



Bern Township
Comprehensive Plan 2013

Berks County, Pennsylvania



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KEY:

- N North
- S South
- E East
- W West
- NW Northwest

Introduction

The Bern Township Comprehensive Plan

was first adopted in 1972 and subsequently amended in 1980, 1987 and 2003. This Plan is an update of the 2003 amendment.

Bern Township covers 20.0 square miles (19.1 square miles land and 0.8 square miles water). It is partly suburban and partly rural in nature. Situated immediately N of the City of Reading, Berks County, Pennsylvania, it is bounded on the E by the Schuylkill River and S by Tulpehocken Creek. It is adjacent to Centre, Lower Heidelberg, Muhlenberg, Ontelaunee, Penn, Spring Townships and the Boroughs of Leesport and Wyomissing.

According to the 2010 census there were: **6,797 people, 2,080 households, and 1,560 families** residing in the township. Population density was **355.9 people per square mile** (138.7/k).

Characteristics

- ◆ Topographically, the Township is divided into two distinct portions, which roughly correspond with geological and soil characteristics.
- ◆ The eastern half of the Township has gently rolling terrain, with limestone-type soils—except for the Tulpehocken Creek, Siefert Run and Schuylkill River valleys.
- ◆ The western half of the Township has overlying shale soils with a number of hills, valleys and narrow ravines. Here the slopes are more severe.
- ◆ Soil types and limited public sanitary sewer and central water systems also constitute important factors in local planning.
- ◆ Agriculture is still a desirable industry in the Township, and there are a number of places where Prime Agricultural soils (USDASCS Class I, II and III) are found.

There were **2,168 housing units** at an average density of 113.5/sq mi (44.2/km²). The racial makeup of the Township was 91.0% White, 5.8% African American, 0.1% Native American, 0.7% Asian, 1.5% from other races, and 1.1% from two or more races. Hispanic or Latino of any race were 9.3% of the population.

The median income for a household in the township was \$61,222, and the median income for a family was \$68,636. Males had a median income of \$46,731 versus \$26,694 for females. The per capita income for the township was \$25,969. About 1.2% of families and 2.2% of the population were below the poverty line, including 8.0% of those age 65 or over.

Berks County Prison System is located in Bern Township. It holds 1,545 prisoners, 22.7% of the township's population.

Influences

- ◆ Reading Regional Airport is situated at the E end of the Township. This facility has been in operation since 1939 and currently serves general private aviation. There is no regularly scheduled commuter service. Aviation creates noise patterns generated by aircraft, glide slopes, clear zones, etc. Berks County Industrial Development Authority (BCIDA) plans to develop the area adjacent to the Airport.
- ◆ Many non-taxable facilities own land in Bern such as:

Blue Marsh Lake (Federal)	685.38 acres
Reading Regional Airport Authority	568.82 acres
Berks Co Industrial Develop. Authority	149.73 acres
County Lands	951.93 acres
- ◆ **There are 2,355.86 acres of tax-exempt land in Bern, resulting in \$632,638.36 of lost revenue to the Township. However, Bern Township still provides services to those areas.**

1 Community Goals & Objectives

Goals are general statements about the desired direction for the Township. They reflect relatively long-term conditions, which the Township wants to maintain or establish.

Objectives are more specific, relatively short-term policy guidelines for the Township to follow. Goals are achieved by accomplishing the stated objectives.

Bern Township is still a “green and pleasant land” and is considered to be a very desirable place to live. One of the most attractive features of the Township is its balanced mix of residential regions, agricultural areas, commercial segments, industrial sectors, and recreational and institutional facilities. The Township still has a rural atmosphere, with ample open space and appealing undulating scenery, while offering diverse land use opportunities.

The goal of this revised Comprehensive Plan is to adequately manage and control development of our diverse land uses, while at the same time preserving and enhancing our deep-rooted rural atmosphere.

Residential development should be balanced with commercial and industrial development to help offset the disproportionately high community costs associated with residential development.

Agricultural development is the least costly of the types of development common to our area due to the fact that taxes paid by Agricultural land users far exceed the cost of services delivered to them.

The Township should encourage existing Agricultural uses and promote this type of development by encouraging landscaping nurseries, horse farms, and other viable forms of agriculture-related business.

The Composite Map of Bern Township is an integral part of this Comprehensive Plan. It serves as a valuable tool in guiding the future growth of the Township. It also identifies the existing natural features, and parcel boundaries.

It is recommended that future development occurs in areas where sewage disposal, water supplies, existing utilities, and transportation are adequate to accommodate the proposed levels of development. This will:

- ◆ Help promote the effective and efficient use of the existing land base and public facilities
- ◆ Maintain moderate separation of suburban and rural land uses
- ◆ Lessen development pressures in agricultural areas
- ◆ Minimize travel distances, and promote the cluster and village design concepts which, in turn, reduce suburban sprawl.
- ◆ Areas with steep slopes, wetlands, floodplains, and woodlands should be left as open areas

Land Use and Housing

Land Use & Housing Goal 1:

Allow managed and adequately controlled residential development at appropriate locations where necessary physical services are, or where they could become available (i.e., highway access, open space, utilities, etc.)

Land Use & Housing Objective 1:

- ◆ Provide for adequate, safe and sound housing for present and future residents.
- ◆ Provide for well-planned development in the Township, which will be consistent with community character.
- ◆ Discourage residential development in areas not suitable for on-site sewage disposal, which are not planned for public sewers.
- ◆ Provide for flexibility in land use ordinances and regulations to encourage innovative site design and alternatives to standard subdivisions, such as conservation development consistent with *Growing Greener* concept.

- ◆ Restrict adult-oriented businesses in the vicinity of residences, churches, parks, schools, industries, and government facilities.

Land Use & Housing Goal 2:

Provide for industrial and commercial development at appropriate locations, which are compatible with existing residential areas and consider transitional areas between industrial, commercial and residential uses.

Land Use & Housing Objective 2:

- ◆ Provide for a mix of land uses, which will balance growth with the need to preserve open land, manage traffic, maintain the quality of life in the Township, and support manageable tax structures.
- ◆ Provide opportunities for suitable and compatible commercial, office, and environmentally responsible industrial activities at appropriate locations, within the context of existing land use patterns, support services, transportation networks, environmental concerns, and availability of public sewer and water facilities.
- ◆ Minimize the conflict between non-residential and residential uses through the proper allocation of land use and use of performance and design standards and buffer yards with screen plantings. Discourage proximity of incompatible land uses within the Township and along municipal boundaries.
- ◆ Require commercial and industrial sites to be developed in accordance with design and performance standards, using open area and setback requirements that are intended to provide attractive development, particularly along Route 183.

Land Use & Housing Goal 3:

Discourage residential or industrial development of agricultural lands and permit varied agricultural uses and related activities.

Land Use & Housing Objective 3:

- ◆ Consider the needs of the agricultural industry when making land use decisions

- ◆ Promote the continuation of agricultural uses and encourage the use of available organizations and programs which will help make farmland retention possible.
- ◆ Encourage land development techniques, such as conservation development based on land characteristics, which will preserve natural resources, agricultural lands, and open space. Review what zoning techniques are appropriate to the Township to preserve agricultural lands.

Land Use & Housing Goal 4:

Promote controlled higher density development in portions of the Township where public sewer and water facilities are available.

Land Use & Housing Objective 4:

- ◆ Provide opportunity for a variety of residential housing types within the natural and service constraints of the Township, which will be compatible with the general character of the Township.
- ◆ Allow for a variety of housing densities in appropriately designated areas consistent with availability of infrastructure that will support the proposed development.

Land Use & Housing Goal 5:

Encourage the development of businesses and industries in the area of the airport which promote economic stability, increase the local tax base and expand employment opportunities for residents of the Township.

Land Use & Housing Objective 5:

- ◆ Ensure that development of areas near the airport are consistent with public safety regulations and airspace safety requirements.
- ◆ Develop and maintain a local economic development strategy for the airport focused on the compatibility and sustainability of existing, as well as future, businesses and industries.
- ◆ Review the airport's long-range planning process to be sure it is in the best interest of the Township and involve the public and private sectors in the economic development of the airport area, on a local and regional basis.

- ◆ Encourage a wide range of business and industry with appropriately planned areas for future expansion, and work closely with Berks County, the Airport Authority and other agencies to create employment opportunities.
- ◆ Work toward additional land use and infrastructure improvements in the area of the airport, and promote business and industrial development where designated on the Future Land Use Plan.
- ◆ Recognize and protect residential neighborhoods in the vicinity of the airport from adverse impacts of airport operations and expansion.
- ◆ Require review of development near the airport to be sure it is consistent with public safety in relation to air space safety requirements.

Ecological Resources

Ecological Resources **Goal 1:**

Establish programs for the most effective use of land and preserve land in strategic locations.

Ecological Resources **Objective 1:**

- ◆ Evaluate the effectiveness of measures currently in place to protect natural features and consider including additional provisions in the Township's Zoning Ordinance, such as Woodland Protection Provisions and Stream Corridor Overlay Zoning.
- ◆ Develop techniques to guide and encourage the conservation of land.
- ◆ Encourage public awareness of, and sensitivity toward, natural and scenic resources in Bern Township. Support both public and private efforts to preserve and maintain natural resources.

Ecological Resources **Goal 2:**

Preserve agricultural areas.

Ecological Resources **Objective 2:**

- ◆ Promote the preservation of agricultural areas within the Township through conservation development, agricultural security areas, purchase and donation of

development rights, and conservation easements. Work with farmers to identify programs available for preserving farms.

- ◆ Minimize conflicts of agricultural and non-agricultural uses through the effective use of setbacks and buffers.

Ecological Resources **Goal 3:**

Provide ecological management to preserve prime agricultural land, protect downstream population areas and provide a healthy and safe environment for existing residential areas.

Ecological Resources **Objective 3:**

- ◆ Encourage developers to preserve key environmental resources and to incorporate these features into their developments.
- ◆ Ensure that land areas subject to flooding, or otherwise not suitable for any buildings or structures, (because of steep slopes, poor soil bearing qualities or with poor or prohibitive water and/or sewage capabilities) are not used for building development purposes.
- ◆ Encourage the protection of water resources and the quality and quantity of surface and groundwater. Of particular concern are the Schuylkill River, Siefert Run, Plum Creek, Tulpehocken Creek, and Blue Marsh Lake, as well as wetlands and floodplains along these watercourses. Preserve and buffer these areas to protect watercourses and groundwater discharge/recharge areas, while also providing a system of open space.
- ◆ Minimize the loss of topsoil, erosion and sedimentation of soils and employ effective storm water management techniques.

Ecological Resources **Goal 4:**

Protect floodplain areas.

Ecological Resources **Objective 4:**

- ◆ Protect the natural features of floodplains, wetlands, and drainage swales by limiting their disturbance and avoiding negative impacts on adjacent properties.
- ◆ Encourage the efforts of agencies involved in efforts to create a greenway along the Schuylkill River.

Ecological Resources Goal 5:

Protect areas of steep slope to preserve their natural state.

Ecological Resources Objective 5:

- ◆ Minimize alterations to existing topography by giving particular attention to protecting steep slope areas (i.e., in excess of 15% slope) from indiscriminate disturbance.
- ◆ Explore development regulations to limit intrusion upon or disturbance to areas characterized by steep slopes.

Ecological Resources Goal 6:

Preserve open space for recreation purposes around Blue Marsh Reservoir, Berks County Institutional Complex and along the Schuylkill River and Tulpehocken Creek; protect the recreational areas of the Township, such as waterways and woodlands, and to promote their effective utilization.

Ecological Resources Objective 6:

- ◆ Establish criteria for project sites such as: acreage, locations, site amenities, access, existing ground cover, etc.
- ◆ Require recreation sites as deemed necessary by the Township.
- ◆ Work with landowners to identify preservation targets and the means to preserve them.
- ◆ Require developers to dedicate land when appropriate.
- ◆ Require developers to provide recreation facilities or fees-in-lieu in order to support the development of Township recreation facilities when appropriate.

Transportation

Transportation Goal 1:

Promote an effective transportation system with separate local and through traffic, as well as good access to areas generating higher traffic volume.

Transportation Objective 1:

- ◆ Coordinate land use and road improvement policies.
- ◆ Monitor the impacts of new development on roadway capacity and require developers to address projected

increased traffic volumes in the road system by improving the existing system.

- ◆ Provide maintenance of the existing road system as warranted.
- ◆ Address existing deficiencies and safety concerns in the transportation system with landowners, Penn DOT and developers as appropriate.
- ◆ Recognize that significant traffic is generated outside the Township. Work with State, County, municipal, and other agencies and organizations to address areas of concern within the Township.
- ◆ Require connecting road systems within subdivisions and between subdivisions to eliminate the use of cul-de-sacs.

Transportation Goal 2:

Regulate and minimize direct driveway access on traffic routes through the use of parallel access roads, promoting controlled points of intersection, and internal road systems.

Transportation Objective 2:

- ◆ Preserve and improve the capacity of the existing roads within the Township as future development occurs through cooperative efforts with developers and Penn DOT, as applicable.
- ◆ Promote coordinated access management programs along the road corridors within the Township, to minimize the number of access points to the road system.
- ◆ Require developers to provide internal road systems in order to minimize driveway access to roads within the Township.
- ◆ Facilitate access and emergency services within developments through the use of interconnected roads and the elimination of cul-de-sacs.

Community Facilities and Services

Community Facilities & Services **Goal 1:**

Provide community services in accordance with the needs of residents and balance revenue required with demand for these services.

Community Facilities & Services **Objective 1:**

- ◆ Periodically evaluate the need and opportunity to create additional, expanded or improved community services and facilities, then plan for the efficient and economic distribution of those services and facilities.
- ◆ Review opportunities and/or needs for regional cooperation in the provision of services and facilities.
- ◆ Review proposed developments to ensure that required infrastructure is provided by the developer.

Community Facilities & Services **Goal 2:**

Provide water services within physical and financial capabilities.

Community Facilities & Services **Objective 2:**

- ◆ Assure that the scale of development is consistent with the capacity of the Township's infrastructure.
- ◆ Monitor areas with groundwater problems.
- ◆ Coordinate sewer and water planning with land use policies.

Community Facilities & Services **Goal 3:**

Ensure that provision of public sewer facilities is consistent with the Township's Act 537 Plan.

Community Facilities & Services **Objective 3:**

- ◆ Regulate waste disposal including, but not limited to, human, household, industrial, hazardous, toxic, nuclear and biological wastes.
- ◆ Ensure that sewage planning and land use planning for areas of highest density residential development reflect the policies of the Act 537 Plan.

- ◆ Coordinate economic development policies with sanitary sewer planning.
- ◆ Coordinate sewer planning efforts with Berks County and the Reading Regional Airport Authority.

Community Facilities & Services **Goal 4:**

Develop Open Space and Recreation Areas

Community Facilities & Services **Objective 4:**

- ◆ Provide for conservation developments to encourage preservation of open space.
- ◆ Provide financial means, through ordinance language, to build the recreation and park facilities planned by the Township.
- ◆ Develop a park and recreation budget.
- ◆ Protect natural areas of the Township, such as woodlands and waterways.

2 Existing Land Use

Existing land use patterns have a great influence on any future land use plan. Land use also affects transportation within the Township as well as the demand for additional community facilities and services.

Even though Bern Township has experienced steady population growth and residential land development during the 1980s, 1990s and the 2000s, much of the Township still remains agricultural or rural in nature, especially in the western area.

According to the Berks County Comprehensive Plan 2030 Bern Twp has:

- ◆ 102 acres in Ag preservation,
- ◆ 5,098 acres developed
- ◆ 4,186 acres rural
- ◆ 1,382 acres open space

(Appendix D Municipal Land Use Acreages)

Much of the farm land is cultivated, interspersed with pasture and woodlands. One of the largest wooded areas is found around Blue Marsh Lake.

LAND USE CATEGORIES

Single Family Residential

Most residential uses within the Township are single family residential. Single family residential development can be classified as either:

- ◆ Compact, dense development pattern immediately adjacent to the NW corner of the City of Reading, in the vicinity of *Greenfields* and *Greenfields Manor*, in the area of *Fairview Heights*, and in *West Ridge* S of Route 183

- ◆ Scattered lower-density growth along various major and secondary roads, W of Route 222 and N of Route 183.

Multi-Family Residential

In Bern Township, multi-family residential development has been limited. It was primarily located in three areas of the Township: in the vicinity of *Greenfields*, *South Gate* at Upper Van Reed, and on Cross Keys Rd near Rickenbach.

Commercial

Commercial development in the Township has increased in the past decade, and has gradually moved W along the Route 183 corridor, especially in the vicinity of the intersection of Route 183 and West Leesport Road.

Commercial uses in the *West Ridge* development include a mini-mall, restaurant, convenience store, pharmacy, auto and motorcycle dealerships, offices, a bank, car wash and other small businesses.

Industrial

Industrial development has also been growing in the Township, especially in the Light Industrial area bordered by Stinson, West Leesport and Leisz's Bridge Roads. This area has had light industrial and warehousing uses built here, as well as some corporate and general offices.

Airport

The Reading Airport has updated its Master Plan, which provides a series of alternatives for the future development of the airport. The Reading Regional Airport Industrial Park has remained the same since the last plan update, but Reading Regional Airport Authority (RRAA) has sold land to the Berks County Industrial Development Authority (BCIDA) for the development of a food research park. Other commercial businesses may locate there.

Institutional /Recreational

St. Joseph's Hospital has relocated from downtown Reading to a new campus across from the airport on Route 183. This 212-bed facility includes Doctors' Office Building, a day care facility and a credit union.

A number of institutions with extensive land holdings are located in the Township:

- ◆ Berks Heim
- ◆ Berks County Prison
- ◆ Berks County Agricultural Center
- ◆ State Game Lands
- ◆ Epler's Landing State Park
- ◆ Union Canal Trail
- ◆ Berks County Heritage Center
- ◆ U.S. Army Corps of Engineer's Blue Marsh Recreation Area
- ◆ 4-H Center
- ◆ Reading Fairgrounds
- ◆ Berks Career and Technology Center
- ◆ Easy Does It

These Institutional holdings are non-taxable, which in the year 2012 represented in loss of \$ 632,638.36 in revenue to Bern Township.

Planned Office Business /Office Research

Provides opportunities for modern office buildings and other compatible businesses which will serve them, such as medical, financial, legal, architectural and other professional businesses.

3 Natural Constraints

The Composite Map, Bern Township, dated April 6, 2001, shows natural constraints in the Township. (The map is in the pocket at the end of this report.) This composite map shows:

- ◆ water resources, including wetlands
- ◆ 100-year and 500-year floodplains
- ◆ areas of steep slopes, including slopes of 15-25% and slopes greater than 25%
- ◆ wooded areas

There are a number of natural resources providing limitations to development in the Township:

- ◆ Floodplains, wetlands and wooded areas are found along the watercourses.
- ◆ Wooded areas are scattered throughout the Township. They are found in greatest concentrations in the Blue Marsh Lake area and in the central portion of the Township extending from the Schuylkill River.
- ◆ Steep slopes are also scattered throughout the Township. Many are located near stream corridors.

Floodplains

Floodplains are areas adjacent to watercourses, which may be submerged by rising floodwater. **For regulatory purposes, a 100-year floodplain is an area which has a 1% chance of being flooded during any one year.**

Floodplains should not be developed, because development within floodplains increases the risk of danger to both people and property. If development occurs within the floodplain, the flow of floodwaters in the area will be obstructed, and the resulting increase in floodwater velocities will cause an increase in flood damage downstream. Consideration should also be given to not disturbing areas adjacent to watercourses because increased sedimentation within a watercourse can occur. Increased impervious coverage

along watercourses can also increase storm water runoff in streams. This runoff erodes stream banks and channels. Sedimentation leads to the silting of stream beds, which could cause floodwaters to cover a larger area, permanently alter the location of streams, impact their ecological balance and detract from the aesthetic value of the stream.

The one hundred year and five hundred year floodplains that are shown on the Composite Map are based on the Federal Emergency Management Agency (FEMA) maps which were updated using modern technology in 2012. (See attached map.)

Detailed studies have not been performed to establish, through calculation, the extent of all 100-year and 500-year floodplains for all watercourses in Bern Township.

Developers should be required to calculate 100-year floodplains in areas where it has not been done by FEMA.

Wetlands

Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, under normal circumstances, specific vegetation types usually associated with saturated soil conditions.

Wetlands within the Township are generally found near watercourses.

During on-site inspections, wetlands can sometimes be identified when they are saturated with permanent or semi-permanent standing water. They may contain common wetland plants such as cattails and willows.

If wetlands cannot be identified by the plant life, soils may be investigated to determine whether wetlands are present. Hydric soil mapping can also be used to identify potential wetland sites.

Developers should be required to show hydric soils on their plans and investigate the existence of wetlands.

- ◆ Wetlands are an important part of the natural environment. They can be areas rich in plant growth and animal habitats, often serving as breeding grounds for many organisms.
- ◆ In addition to providing a habitat and a source of food for many organisms, wetlands can protect water sources. Plants growing in and around wetland areas also help to keep water sources clean by acting as a natural filter and removing pollutants such as bacteria and sediment from water.
- ◆ Wetlands also store water, which can replenish surface and groundwater supplies. In general, no development activity or placement fill may occur within wetlands without the obtaining a DEP permit.

The wetlands that are shown on the Composite Map are based on the National Wetlands Inventory, prepared by the Office of Biological Services, U.S. Department of the Interior, Fish and Wildlife Service.

The wetlands inventory is prepared by analysis of high altitude aerial photographs, with the wetlands identified on the photographs based on vegetation, visible hydrology, and geography.

A detailed site analysis may result in a revision of wetland boundaries, and it is possible that small wetlands and those obscured by dense ground cover may not yet have been identified. The Composite Map of the Township shows wetland coverages, as well as a one hundred foot wetland margin around the identified wetland.

Developers should be required to identify all wetlands on their properties.

Steep Slopes

Areas which have slopes greater than 15% have severe limitations to development.

In general, this land is too steep for residential subdivisions or cultivation. Development of steep slopes can result in hazardous road conditions, costly excavation, erosion, sedimentation and storm water run-off problems.

Steep slopes are quite prone to erosion, and protection of these areas located near watercourses is especially important for water resource protection.

Development should be limited and erosion controls initiated. Vegetation cover must be maintained to the greatest extent possible, as removal of absorptive vegetation causes runoff that rapidly erodes slopes.

Slopes of 15 to 25% and greater than 25% are indicated on the Composite Map. Data is from a digital elevation model, USGS. Most of the steep slopes occur in the W and N areas of the Township.

Woodlands

Woodlands are scenic amenities, as well as habitats for many native species of Berks County plant and wildlife.

- ◆ Woodlands provide visual relief from developed areas.
- ◆ Land in woodlands increases the absorption capacity of storm water runoff, which diminishes potential flooding and decreases erosion.
- ◆ Woodlands on steep slopes are especially valuable, playing an important role in securing the soil, reducing runoff, erosion and sedimentation.
- ◆ Maintenance of woodland areas on steep slopes is of paramount importance when the steep slopes are located near streams, which could be disturbed by sedimentation. They may experience greater flood peaks if they are impacted by increased surface runoff.
- ◆ When woodland areas are retained, the quantity and quality of groundwater can be improved and controlled because the natural cover allows for infiltration of rain-water into the groundwater system.
- ◆ Retention of woodlands also preserves the habitats of native species
- ◆ Woodlands provide both private and public recreational opportunities for the population as a whole.

Woodlands are shown on the Composite Map. Data is from USGS.

Rivers, Streams, Creeks and Lakes

Some of the natural functions of watercourses and their surrounding areas have already been discussed, but it is important to note that streams and creeks often provide recreational resources such as fishing and boating.

- ◆ **The Tulpehocken Creek** from the area below the Blue Marsh Dam to the first deflector downstream at the Covered Bridge is classified as Special Regulated Trout Waters. Within this area, there is delayed harvest and only artificial lures can be utilized.
- ◆ **Blue Marsh Lake Reservoir** from above the dam is also classified as a Trout Stream Fishery.
- ◆ **The Tulpehocken Creek Corridor** was found to satisfy eligibility criteria for Scenic River Designation for Historic Value, Fishery/Wildlife and/or Vegetative Value, Recreational Value and Cultural Value.

Streams that are classified as High Quality have additional requirements for potential discharges listed in the Rules and Regulations of the Pennsylvania Department of Environmental Protection.

PA DEP requires that a proposed point source discharge to High Quality Waters must show that the discharge is justified for necessary economic or social development, which is of significant public value and that the proposed discharge alone, or in combination with other discharges, will not affect the protected use criteria.

The Forest Resources Report for the Tulpehocken Creek Watershed and Tulpehocken Creek Watershed Protection Plan and Environmental Assessment include proposals for improving water quality and protecting and enhancing natural resources in the watershed. Major recommendations from these reports are:

- ◆ The use of riparian forest buffers along the watercourses in the watershed;
- ◆ Use of best management practices in urban development, agriculture, and forestry;
- ◆ Voluntary conservation easements;
- ◆ Stream habitat improvement, including wetland restoration and stream bank restoration/stabilization.

The Schuylkill River is another asset in the Township. The river is designated as a Warm Water Fishery from the Schuylkill-Berks County Line to the Berks-Montgomery-Chester County Line. The designation of Warm Water Fisheries indicates that the river should be protected as habitat for warm water fish and other ecosystems indigenous to warmer waters.

A River Conservation Plan for the Schuylkill River Watershed has been prepared. The Plan was designed to be a guidebook for municipalities, conservation groups, and citizens interested in taking steps to enhance the long-term health of the Schuylkill River watershed. Municipalities and non-profits can use the Plan to engage landowners and citizens in implementing the recommendations developed in the Plan, which focused on three major areas:

- ◆ Reducing Non-Point Source (Runoff) Pollution,
- ◆ Creating A Network Of Greenways and Integration of Conservation Lands,
- ◆ Landscape-level sustainability of the watershed in terms of wildlife habitat and ecosystem stability.

The Schuylkill River was also designated a National Heritage Area, (one of 23 in the U.S.A.), as a tribute to the natural, historical and cultural value of the Schuylkill River Valley.

Prime Agricultural Soils

Prime agricultural soils constitute a local, state and national resource because of their inherent ability to produce cultivated crops.

These are shown on the soils mapping prepared for Berks County by the USDA Natural Resources Conservation Service, and include Class I, II, and III soils. (A Prime Agricultural Soils Map for the Township is found in the map pocket.) Since prime farmland is also good building land, it is rapidly being converted to development use. It will be difficult, if not impossible, for such land to revert to its original use.

Bern Township plans to preserve prime agricultural land wherever possible. The Township has an Agricultural Security Area Program, and participation in it is encouraged.

4 Reading Regional Airport

The Reading Regional Airport (RRA) occupies about 718.55 acres in Bern Township (**568.82 acres are zoned Airport Use and 149.73 acres of land is zoned Industrial/Commercial**). It is currently surrounded by a mixture of commercial, light industrial, agricultural and residential areas.

The airport was constructed between 1935-36 as a joint venture of the federal government and the City of Reading. In 1938 it was dedicated and opened as a civil airport. During World War II, the U.S. Army Airforce First Air Force used the airport as a training facility and made extensive improvements. Reading Army Airfield was opened on June 1, 1943, with the 309th Base Headquarters and Air Base Squadron as its host unit. On January 1, 1944, Reading AAF was reassigned to Air Technical Service Command and became a sub-base of the Middletown Air Depot near Harrisburg. The mission of the station became to repair and overhaul aircraft and return them to active service. After the war, the airport was inactivated as an active military airfield and designated as an Air Force Reserve base, then in 1948 the jurisdiction of the field was transferred to the ADC First Air Force. A series of reserve bombardment groups were assigned to the airport. Due to budgetary cutbacks, the Reserve Training Center at Reading was inactivated on May 1, 1950. The Air Force closed its facilities at Reading airport and it was returned to full civil control. Since the 1950s, the airport has also been home to the Reading Composite Squadron (Pennsylvania Wing designation Squadron 811) of the U.S. Civil Air Patrol.

Commercial airline service began in 1946. On December 5, 1984 the airport was dedicated as Gen. Carl A. Spaatz (USAF) Field. In the 1950s Reading Air Services sponsored the National Maintenance & Operations Meeting, better known as the Reading Airshow, and later Reading Aerofest. The annual airshow was one of the largest in the U. S. in the 60s and 70s peaking at 100,000 attendees in 1976. The show expanded to a week long trade and airshow, then declined and ended in 1980. It was again revived as a smaller airshow The Reading Aerofest ending in 1998.

Reading Airport is now owned and operated by the Reading Regional Airport Authority. Bern Township has no direct participation in operation of the airport. The area, which makes up the airport complex can be described as four basic land uses. They are:

- ◆ The airfield
- ◆ Air carrier facilities
- ◆ General aviation services
- ◆ Industrial/commercial areas

In recent years, the Township has seen increased commercial and industrial growth in this area with the potential for future growth. An updated Master Plan for the airport was created and is being revised. The current runway configuration at Reading Regional Airport provides the required wind coverage at 100 percent. It consists of two runways:

Runway 13-31

- ◆ This is oriented in a W direction and is 6,350 ft. long
- ◆ Runway 31 is the primary departure runway due to longer length and visual flight condition wind coverage.
- ◆ Runway 13 serves as an adequate secondary precision instrument approach for aircraft requiring a landing length longer than what is provided for arrivals to Runway 36.

Runway 18-36

- ◆ This is oriented in an E direction and is 5,151 ft. long
- ◆ Runway 36 is the primary arrival runway due to terrain, obstruction-free clearances and better instrument flight condition wind coverage.
- ◆ The primary precision instrument approach at Reading Regional Airport is to Runway 36. This runway is clear of terrain obstructions, but is constrained by the location of PA 183 (Bernville Road) on the approach end and the Schuylkill River on the opposite end (Runway 18).

The airport has established runway safety areas (RSA). These areas, as described by the Federal Aviation Administration (FAA), are: “the surfaces surrounding runways suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.”

Current FAA design standards require a runway safety area to be 500 feet in width and a length equal to the runway plus 1,000 feet beyond the end of each runway.

Regional Airport Authority has recently completed new runway safety areas for Runways 13-31 and 18-36.

Another issue involving the airport concerns the runway protection zone (RPZ), an area off the runway end to enhance the protection of people and property on the ground. There are two components of the RPZ, a runway object-free area, which extends 1,000 feet from the end of the runways and is 800 feet wide, and the controlled activity area, which encompasses the remainder of the RPZ.

An object free area (OFA), according to the FAA, is: “an area on the ground that is provided to enhance safety of aircraft operations by having the area free of objects, except for objects that need to be located in the OFA for air navigation and the controlled activity area, whose purpose is to limit activities within the RPZ.” While, according to the FAA, it is desirable to clear all objects from the RPZ, some uses could be permitted:

- ◆ Provided they do not attract wildlife
- ◆ Are outside the object free area (OFA)
- ◆ Do not interfere with navigational aids

FAA also states that places of residence and public assembly should be specifically prohibited from the RPZ. The Reading Regional Airport controlled a portion of the RPZ areas at each runway end. The airport acquired additional land within the Runway 13 RPZ area. The airport currently has aviation easements within the Runway 18 and 36 RPZ areas that provide a limited degree of control with regards to land use in this area.

Commercial Carriers and Facilities

No regularly scheduled commercial airlines serve RRA.

Non-aeronautical land uses

This comprises approximately 30% of the total airport 149.73 acres.

Airport Industrial Park Section 1

Comprises much of the SW portion of the airport along Rt 183, includes major tenants such as:

- ◆ Philip Van Heusen Distribution Center

- ◆ Barco Manufacturing
- ◆ Federal Express-operates as a ground delivery facility, with no direct air cargo operations at the airport.

Airport Industrial Park Section 2

Also known as the Northfield Business Center, this is located on the NW portion of the airport between Arnold Road and Leisch’s Bridge Road. Warehouses are currently leased by INCOR Properties (formerly known as ProLogis) and are currently occupied by:

- ◆ XO Communications
- ◆ Supply One Plastics
- ◆ G&T Industries

Airport Industrial Park Section 3

Located on the NE portion of the airport, this section is now owned by Berks County Industrial Development Authority (BCIDA). Industrial Metal Plating is the principal tenant. These commercial facilities generate approximately 30 % of the airport’s operating revenues and contribute substantially to the capital expenses of the airport.

Government Facilities

The Pennsylvania State Police has an aviation facility located on the W apron of the airport.

Airport Key Issues

There are a number of issues involving the airport and future land use in Bern Township. The Reading Regional Airport Authority (RRAA) is currently developing a master plan to address long-range development at the airport. Plan recommendations may involve development and in some cases expansion of the airport. Key issues are:

- ◆ Land Use Impacts (Efforts to expand or encourage commercial, industrial or general aviation land uses)
- ◆ Economic Development (Opportunities to encourage industrial economic development in the Township)
- ◆ FAA Standards and Criteria
- ◆ Aircraft Noise (Take-off, Landing, Engine Maintenance)
- ◆ Environmental and Quality of Life Impacts
- ◆ Vehicle Traffic on Local Roads
- ◆ Airline Service

Airport expansion should occur in a manner which preserves viable residential neighborhoods in the Township and does not adversely impact traffic patterns and quality of life in the Township.

5 Population

This chapter will look at population trends for Bern Township, surrounding municipalities, and Berks County.

- ◆ Between 1980 and 2000, Bern Township grew moderately, while Berks County experienced a slower population growth.
- ◆ **Between 1990 and 2000 the rate of growth in Bern Township was greater than that of Berks County as a whole, but it was lower in 2010.**

According to the U. S. Census Bureau 2010 census:

- ◆ Bern Twp **population density was 355.9 people per square mile** (138.7/km²).
- ◆ There were **2,168 housing units** at an average density of 113.5/sq mi (44.2/km²).
- ◆ The racial makeup of the township was 91.0% White, 5.8% African American, 0.1% Native American, 0.7% Asian, 1.4% from other races, and 1% from two or more races. Hispanic or Latino of any race were 9.3% of the population.
- ◆ There were **2,080 households** out of which 27.6% had children under the age of 18 living with them, 64.3% were married couples living together, 6.5% had a female householder with no husband present, and 24.8% were non-families. 19.1% of all households were made up of individuals and **10.3% had someone living alone who was 65 years of age or older.**
- ◆ **The average household size was 2.51 and the average family size was 2.84.**
- ◆ **Berks County Prison System, in Bern Township hold 1,545 prisoners = 22.7% of the Twp population.**
Berks Heim Nursing Home in Bern Twp is run by Berks County. It has an average of 421 residents= 6.1% of the Twp population.

TABLE 1

Total Population Bern Township & Berks County 1980 -2010

Year	Bern Township			Berks County		
	Persons	Number Change	% Change	Persons	Number Change	% Change
1980	5,097	—	—	312,509	—	—
1990	5,748	651	13%	336,523	24,014	8%
2000	6,758	1,010	18%	373,636	37,113	11%
2010	6,797	39	.06%	411,442	37,804	10.1%

TABLE 2

Bern Township Population Distribution as Percentage of Total Population 2000 -2010							
		Age	0 - 18	18-24	25 - 44	45 - 64	65 & over
Census	Persons	Households	%	%	%	%	%
2000	6,758	1,903	16.6	8.7	29.4	25.1	20.2
2010	6,797	2,080	16	8.8	24.7	29.4	21.1

TABLE 3

TOTAL POPULATION
Bern, Centre, Lower Heidelberg, Muhlenberg, North Heidelberg, Ontelaunee and Spring
Townships, Leesport Borough, the City of Reading, Berks County and Adjacent Municipalities

1980-2010						
Municipality	1980	1990	2000	2010	Change 2000-2010	
					%	Number
BERN TOWNSHIP	5,097	5,748	6,758	6,797	.6	39
Centre Township	2,329	3,154	3,631	4,036	11.2	405
Leesport Borough	1,258	1,825	1,805	1,918	6.3	113
Lower Heidelberg Township	1,819	2,209	4,150	5,513	32.8	1,363
Muhlenberg Township	13,031	14,127	16,305	19,628	20.4	3,323
North Heidelberg Township	953	1,288	1,325	1,214	-8.4	-111
Ontelaunee Township	1,408	1,359	1,217	1,646	35.3	429
City of Reading	78,686	78,380	81,207	88,082	8.5	6,875
Spring Township	17,193	20,505	23,402	27,119	15.9	3,717
BERKS COUNTY	312,509	336,523	373,636	411,442	10.1	37,804

Data Sources: U. S. Census Bureau

Table 1

Rate of growth for population of Bern Township was:
 From 1980 to 1990, it increased 13%
 From 1990 to 2000, it increased 18%
 From 2000 to 2010 it increased less than 1%

Rate of growth for population of Berks County was:
 From 1980 to 1990 8%
 From 1990 to 2000 11%
 From 2000 to 2010 10.1%

Table 3

Gives total population in 1980, 1990, 2000 and 2010.

The percentage of change from 2000 to 2010 for Bern, Centre, Lower Heidelberg, Muhlenberg, North Heidelberg, Ontelaunee and Spring Townships, Leesport Borough, the City of Reading and Berks County as a whole increased.

North Heidelberg Twp dropped by 8.4%

6 Transportation

Land use and transportation are closely linked, so a road system which can accommodate current, as well as projected, traffic volumes must be maintained.

The transportation system within the Township is an important influence on the type and location of future development.

The location of residential, commercial and industrial uses is influenced by the function or classification of roads, their design and their condition.

Mileage of Roads in Bern Township 2010	
State Roads	17.99 miles
County Roads	4.00 miles
Township Roads	53.82 miles
TOTAL	75.81 miles

Arterial Roads

Bern Township has two major highways, which serve as arterial roadways:

- ◆ **SR 0222** Route 222 (formerly known as the *Road-to-Nowhere*) is classified as Urban Expressway (Principal Arterial). It runs in a SW to NE direction and carries a high volume long distance traffic. Rt 222 is part of a four lane limited-access beltway around the City of Reading. Rt 222 also connects to Route 61 in Muhlenberg Township and Route 422 in Spring Township
- ◆ **SR 0183** Route 183 (Bernville Road), is an Urban Minor Arterial Road. It is a two lane road running in a SE to NW direction from the City of Reading to Bernville, Strausstown and beyond, to the NW portion of Berks County and into Schuylkill County. The 183/222 interchange has been redesigned and reconstructed to handle increased traffic volumes.

Major Rural Collector Roads

- County Welfare Road
- Cross Keys Road
- West Leesport Road

Minor Rural Collector Roads

- Butter Lane
- Fairview Drive
- Grange Road
- Hilltop Road
- Old Bernville Road
- Palisades Drive
- Reber's Bridge Road
- Red Bridge Road
- Rickenbach Road
- Upper Van Reed Road
- White Oak Lane

County Roads

- County Welfare Road

Local Roads

All other Township roads are considered local roads

Traffic Counts

The most recent PennDOT traffic counts along Routes 183 and 222 shows a considerable increase in traffic calculated as Average Daily Trips (ADT).

Year	2003 ADT
PA Rt 183 at interchange with PA Rt 222 to Twp line	17,000
PA Rt 222 at interchange with PA Rt 183	53,000
PA Rt 222 @ PA Rt 183 interchange Twp line with Muhlenberg Twp	39,000

The Township has seen a number of improvements occur in the corridor over the past decade such as:

- ◆ The addition of lanes, a new partial cloverleaf and lengthening of ramps at the interchange at Route 222
- ◆ Addition of a new lane for left turns on Rt 183 from the Airport exit to Route 222
- ◆ Installation of a traffic light and turning lanes at the intersection of Route 183, Palisades Dr and Plum Creek Rd.

Even with the recent upgrade of the Rt 183 and Rt 222 interchange, as commercialization of the corridor continues the Township will experience:

- ◆ Conflicts between local and through traffic
- ◆ An increase in traffic volume and possible rise in accident risk as commercialization of the corridor increases

For these reasons, it is important for the Township to ensure that future commercial uses have limited vehicular access to the corridor, and are restricted to designated areas, preferably from parallel access roads.

Most Recent and Projected Traffic Counts in Bern Twp		
	Current 2012	Projected 2033
PA Rt 183	28,685	46,138
PA Rt 222 Northbound	32,277	51,915
PA Rt 222 Southbound	26,810	43,123
Total Vehicles per day	59,087	95,038

Access Management

Access management problems can result in congestion and safety concerns. Typically problems occur on roads serving high volumes, higher speed traffic, and abutting roads with more intense trip generating uses, such as Route 183.

An example of an access management problem can be found where commercial development occurs on a road and the mobility of traffic is adversely affected by the increase of driveways from adjacent land to the road on which the land fronts. **As the number of driveways increases, the safety and efficiency of the road can decrease.**

Access management will be an increasing concern on roads in the Township in the future. To promote access management, appropriate roadway access regulations have been added to the Township's Zoning Ordinance and Subdivision and Land Development Ordinance.

To help alleviate this problem an Overlay District restricting driveway access to Rt 183 has been created. This district starts at Egle Drive and ends 1200 feet N of Fairview Drive

PA Rt 183 Detour Routes

A system of detour routes running E to W has recently been created. All routes start and end on Rt 183.

PA Rt 183 Detour Routes	
Greenfields Area:	
Red Detour:	Barlow Ave, Cullum Drive, Boeing Ave.
Blue Detour:	Oak Grove Road, Dennis Drive, Egle Road
Airport Area:	
Green Detour:	Aviation Road, Leisch's Bridge Road, Van Reed Road
Orange Detour:	Van Reed Road, Leisch's Bridge Road, Old Bernville Road, West Leesport Road
North Area:	
Blue Detour:	West Leesport Road, County Road, Palisades Road
Red Detour:	West Leesport Road, Old Bernville Road

Bus Service

Berks Area Reading Area Transportation Authority (BARTA)

Bus Rt 17 provides service from BARTA Transportation Center, 1700 N. 11 St, Reading to Bern Township.

This scheduled bus route runs via Centre and Greenwich St to the Reading Regional Airport, Airport Industrial Park (Rt 183 & Mac Arthur Rd), St Joseph Hospital then down County Welfare Road to Berks Heim and the County Prison.

BARTA also provides paratransit services to the elderly and handicapped throughout Bern Township and the rest of Berks County. Senior Citizens aged 65+ may apply to BARTA to obtain a free travel card.

Bieber Tourways

Bieber buses can be boarded at the Intercity Bus Terminal at 3rd and Penn Streets in Reading or at 320 Fair St, Kutztown.

Bieber operates commuter services to both Port Authority Bus Terminal in NYC and Philadelphia.

Rail Service

The Reading Blue Mountain and Northern Railroad Company (RBMNR)

Their track is 320 miles long and operates in eight counties in Pennsylvania. It handles freight to and from all points in the United States, as well as import and export traffic, and connects to both Norfolk Southern and Canadian Pacific Class I railroads. Materials handled by RBMNR include coal, plastics, wine, lumber, paper, grains, chemicals, and sand. In Bern Township trains run along the W side of the Schuylkill River N of Reading.

Trains run from Reading north into Schuylkill County. The private operator is guaranteed a revenue level through necessary surcharges placed on shippers and partial subsidization by PennDOT.

The rail line running N-S across Cross Keys Rd is freight only. There are no rail sidings in the Township.

Developer Responsibilities

Developers will be required to perform transportation impact studies and address the impacts of their developments. They will also be required to improve frontage roads, manage access, and construct internal roads to limit driveways to roads within the Township.

The Township has adopted a traffic impact fee ordinance and developers in identified districts are required to pay traffic impact fees.

In developing the traffic impact fee ordinance, the Township prepared a *Land Use Assumption Report, Roadway Sufficiency Analysis Report* with recommended improvements and Transportation Capital Improvements Plan with proposes road improvements. This plan was updated in 2006.

7 Community Facilities

Community Facilities

Community facilities are the public buildings and structures that house programs and activities essential to Township operations. They provide necessary and important services to Township residents.

Public services include activities ranging from police and fire protection to libraries and recreation programs.

The extent to which facilities and services are available in any one municipality is dependent on many factors including population, tax base, the transportation network and regional location.

Bern Township Municipal Authority

The BTMA administers public sewer and water in the Township. It has recently constructed sewers in the Water District and West Shore areas as originally recommended in the 1995 Sewage Facilities Plan. A portion of the Water District and Faller Lane have been connected to the County of Berks sewage treatment plant. The rest of the Water District and West Shore sewers are connected to the Reading Regional Airport sewage plant.

Public Water

Currently, portions of the Township are served by public waters supplied by the Bern Township Municipal Authority, the Reading Area Water Authority, Leesport Borough and Western Berks Water Authority.

Bern Township Municipal Authority generally serves the area around the Township building, West Ridge, West Shore and County facilities. An area adjacent to Leesport is served with BTMA sewers, but water in that area is provided directly by the Borough of Leesport.

The Reading Area Water Authority (RAWA) serves Greenfields and the Airport area.

The City of Reading Northwest Reservoir, which consists of two storage tanks with a combined capacity of 25 million gallons, is located SW of the intersection of Route 222 and Route 183. These tanks provide flow in lines serving the E portion of Bern Township, which includes service to the area W of Route 222 in the vicinity of Leinbachs.

Act 537 Sewage Facilities Plan

The Township updated its Act 537 Sewage Facilities Plan in 2002. That plan identifies:

- ◆ Currently sewerred areas
- ◆ Major sewerage facilities
- ◆ Sewer planning areas
- ◆ Areas proposed for new sewers

The major recommendations of that Plan update are:

Leesport Area

Leesport Borough Authority (LBA) Sewage Plant

- ◆ Sewers shall be constructed by developers and subsequently dedicated to the Bern Township Municipal Authority (BTMA);
- ◆ Treatment at the Leesport Borough Authority (LBA) plant.
- ◆ Should developers not proceed, no sewers will be installed here.

PA 183-US 222 Interchange Area Berks County Sewage Plant

Berks County sewage plant is rated for 500,000 gallons per day (gpd). The acceptance of hauled in septage was discontinued in 2012. There are no immediate plans to resume receiving septage in the future. The current forecasted average daily flow is predicted to be 286,700 GPD

This County plant treats sewage from County facilities, West Ridge area and the area known as the Water District which drains naturally to the Berks County sewage plant.

Reading Airport Sewage Plant

This plant has been expanded and upgraded to 420,000 gpd, and continues to serve present and future airport needs. It also treats flow from that portion of the Water District that drains naturally to the Airport sewage plant, the West Shore area and sewage from the new St. Joseph Hospital on Rt 183. The Airport's E and W interceptors have been partially replaced or rehabilitated.

Utilities

Electric service

Service is provided by Metropolitan Edison (MetEd). There is currently a deficiency in electric and natural gas infrastructure service to the zoned Industrial and Commercial areas along Route 183, to the N and S of Route 222. This deficiency significantly impacts the size and type of development that can take place in this area.

Cable TV

Comcast Cable Company has a franchise to service the Township with cable television. Only the more densely populated areas of the Township have been provided with this service.

Internet

Comcast, Verizon, Frontier

Cell Phone Service

There are two cell towers in the Township.

Education

Schuylkill Valley Schools

Bern Township is part of the Schuylkill Valley School District. Currently, there are no district schools within the Township. (However, there are several former one-room schoolhouses which have been restored and transformed into desirable residences.)

Students attend the Schuylkill Valley Elementary School, the Schuylkill Valley Middle School and the Schuylkill Valley High School in nearby Ontelaunee Township. Schuylkill Valley School District officials do not contemplate any additional school construction in the foreseeable future.

Berks Career and Technology Center (BCTC)

Founded in 1968, in partnership with its 16 sponsoring Berks County school districts and other private schools, as well as business and industry. BCTC is designed for high school and adult students who want a technical education that is directly connected to the real world of business and industry. BCTC Bern campus is on 23 acres. There is also another campus in Oley Township.

More than 400 business and industry advisors review and update the school's educational program annually. BCTC provides students with classroom theory and technical applications in labs, as well as work-based experiences. Students can also become licensed or earn nationally-recognized industry certifications.

Currently, the Center campus in Bern Township has a high school enrollment of 381 morning students, 428 afternoon students as well as an enrollment of about 400 continuing education students in the evenings. About 37 different career programs are offered.

Recently, the expansion at the West Campus in Bern created separate wings to house Welding Technology, Auto Collision Repair Technology, Auto Technology, Diesel Technology and Heavy Equipment Technology. In addition, a Graphic Communications Center was established, which includes Visual Imaging & Design Technology, Photo Imaging, and Graphic Imaging Technology.

A CDL Truck Training Facility has been created at Hilltop Rd and Rt 183 in Bern Township, which will allow students to obtain hands-on driving experience.

Library

Schuylkill Valley Public Library is located on Washington Road in Bern Township. It provides the community with books, CDs, DVDs periodicals and newspapers. There are also several computers available for patrons' use. In 2012 1,180 Bern residents held library cards.

The Mid Atlantic Air Museum

Established in 1980 and located at the Reading Regional Airport, The Mid Atlantic Air Museum reflects this region's unique contribution to aviation history. Historically-accurate exhibits chronicle general and military aviation. Aside from the educational collection and lectures, there are flying demonstrations featuring restored aircraft and special events such as World War II Weekend.

Berks County Facilities

The Berks Heritage Center

The Berks County Heritage Center is a historical interpretive complex commemorating important eras of our cultural history. The Gruber Wagon Works, a National Historic Landmark, the C. Howard Hiester Canal Center, Wertz's Covered Bridge, Melcher's Grist Mill, Deppen Cemetery, Bicentennial Eagle Memorial, Police and Veteran's Memorial, Doctor's Grove, the Distlefink and a salad and herb garden are all located within the Heritage Center.

Gruber Wagon Works and the C. Howard Hiester Canal Center provides a variety of educational programs to support area schools. Educational facilities are available at the Museum, the Wagon Works and the Canal Center. These facilities are used for both school and adult education activities and seminars.

The Berks County Prison

In 2010 the population of Berks County Prison was 1,545.

Berks Heim County Nursing Home

This 420-bed community provides quality long-term elder care services, including Medicare and Medicaid. They use an individualized approach to health care and dedicated staff provide for the social, emotional, and physical well-being of the residents. The Heim employs about 497 persons.

Berks County Dept of Emergency Services

This department is located within the Direct Link building on Rt 183 near Reading Airport.

Bern Township

Building Code

The Township uses the Uniform Construction Code (UCC) as its Building Code. Permits for all construction, excluding maintenance are required. Code enforcement is currently contracted out to LTL, a consult company.

Trash Collection

For residents in the Trash District of the Township, there is one weekly trash collection. Residents not in trash collection areas must make their own arrangements for private collection.

Recycling

Act 101 of 1988 required the Township to fully implement a township-wide recycling program. This includes collecting household recyclables from all residences located on public streets. In addition the Township has:

- ◆ A Leaf and Yard Waste program operating on scheduled routes.
- ◆ The township provides a newspaper, glass and metal recycling in a Dumpster near the soccer field on W. Leesport Rd.

- ◆ Leaf and Yard Waste Drop-Off Center at the County Recycling Facility on Hilltop Road

Emergency Services in the Township

Fire Companies

There are three fire companies serving Bern and a mutual aid agreement is in effect among all companies that serve the Township.

Fire hydrants are located in parts of the Township currently served by public water. These voluntary companies serve the Township:

- ◆ Greenfields Fire Company, located next to the airport on Route 183
- ◆ Union Fire Company, located in Leesport Borough
- ◆ Mt. Pleasant Fire Company, located in Penn Township.

Ambulance Services

The Township is served by two volunteer ambulance associations

- ◆ Schuylkill Valley Emergency Medical Service (EMS) established in 1959 and located at the Union Fire Company in Leesport,
- ◆ Western Berks Ambulance Service, established 1961

Bern Township Police Department (BTPD)

Bern Township has its own full-time police force located in the Township building. Currently, the force has 12 officers, including the Chief. The department has mutual aid agreements with neighboring municipalities and additional officers are available in a case of emergency. Several recent BTPD projects include:

- ◆ Appointing a full-time Criminal Investigator
- ◆ BTPD Bicycle Patrol Unit
- ◆ We participate in a SWAT team, the Berks County Emergency Response Team (BCERT)
- ◆ Refurbished an ambulance, which is used as a mobile Special Service Command Post during special operations such as truck details, etc.

Bern Township Public Recreational Facilities			
Facility Owner	Park Type	Facilities Description	Acres
Airport Desilting Basin	State	Natural Resource, fishing, nature study	41.84
Berks County 4-H Youth Center	County Single Purpose	Community center, horseback riding, horse show rings, support building with meeting rooms, gymnasium and concession stand	29.44
Berks County Heritage Center	County Single Purpose	An historic interpretive area that includes a National Historic Landmark, The Gruber Wagon Works and the C.Howard Hiester Canal Museum, Wertz's Covered Bridge, Melcher's Grist Mill, Deppen Cemetery, Bicentennial Eagle Memorial, Police and Veteran's Memorial, Doctor's Grove, the Distlefink and a salad and herb garden. Union Canal Towpath Trail, a 4.5 mile walking/ jogging/ bicycling trail created following the actual towpath, where the mules walked as they towed the canal boats. It runs from the Blue Marsh Project Area to Stonecliffe Recreation Area near Reading. Supports Berks County Park Department special events biking, hiking, museum	44.64
Berks County Youth Recreational Area	County Sports Complex	Berks County-owned athletic complex is managed and operated by the Berkshire Baseball organization. State-of-the-art athletic fields. Fee based used for games only, (no practice times permitted). Fields include: 4 soccer fields (1 lighted) , 1 baseball field, 1 lighted softball field, 1 Little League field and 1 T-ball field. Complex is serviced by a concession stand and rest room building, as well as on-site service buildings for field maintenance, equipment materials. Fields made available through field use fees with equal access for all County groups. Berks has entered into a management agreement with a private athletic organization to schedule events. Schuylkill Valley schools & Youth Groups can use facility at no cost when not in use, handicapped accessible, hiking, soccer, softball	117.40
Bern Desilting Basins	State Natural Resource	Fishing, hiking	275.10
Bern Township Municipal Complex	Municipal Neighborhood	The Township owns and maintains these facilities: 2 tennis courts, childrens' playground equipment, basketball court, picnic tables and a pavilion. There are 6 acres of Soccer Fields located on West Leesport Rd, which are used without charge by Schuylkill Valley Schools and Youth Groups.	10.0
Blue Marsh Lake	Federal	U.S. Army Corps of Engineers facility was built for flood control, water supply, water quality and recreation. Construction was completed in 1979. There are more than 36 miles of trails, 5,000 acres of land, 1,147 acres of water. State-of-the-art recreational facilities include a lake, picnic area, pavilions, volleyball courts, showers, rest rooms, swimming beach, boat launch ramps for sail and motor boats, water skiing, fishing, hunting, hiking trails and a Visitor Center.	6,194 site 1,150 lake
Gamelands 280	State Natural Resource	Hiking, hunting, nature study	315.34
Epler's Landing Recreational Facility	State Greenway	PA Fish Commission Facility has a boat launch area adjoining a grass area. There are no support facilities Boating, Fishing, Hiking, Nature study, Picnic area	72.33
Reading Airport Open Space	Municipal Natural Resource	Fishing, nature study	8.88
Reading Fair Ground	County Single Purpose	Leased from Berks County, used for the Reading Fair and other special events. There are 2 pole barns, toilet facilities, a race track and grandstand.	73.63
Schuylkill River Greenways Trail segment Bern-Leesport	Non-Profit Linear Park	fishing, hiking, horseback riding,	21.40
Union Canal Trail	County Greenway	biking, fishing, hiking	144.92

Bern Township Private Recreational Facilities			
Facility Owner	Park Type	Facilities Description	Acres
Berkshire Country Club	Private Park	Exclusive, membership facility with a 18-hole golf course, tennis courts, swimming pool and clubhouse facilities	115.75
Bern Church grove	Non-Profit Private Park	Picnic pavilions, Little League field, baseball youth, picnic area	8.18
Bern Lions Club	Non-Profit Private Park	Privately owned facilities include: baseball, softball field, T-ball backstop, concession stand, and swimming pool. Serves Bern Township Athletic Association youth league programs.	26.28
Epler's Church Recreation Area	Non-Profit Private Park	BB, Basketball, Tot lot Est. 1737, the church grounds have a grass area with backstop, basketball court and stand-alone playground equipment. There is a maze in the grounds.	4.16
Grand Slam USA	Private Park	Private indoor batting cages, volleyball, arcade; fees	0
Leesport Historical Society	Non-Profit Private Park	Museum in old schoolhouse	0.25
Orchard Hill	Non-Profit Private Park	Boating, fishing	31.13
Mid Atlantic Air Museum	Non-Profit Private Park	Museum	10.55
Willow Hollow Golf Course	Private Private Park	Golf, picnic area	119.77
Wodenshire Country Club Pool	Non-Profit Private Park	Open field sports, swimming	5.34
Public and Private Recreational Facilities Total Acres			2,352.66

*Source: Berks County Greenway Park and Recreation Plan 2007 part of Berks Vision 2030
Metro Region: Recreational Facilities Inventory*

Berks County Recreational Areas

Berks Leisure Area

1901 Tulpehocken Rd., Wyomissing PA 19610

Footbridge provides access to the Union Canal Bicycle and Walking Trail on the opposite side of Tulpehocken Creek. This bridge marks the location of a mule bridge that was used in conjunction with the operation of the Union Canal. Crossing over the bridge from the Berks Leisure Area, the remains of lift Lock No. 51 of the Union Canal can be found.

The Berks County Heritage Center

near Rt 183 at 1102 Red Bridge Rd, Reading, PA 19605

This is a historical interpretive complex commemorating important eras of our cultural history. The Gruber Wagon Works, a National Historic Landmark, the C. Howard Hiester Canal Center, Wertz's Covered Bridge, Melcher's Grist Mill, Deppen Cemetery, Bicentennial Eagle Memorial, Police and Veteran's Memorial, Doctor's Grove, the Distelfink and a salad and herb garden are all located within the Heritage Center complex.

Gring's Mill Recreation Area

2083 Tulpehocken Road, Wyomissing, PA 19610

The historic buildings at Gring's Mill Recreation Area house the Berks County Parks and Recreation Department's administration and maintenance offices. An information center, group meeting facilities, snack bar, and rest rooms are located in the adjoining barn. Recreation facilities include six tennis courts, a softball field, an eighteen-station exercise course, one sand volleyball court, and a ranch-theme children's play area. A game court area features volleyball and shuffleboard courts, quoits, and horseshoe pits.

Kaercher Creek Park

3401 Old Route 22, Hamburg PA 19526

Located just east of Hamburg along old Route 22, Kaercher Creek Park offers recreation opportunities in northern Berks County. The park is developed around a 40-acre lake, complete with a fishing dock, boat dock and a boat launching ramp. The lake is stocked with a variety of fish by the Pennsylvania Fish Commission. Family oriented facilities feature a lodge, picnic pavilion, children's play apparatus, volleyball courts, sand volleyball court, quoit and horseshoe pits. Several summer concerts and interpretive programs are presented at Kaercher Creek Park.

Red Bridge Recreation Area

2141 Tulpehocken Rd., Wyomissing PA 19610

The Red Bridge, originally known as Wertz's Bridge, at 220 feet is the longest single span covered bridge in Pennsylvania. Built in 1867 and one of five remaining in Berks County, the covered bridge allows pedestrians to pass over the Tulpehocken Creek to the Union Canal Bicycle and Walking Trail and the Berks County Heritage Center. The Red Bridge Recreation Area, located just south of Wertz's Bridge on Tulpehocken Road, consists of a picnic pavilion and badminton court.

Stonecliffe Recreation Area and Action Park

Rt 183 and Columbia Street

A new attraction at Stonecliffe Recreation Area, is an Action Park for skaters and bikers. Skates include in-line skates, skateboards and scooters. Bikes include BMX-style bikes only. Hours -8:00 a.m.-Sunset (Weather and Conditions permitting). Action Park includes Quarter Pipes that range in height from 3-5', Three-sided Pyramid with Curved Rectangular Grind Rail, Double Pump Hump, Grind Box with angled edge, Skate Table (picnic table) with Kicker Ramp, Kinked Rectangular Grind Rail, Straight Round Grind Rail, Kinked Round Grind Rail, 5' Hip and Spine, and 3 Ledges- 2 with 2" round coping, 1 with 2" square coping.

Berks County Recreational Area Facilities

	Berks Heritage Center	Berks Leisure Area	Gring's Mill Rec Area	Kaercher Creek Park	Leesport Lock-house	Red Bridge Rec Area	Stone-cliffe Rec Area	Youth Rec Facility
ACRES	44.64	7.5	33	185	1	7	15	117.4
Action Park							X	
Amphitheater			X					
Badminton		X				X		
Baseball/ Softball Fields			X					X
Basketball								
Cabins								
Electricity (with reservation)	X (barn)	X	X (barn)	X (lodge)	X	X	X	X
Exercise Course			X	X				
Fishing Dock				X				
Gazebos								
Grills		X	X	X		X	X	
Horseshoes		X	X	X		X		
Lodge/Barn	X		X	X				
Meeting Area	X		X	X	X			
Parking Area	X	X	X	X	X	X	X	X
Pavilions		X		X		X		
Play Equipment			X	X		X	X	X
Picnic Tables	X	X	X	X		X	X	X
Pool								
Quoits		X	X	X		X		
Restrooms	X	X	X	X	X	X	X	X
Sand Volleyball			X	X				
Shuffleboard		X	X					
Soccer Fields							X	X
Tennis			X					
Volleyball Court			X	X			X	
Walking Trail	X	X	X			X		

The Township will encourage developers to pay recreation fees as detailed in the Township's Subdivision and Land Development Ordinance in order to fund development of recreation facilities. Where considered appropriate by the Township, recreation facilities will be required of developers.

Trails

Blue Marsh Trails

- ◆ National Recreation Trail multi-use loop around the lake-- hike, bike or ride a horse.
- ◆ Skinners Loop and Foxtrot Hiking Trail are connected to this.
- ◆ The Squirrel Run Nature Trail is near the State Hill Boat Ramp.
- ◆ There also is a universally accessible Eyes of the Eagle Sensory Trail and the Great Oak Nature Trail located within the Day Use Area.

Schuylkill River Trail

The Schuylkill River Trail is currently being constructed through a partnership with the Schuylkill River Greenway Association (SRGA) and Bern Township. The 10 foot wide by 3,100 foot long trail begins on Washington Road at Herbein's Lock, running along the Schuylkill River and ends in Leesport Borough at Washington Road near the Schuylkill Valley Library.

This Schuylkill River Trail segment will be the first piece in northern Berks County to be installed as a result of the DCNR funded *Hamburg to Reading Schuylkill River Trail-Freedom Trail Feasibility Study* completed October 2007. It is centrally located between the two towns and when completed will demonstrate the viability of regional trails created through a multi-municipal partnership in an area that needs these recreational opportunities and facilities.

SRGA successfully acquired, constructed and now manages over 25 trail miles located south of Reading and north of Hamburg. This project will begin to fill a 17 mile gap that must be built in small pieces due to the lack of contiguous rail corridor

Currently the SRGA has established an "on road" trail connecting the River Trail and the Union Canal Trail, this trail runs along Washington Road, Cross Keys Road, Rickenbach Road, West Leesport Road, County Road and a short section of Palisades Road to the Destilling Basin entrance.

The Union Canal Connector Trail

Runs along the canal tow path and provides visitors with a path to the Schuylkill River Trail and the Berks County Parks and Recreation Department trail system (horses are prohibited on this trail). The trail starts at Stonecliffe Park

and the distance is .6 m to Berks Leisure Area, then .6m to Gring's Mill then 1.1 m to Red Bridge-Berks Heritage Center, then 1m to Paper Mill then .9m to Reber's Bridge then .9 to Swiftwater Parking Lot and finally .9 miles to the Stilling Basin Road for a total of 6 miles.

TCVG Trail

The Tulpehocken Creek Valley Geo Trail, is a geocaching interpretive trail consisting of 20-acres along the scenic Tulpehocken Creek and around Blue Marsh Lake.

Historical and Cultural Resources

The following brief history of the Township appeared in the August 27, 2001 edition of the *Reading Eagle and Reading Times*:

"The area that became Bern Township, located in what is now south central Berks County, was settled through land grants from Thomas and Richard Penn in 1733 by German farmers and artisans who arrived from upstate New York. Prominent among the early settlers were John Hiester. At one time the Hiesters owned thousands of acres along the Tulpehocken and built a number of mills. Peter Herbein owned quarries, a distillery and a mill.

In 1738, the residents petitioned for and were granted establishment of a township to be carved out of eastern Tulpehocken Township. The new Bern Township was huge, extending beyond the Blue Mountain.

By 1767, Bern officials realized their township was too large to manage, so they asked that it be divided. The expanse beyond the mountain is now part of Brunswick Township, Schuylkill County, the crest of the mountain serving as the county line.

Bern also gave up land for the formation of Upper Bern, Penn, Centre and Tilden townships, as well as the Glenside section of Reading.

Farming and milling were the principle activities of township residents, and when large limestone deposits were found in the eastern portion of Bern, limekilns were established and the Philadelphia and Reading Railroad laid a spur line at Rickenbach Station, which became the shipping center for the finished product, lime. Below the station, John Rickenbach ran a successful canal-boat-building business. Many old locks, lock houses, mills, barns and fine old homes can still be found in Bern Township."

The National Register of Historic Places

This is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeologi-

cal resources. In Berks County 133 resources are listed, 4 of them are in Bern Twp. The four places in Bern Township listed on the National Register. They are:

Wertz's Covered Bridge, Gruber Wagon Works, Reiser Mill, Rieser-Shoemaker Farm.

Historical Properties

Recent amendments to the Township's Zoning and Subdivision and Land Development Ordinances (SALDO) reflect concern for preservation of remaining historic resources, including requirements for identification, analysis, mitigation of impacts, and protection from neglect.

The following list is from the Pennsylvania Historical Museum Commission database of Township properties. It lists the property, its location, and status relating to the National Register of Historic Places.

Pennsylvania Historical Museum Commission List of Bern Township Properties

Rieser-Reiser Grist Mill

A huge stone grist mill owned/operated by the Rieser family was constructed in 1784. No longer operating. Located on Cross Keys by Grange Rd.

Rieser-Shoemaker Farm on Cross Keys Rd

Wertz's Covered Bridge (1867) Red Bridge Road
Closed to vehicles, this is one of the longest one-lane covered bridges in Pennsylvania. Stretching 204 feet across the Tulpehocken Creek, it serves as a link between Bern and Spring Townships. It was erected in 1867 using the Burr Arch-Truss construction design. In 1979, the bridge was placed on the National Register of Historic Places.

Gruber Wagon Works Berks Heritage Center is a national historic landmark. It is the most complete example of an integrated rural manufactory of its kind in the nation.

The Park and Recreation Plan lists the following historical sites in Bern Township and provides a map showing their location:

Berks County Prison

This large structure was constructed when the City Park facility was no longer used as a prison.

C. Howard Hiester Canal Center

Houses the largest private collection of 19th century canal memorabilia in America. Canal artifacts from the Schuylkill Navigation Company and the Hiester Boatyard included the houseboat "Mildred," which plied the Schuylkill Canal between Reading and Philadelphia, a toll collection booth, and a pilot house from the tugboat "Dolphin".

Epler's Church

Built in 1851 this brick structure was the center of an old settlement and once housed a Dieffenbach organ used for 100 years, thought to be one of the oldest working organs in America.

Epler's School House

This well-kept stone structure was moderately modified from its original appearance following closing of the school in 1931. The structure now is used as a dwelling.

Hain's Tavern/Store

This large structure closed long ago and is currently used as a dwelling.

Joseph Hiester Home

Home and lands of former PA governor Joseph Hiester (1820 -1823) given to County in 1928 by William W. Essick. As of 1976 this was the largest single donation ever made to Berks County.

Leinbach's Hotel

Landmark store-hotel opened by Christian Leinbach in 1848 established in 1852 in the store part. As of 1976 the hotel was operating in some form.

Leinbach's Store

Former Leinbach's Store built in 1867 at which time the store and post office were removed from the hotel building. The store and post office have been closed for a long time. Currently, the structure is used as a dwelling.

Peacock Railroad Bridge

Constructed in 1854 this 63 foot diameter, 9 arch stone bridge has a 12 foot diameter opening. A smaller version of the bridge is located on Washington Road in the Township.

Richenbach Family Graveyard

Small burial plot below railroad track level. Rickenbach Station (building removed) was the center of a bustling settlement.

Schuylkill Canal #38

The buildings have been removed but the lock chambers remain nearly buried.

Stolzfus Family Graveyard

The burial site of Nicholas Stolzfus. South of this site is the Peacock School, Canal Lock #39 and the former Murphy's Canal Hotel.

Stoudt School House

This one room stone school house with rounded interior corners is now used as a dwelling.

Berks County Conservancy Survey of Historic Resources in Bern Township (1986)

Historic Name	Year	PHMC Key No	Resource Type	Address	Builder
Belleman House (Windy Hill Farm)	1791	89131	residential farm complex	975 GangeRd	
Berks County Prison	1931	89470	prison	County Welfare Rd	Berks County
Bushong House	1783-1820		gardener's cottage	Old Bernville & Woodward	Bushong
Colonial Hall Acres	1800-1824	89460	house tannery	Parvin Tannery Grange Rd	
County Farm No. One	1800-1824		farm complex		
Dester-Rieser House (Jacob Rieser)	1800-1824	89461	residential farm	1096 Grange	Rieser
Dundore Farm	1856	894659	residential farm complex	Grange Road	Dundore
Epler's Church	1851	89472	Church	W Leesport Rd	Epler
Epler-Hain Farm	1797	89473	residence & farm complex	158 Stinson Rd	Epler
Epler Farm & School	1850	89479	res/farm complex & school	Van Reed Rd	Epler
Epler Johannes Farm	1850	89474	residence & farm	1160 Old Bernville Rd	Epler
Epler-Wistar Tract	1800-1824	89475	log house/residence res Dechant	613 Prison Rd	Epler
Fisher-Hain House & Blacksmith Shop	1790	89471	home and blacksmith shop	W Leesport Rd	
Gruber Wagon Works	1882	101638	industrial, wagon works,	Tulpehocken Creek Park	National Historic Landmark
Hain Tavern	1812		tavern	Old Bernville Rd	Kline
Peter Herbein Homestead	1760-1811	89469	residence & farm complex	1182 Cross Keys Rd	Herbein
Hiester Mansion	1800-1824	89480	Governor's residence	County Welfare Rd	Hiester
Leinbach's Tavern	1848	89477	country hotel & tavern	1079 Old Bernville Rd	Leinbach
Locktender's House	1825	89481	Lock 48 of Union Canal	Van Reed Rd	Union Canal
Moser Homestead	1797	89462	residential farm complex	White Oak Rd	Moser
Maurer-Kintzer House	1820-1849	89467	canal & Schuylkill River	1400 Cross Keys Rd	Maurer
Mc Gray House (Reeser)	1807	89463	Federal house	W Main St	Rieser
Parvin Lightfoot House	1819	89468	canal & Schuylkill River	1504 Cross Keys Rd	Parvin
Jacob Rieser Homestead & Mill	1784	89464	residence and mill complex	1002 Cross Keys Rd	
Daniel Rieser Farm	1800-1824	89466	residence & farm complex	1014 Sillman Lane	
Rieser-Shoemaker Farm	1800	89465	residence & farm complex	1062 Cross Keys Rd	Rieser
Silvis-Bright House	1840-1919	89478	quarry/ restoration by Okie	Cedar Hill Rd	Silvas
Jonathan Stoudt House	1854-1862	115377	model farm of the period	1450 W Leesport Rd	Stoudt
Schell Farm	1780-1820	89130	residential farm complex	Possum Lane	
Mathias Weaver Farm	1764		residence & farm complex	Rt 183	Weaver
Wertz's Covered Red Bridge	1780-1899	101637	bridge	Red Bridge Rd	

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Ecological Management

Ecological management must be included as a component of all future land use development in the Township. There is a clear and urgent need to preserve and protect floodplains, wetlands, steep slopes and prime agricultural soils (USDA Class I, II and III) and other natural resources of the Township.

The Township is bordered by the Schuylkill River on one side and the Tulpehocken Creek on the other, so it is imperative to consider how water courses within the Township relate to land use. The Township's objectives are:

Protect water resources within the Township as well as the quantity and quality of surface and groundwater.

Of special concern are:

The Schuylkill River and Tulpehocken Creek and tributaries such as *Siefert Run and Plum Creek*.

- ◆ Protect the watershed and wellheads of community water supplies. The Township is participating in the Western Berks Water Authority's Source Water Protection Committee, which was formed in 2012 by order of the Department of Environmental Protection (DEP).
- ◆ Protect and improve water quality in the Township, with special emphasis on the water courses listed above.
- ◆ Protect ground water in the Township, especially in limestone areas where the potential for pollution exists. The Township is participating in the Berks County MS4 Steering Committee to educate the public on the importance of storm water management.
- ◆ Manage and protect woodlands within the Township.
- ◆ Protect the steep slopes in the Township.
- ◆ Protect and conserve natural areas in the Township, such as areas adjacent to Blue Marsh Lake.
- ◆ Protect and preserve agricultural areas for agricultural use. The Township will identify the methods to use to protect and preserve agricultural areas.

Relation to Future Land Use Plan

Stream corridors within the Township are designated for protection in order to:

- ◆ buffer water courses,
- ◆ protect ground water discharge and recharge areas
- ◆ protect the quantity and quality of surface and groundwater.

Vulnerable wooded areas, steep slopes, as well as critical ecosystems, should be protected to maintain an adequate ecosystem.

Net-Out Provisions

The Township's Zoning Ordinance contains provisions requiring developers to identify :

- ◆ critical natural resources on their tracts
- ◆ eliminate areas containing those resources when determining the permissible density of development of a tract
- ◆ protecting those resources

Identified Important Natural Areas

The *Natural Areas Inventory of Berks County* identifies the Schuylkill River as an important natural resource. This river is a Pennsylvania Scenic River and it is recommended to be protected from encroachments, increased pollution, and excessive sedimentation.

The *Orchard Hill* tract, located along West Leesport Road, has also been identified as an important natural area. It contains the Schuylkill River Cliffs, which are of geological interest, and a variety of habitats. The area is managed by the Berks County Conservancy.

There are several private conservation easements located

throughout the Township. Private landowners have taken steps to preserve and protect farmland, woodland, wild-life habitat and wetlands. Many of these properties are monitored by the Berks County Conservancy, a non-profit whose mission is to preserve unique cultural and environmental heritage for the benefit of future generations.

The Tulpehocken Creek Valley Geo Trail, is a geocaching interpretive trail consisting of 20-caches along the scenic Tulpehocken Creek and around Blue Marsh Lake. It was developed in partnership with the Berks County Parks Department and opened September 29, 2012.

There is also an 4.5 mile trail that runs along the Tulpehocken Creek from Stonecliffe Recreation Area to Reber’s Bridge. The trail is crushed stone, and fairly flat.

There are several linear park trails located within the township. The Schuylkill River Trail starts at the Philadelphia Art Museum and runs 130 miles to the end in Pottsville, Schuylkill County.

Today the Circuit covers 250+ miles of walking and biking trails in the Greater Philadelphia region. When completed the Circuit will have 750 miles of bicycle and pedestrian trails connecting the region.

Agricultural Preservation

Conservation easement is a legal agreement between a landowner and a land trust or government agency, which permanently limits uses of land in order to protect its agricultural or conservation values. An easement remains with the property deed in perpetuity. Landowners may continue to own and use their land or to sell it or pass it on to heirs.

An easement can be used to protect prime agricultural soils, cultural and historic resources in the Township. There are two organizations in Berks County that control easements:

The Berks County Agricultural Land Preservation Board, is a government agency appointed by the Berks County Commissioners that has been protecting farmland through the purchase of agricultural conservation easements since 1989. This board administers the agricultural land preservation program which permanently preserves large clusters of viable agricultural lands by acquiring agricultural conservation easements (ACE). An ACE limits the use of the land for any purpose besides productive agriculture

Berks County Agricultural Land Preservation Board		
Conservation Easements		
Location	Year	Acres
Berks County	2003	34,219.3
Berks County	2012	64,954.2 (640 farms) Berks Co. is Number 3 in U.S.A.
Bern Township	2003	62.9
Bern Township	2012	62.9 plus 42.5 overlapping in Penn & Centre Twps

Berks County Conservancy is a 501(c)(3) conservation organization and land trust that has been serving Berks County since 1974.

Berks County Conservancy		
Conservation Easements		
Location	Year	Acres
Berks County	2003	3,535
	2012	6,769
Bern Township	2003	115
	2012	151

9 Transportation Plan

The goal for a transportation plan is to create a safe and efficient transportation system, which will enhance vehicular travel within the Township, given the limits of the existing system and natural and fiscal constraints.

The objectives for transportation are as follows:

- ◆ Coordinate land use and road improvement policies.
- ◆ Preserve and improve the capacity of existing roads within the Township as future development occurs through cooperative efforts with developers and PennDOT as applicable.
- ◆ Monitor impacts on roadway capacity from new development and require developers to address projected increased traffic volumes.
- ◆ Promote coordinated access management programs along road corridors within the Township, to minimize the number of access points to the road network.
- ◆ Provide maintenance of the existing road network as needed.
- ◆ Recognizing that a sizable amount of traffic in the Township is generated outside Bern, work with State, County and other municipal officials to address concerns.
- ◆ Address existing deficiencies and safety concerns in the transportation system with landowners, PennDOT and developers as appropriate.
- ◆ Continue to implement ways of relieving congestion of Township roads, particularly Route 183, such as increased use of public transportation, traffic management policies along Route 183 and relationships with employers in the corridor.

Future Functional Classification of Roads

There are no recommendations in this plan update for the re-classification of any Township road.

Proposed Road Improvements

A number of improvements have been made to Route 183 since the last plan update.

- ◆ The Route 183 and Route 222 interchange has been redesigned and reconstructed to address traffic volumes and back ups on Route 222 for those traveling northbound on Route 183.
- ◆ Turning lanes and a traffic light at the intersection of Route 183 and Palisades Drive have been installed.

The Township should consider:

- ◆ Evaluating improvements at the entrance to the Reading Regional Airport to accommodate additional traffic to the airport as the industrial park is developed. Widen Route 183 in this area while addressing through traffic.
- ◆ Improving access management along 183 and developing parallel access roads along this roadway to handle additional growth when feasible.
- ◆ Require road improvements from developers, such as widening of roads and creating turning lanes where necessary to support new development traffic loads.

Cooperation with Municipalities

While some road improvements will be handled by the Township, cooperation with other municipalities will be important, particularly along Route 183. Cooperation between the Township and the City of Reading and Penn Township to address the impacts of Route 183 is encouraged. Access management will continue to be a key element.

Mass Transit

With congestion a major concern along Route 183, mass transit routes and stops have been expanded to include the new St. Joseph Medical Center. The current BARTA Route #17 stops at Mac Arthur Road, Berks Heim and the Medical Center.

An objective will be to maintain and then expand service. Elements in trying to expand service will be well-located bus stops, attractive and safe stops, with connections to the transit hub in Reading and the regional train service to Philadelphia, if constructed. As additional development occurs within the Township, consideration should be given to a local circulator system, which could be smaller buses or vans, which circulate throughout the Township and provide access to the BARTA system or directly to destinations.

Access Management

Access management will continue to be a concern along all roads in the Township, but particularly Route 183. The Township has developed an access management plan for Route 183, by creating the Route 183 Overlay District between Egle Road and a point 1,200 feet north of Fairview Drive. Each property has one access point to Rt 183. (See Bern Township Zoning Map 2010).

Major elements in an access management plan are:

- ◆ Design standards for driveways
- ◆ Reduce the number of entrances to roads
- ◆ Traffic Impact Analysis where development is proposed
- ◆ Left turn lanes and right turn lanes constructed at road and driveway intersections
- ◆ Shared access to properties
- ◆ Acceleration and deceleration lanes
- ◆ Signalization of high volume driveways

Transportation Development Districts

The Transportation Partnership Act (Act 47 of 1985, as amended) allows municipalities to create Transportation Development Districts to assist in the financing of transportation facilities and services. The Township study was done in 2006. It has identified two traffic districts :

- ◆ Traffic Study Area 1
including the Route 183 corridor N from the City of Reading to Bern Church and along Cedarhill Rd, Rick Road, White Oak Lane and Possum Lane.
- ◆ Traffic Study Area 2
extends from Northfield Industrial Business Park N to the Borough of Leesport

Traffic Calming

As development occurs in the Township, and traffic volumes increase, there can be increased traffic flow on residential streets. It is hoped that some of the improvements proposed will direct traffic to roads on the periphery of residential areas. In the case that problems develop, the purpose of traffic calming is to manage movement through an area in a way that is compatible with the land usage in the vicinity of the road. Some methods of traffic calming are:

- ◆ Speed reduction
- ◆ Street design
- ◆ Installation of signs
- ◆ Comprehensive transportation planning

Optimization of Traffic Signalization along Route 183

In order to increase system capacity and reduce intersection delays, traffic signal timing along Route 183 should be kept

current. Consideration should be given to implementing a closed loop system to enhance the operation of coordinated signalized intersection along the Route 183 corridor.

Berks Vision 2030

Berks County Comprehensive Plan

The County of Berks is anticipating the adoption of this Plan in late 2013. This Plan lists proposed short, mid and long term transportation projects in Berks County.

This Plan references the Reading Area Transportation Study Long Range Transportation Plan, scheduled to be updated in 2014, which includes three short-term projects in Bern Township:

- ◆ The PA Route 183 widening (PennDOT Job # 74786), from Red Bridge Road to the Reading Regional Airport exit, completed in 2006 with the construction of the new St. Joseph Medical Center. This project involved the construction of a center turning lane and the improvement of the PA Route 183/Mac Arthur Road intersection.
- ◆ The PA Route 183 / Palisades Road/ Plum Creek Road intersection improvement project (PennDOT Job 57842) completed in 2012. This project involved the installation of a traffic signal and turning lanes.
- ◆ The PA Route 183 / Route 222 interchange improvement (PennDOT Job #47070) completed in 2013. This project involved a bridge replacement, widening and lengthening of exit and entrance ramps, the installation of a partial clover leaf and the addition of turning lanes within the interchange.

The Plan includes two additional projects located on PA Route 183 in the Long-Term Plan:

Project # 146 involving a bridge replacement

Project #36, an unfunded/unmet need, involving the widening of Route 183 from US Route 222 to PA Route 3051 (Upper Van Reed Road) to resolve the congested corridor.

10 Future Land Use

The Future Land Use Plan establishes policies for guiding future land use within the Township and serves as a guide on which to base regulatory controls, such as municipal zoning maps and ordinances. Future zoning amendments adopted by the Township will establish new zoning boundaries, permit land uses and establish the permitted density of development. In the land use categories below, the types of land use changes recommended in each category is indicated.

Land Use Categories

Rural Residential

This category reflects existing areas which have been developed for low-density residential development in the Township and areas where such low density development could occur. Single family detached homes would be permitted on lots ranging from one and one-half acres if on-site sewer and water were used to one-half acre if public sewer and water were used.

Suburban Residential

These areas are intended for residential development for single family detached dwellings at a density of about one dwelling unit per acre without both public sewer and water and one-third acre lots with both public sewer and water.

Urban Residential Moderate Density

This area is intended for single family detached dwellings served with public sewer and water facilities, at a density of up to four dwelling units per acre.

Urban Residential

These areas are intended for higher density residential development for single family, two family and multiple family developments and mobile home parks. With on-site sewer and water, the density of development will be about one

dwelling unit per acre. With public sewer and water, higher densities of development will be permitted.

Neighborhood Commercial

These areas are intended for commercial uses which serve the day-to-day needs of surrounding residential areas and will not adversely impact these neighborhoods.

Highway Commercial

These areas reflect existing and potential commercial concentrations along Route 183. In addition to serving the day-to-day needs of nearby residents, these areas accommodate highway users, regional-oriented uses, and those uses best located along major roads.

Shopping Center

These uses reflect a higher intensity of neighborhood and highway commercial uses, developed as an integrated shopping center.

Office Research

These areas are designated to provide locations for office and research development in the future.

General Industrial

These areas are intended for general or heavier industrial uses as well as light industrial and office uses, provided there are no adverse impacts from the uses.

Limited Industrial

These uses are intended for light industrial and offices uses.

Airport

These areas contain facilities that support airport operations.

Institutional Recreation

These areas include County, State, Federal sites, recreational areas, and greenways along the Schuylkill River and Tulpehocken Creek.

Planned Office Business District

This area is intended for modern office buildings and other compatible businesses that will serve them and other professional services.

Agricultural Business

The Township encourages the continuation of existing agricultural operations and agricultural-related uses; conservation uses are permitted, as well as single-family detached dwellings on minimum two acre lots.

Berks Vision 2030: METRO REGION

The Bern Township Future Land Use Plan and the County Metro Region Future Land Use Plan are generally consistent.

The Future Land Use Plan in the Berks County Comprehensive Plan generally shows remaining undeveloped land in the Township south of Route 183 and east of Route 222 as Future Growth Area. Remaining undeveloped land north of Route 183 and east of Route 222 is Designated Growth Area. West of Route 222 and south of Route 183, remaining undeveloped land outside State and Federal land holdings or County recreation land is Designated Rural Conservation or existing development.

Undeveloped land immediately west of Route 222 and north of Route 183 is Future Growth Area. West Ridge land is Designated Growth Area. Land immediately adjacent to the Borough of Leesport is Future Growth Area or Designated Growth Area. The remainder of the Township, except for flood plains, existing developed areas, and a small area of Agricultural Preservation in the northwest tip of the Township, is Rural Conservation.

Adjoining Municipalities

Adjoining land in Penn Township is zoned Rural Preservation or Low Density Residential, so there are no major inconsistencies with the Agriculture Business and Rural Residential designations in Bern Township.

In Centre Township, the western contiguous portion is zoned Agricultural Preservation. The area adjoining Leesport Borough is zoned Medium Density Residential, and the area in-between is zoned Low Density Residential. Land in Bern Township is designated Rural Residential, Agricultural Business, and Suburban Residential. Buffering could be appropriate within a residential subdivision in Bern Township adjoining agricultural preservation land in Centre Township.

Adjoining land in North Heidelberg and Lower Heidelberg Townships is included in the Blue Marsh Recreation Area and presents no conflict.

Adjoining land in Ontelaunee Township is buffered by the Schuylkill River and the Institutional/Recreational area along the River. Adjoining land in Spring Township is buffered by the Tulpehocken Creek and the Institutional/Recreational land along the Creek. Adjoining land in Leesport Borough is zoned Low Density Residential and does not present a conflict.

Adjoining land in the City of Reading is designated R-3 Residential. The City land abuts the Berkshire Country Club and residential development in Greenfields.

Land in Muhlenberg Township which adjoins Bern Township is buffered by the Schuylkill River and Institutional/Recreational land along the River.

Land Use Changes

This plan update addresses areas in the Township's prior Future Land Use Plan and zoning maps that are better suited for alternative land uses. The following are recommended changes to the existing land use strategy for the Township.

Suburban Residential

There is one recommended change in this category. Based on the relocation of Leisz's Bridge Road and the creation of a Runway Safety Area on the N side of the Airport, a small Suburban Residential Area should be changed to Airport Special Use'

Limited Industrial

There is one recommended change in this category. Based on the relocation of Van Reed Road and the creation of a Runway Safety Area on the W side of the Airport, a small area of Limited Industrial Area should be changed to Airport Special Use.

General

It is recommended that zoning boundaries be reviewed and adjusted to follow property lines where appropriate.

Future Land Use Considerations

- ◆ As development occurs in the Township, particular concern for resource preservation and rural conservation will be critical.
- ◆ An on-going sensitivity to natural resources should be encouraged.
- ◆ Development should be concerned with geologic stability, soils suitability, groundwater and stream flows.
- ◆ Groundwater resources should be protected.
- ◆ Floodplains and wet soils should be protected from encroachment.
- ◆ Retention of natural vegetation should be encouraged to control erosion, control storm water, provide animal habitat and provide visual amenities.

11 Recommendations

The following are the recommendations of this Comprehensive Plan. Upon the adoption of the updated Plan, the Township should assign responsibility for beginning the process of implementation. Some recommendations can be accomplished in the short-term, but others may require long-term actions.

Update the Zoning Map to reflect Future Land Use Plan Adjustments to district boundaries to reflect Future Land Use Plan

Consider merits of updating Zoning Ordinance to further protect natural resources through use of appropriate development techniques and regulations.

- ◆ Conservation Zoning

(Growing Greener Concept of Natural Lands Trust)
(consider in rural areas)

Net out natural resources

Establish maximum overall density

Establish minimum substantial open space requirement

Provide visual and physical access to open space areas

- ◆ Evaluate Steep Slope Protection Provisions

Control and limit development and disturbances on steep slopes

Consider larger lot sizes for steep slopes

Discourage development on slopes >25%

- ◆ Develop Woodland Protection Provisions

Limit clearance for development

Encourage tree protection and replacement during development

- ◆ Evaluate Wetlands, Wetland Margin and Hydric Soil Protection Provisions

Require wetland delineation in hydric soil areas

Restrict on-site sewage disposal

- ◆ Maintain Floodplain Controls and Riparian Buffer Zoning

Restrict development and impervious surfaces

Require riparian (vegetative) buffers to moderate water temperatures, protect wildlife habitats, control sedimentation, and reduce pollution

- ◆ Encourage greenways

Encourage conservation easements/donations/dedications
Encourage use of best management practices for development, storm water management, agriculture

- ◆ Encourage stream habitat improvement

Develop guidelines for development in areas of the high yield aquifers, such as recharge areas, limits on impervious cover, and limits on on-site sewage disposal.

- ◆ Consider expanded Historic Resource Overlay Zoning

- ◆ Consider Outdoor Lighting Standards to control light pollution and protect the night sky

- ◆ Enact appropriate Forestry Regulations

- ◆ Encourage expansion of agricultural security areas.

- ◆ Discourage public sewer and water in agricultural areas.

- ◆ Encourage purchase of agricultural conservation easements in proper areas.

- ◆ Ensure Municipal Act 537 plans are coordinated with this plan, particularly the Future Land Use Plan.
- ◆ Consider adopting an Official Map, designating all existing and proposed public facilities and streets.
- ◆ Prepare a Capital Improvements Program for street improvements, recreation and other community facilities, and other improvements recommended by this Plan.
- ◆ Investigate watershed planning and wellhead protection opportunities available under the Growing Greener initiative and other programs in cooperation with the Berks County Conservancy, Berks County Conservation District, and other agencies.
- ◆ Maintain a dialog with the school district regarding development activities, school facilities needs, and location of school facilities.
- ◆ Work with school district to assure resident access to school facilities.
- ◆ Monitor zoning along municipal boundaries.
- ◆ Encourage continuation and location of businesses that support local, agricultural operations.
- ◆ Monitor need for additional and expanded services and facilities.
- ◆ Facilitate coordination among providers of emergency services.
- ◆ Work with the volunteer fire companies and foster cooperation among companies to address manpower and equipment needs. Plan for water lines and fire hydrants with sufficient capacities and pressure to aid fire companies in providing fire protection.
- ◆ Protect municipal water supplies through appropriate watershed planning, management and protection.
- ◆ Develop guidelines for development in areas of transmission pipelines
- ◆ Prepare multi-year programs for street maintenance and restoration.
- ◆ Consider the possibility of a joint Route 183 planning and management study, with adjacent municipalities, Berks County and PennDOT involvement.

Consider the following for the Route 183 corridor:

- ◆ Evaluate the effectiveness of the Township traffic impact fee program.
- ◆ Encourage use of mass transit through cooperative efforts with BARTA , and area businesses.
- ◆ Work with PennDOT to keep traffic signal timing current in the Township.
- ◆ Work with PennDOT to evaluate the need for a closed

loop signalization system.

- ◆ Develop an access management plan with PennDOT to address potential future access points and access design standards"
- ◆ Require developer-financed road improvements where necessary and appropriate.
- ◆ Monitor the need for congestion management system strategies.
- ◆ Monitor the need for a Transportation Development District.
- ◆ Consider the possibility of marginal access roads/service roads.
- ◆ Monitor the need for traffic calming techniques and implement them as necessary.

Establish a program to implement the proposed intersection improvements, proposed road improvements, and improvements to areas of concern. Work with PennDOT, Berks County and developers to implement the program. Place improvements on the 12-year road program of PennDOT.

- ◆ Shoulders along roads, where appropriate, should be constructed, widened or improved as necessary. Developers should improve shoulders along their properties.
- ◆ Encourage cooperative efforts of developers and land-owners to manage access, including shared access and internal connections.
- ◆ Obtain enhanced infrastructure rights-of-way and corridors for future road and other improvements, particularly during the planning process and highway occupancy permit process for developments.
- ◆ Expand upon access management provisions in the Township Subdivision and Land Development Ordinance.

12 Appendix One Governmental Programs

The following is a list of some of the County, State and Federal programs for community and economic development.

Programs can be modified or eliminated over time, therefore it is necessary to contact the responsible agency for availability and eligibility information.

Berks County Programs

Joint Comprehensive Planning Program

Joint Zoning Ordinance Program

Joint MS4 Stormwater Education Program

Agricultural Zoning Incentive Program

Community Development Block Grant Program (CDBG)

This program provides financial and technical assistance to aid communities in their community and economic development efforts. Activities include housing rehabilitation, community facilities, infrastructure, public services, economic development and planning. The activities are to benefit areas containing a majority of low to moderate-income persons.

Pennsylvania Department of Community and Economic Development

Act 47 – Municipalities Financial Recovery Act

This program provides loan and grant funds and technical assistance to local governments experiencing severe fiscal difficulty to develop and implement financial recovery plans that will alleviate the distress conditions.

Ben Franklin Technology Development Authority (BFTDA)

This program provides funding in three areas: Technology Funds Investments for venture investments in Pennsylvania; University Research Grants for Pennsylvania colleges and universities, and nonprofits working with these institutions, for research and development projects; and Technology Development Grants for local development initiatives that stimulate advanced technology in Pennsylvania businesses and communities.

Ben Franklin Technology Partners

Regional centers that provide funding through various investment funding mechanisms to support research and development of new products or processes, and various services to businesses to introduce or develop new technologies.

Building PA

Provides funding to develop real estate assets within the Commonwealth. Funds are loaned to private investors and foundations looking for matching funds.

Business in Our Sites

Offers flexible loans and grants to local municipalities and their economic development partners to create opportunities for future business growth through the acquisition and preparation of key sites for development.

Community Revitalization Program

Supports local initiatives that improve the stability of communities and enhance local economic conditions. Funds may be used to construct or rehabilitate infrastructure; rehabilitate, acquire and demolish structures; revitalize or construct community facilities; purchase or upgrade machinery and equipment; plan for community assets, public safety, crime prevention, recreation or training; and acquire land, buildings and rights-of-way.

Early Intervention Program (EIP)

Provides matching funds for development of multi-year financial plans and strategies for fiscal stability of local governments.

Emergency Solutions Grant

Provides grants to local governments and nonprofit organizations to assist in creating or rehabilitating shelter space for the homeless.

Enterprise Zone Program

This program provides grants to financially disadvantaged communities to prepare and implement business development strategies within designated municipal enterprise zones. Focuses on the formation of public and private partnerships that will develop and sustain increased rates of business investment and job creation, emphasizing industrial, technology-related, manufacturing and export service businesses. Works with local governments to build capacity to improve the business climate and to respond effectively to local business expansion opportunities and constraints.

First Industries Fund

Provides grants, low-interest loan financing and loan guarantees to farmers and owners of tourism and agricultural-related businesses.

Industrial Sites Reuse Program

Provides grants and low-interest loan financing to perform environmental site assessment and remediation work at former industrial sites.

Infrastructure and Facilities Improvement Program

Provides grants to certain issuers of debt to assist with the payment of debt service associated with financing for manufacturing facilities, hospitals, convention centers, industrial facilities and large retail centers.

Infrastructure Development Program

Provides grants and low-interest loan financing for public and private infrastructure improvements necessary for business growth, expansion or new location.

Local Government Capital Projects Loan Program

Provides low-interest loans for equipment and facility needs of small governments with populations under 12,000.

Machinery and Equipment Loan Fund

Provides low-interest financing to companies and farmers for acquisition and installation of new or used machinery or equipment, or to upgrade existing machinery and equipment.

Pennsylvania Capital Access Program (PennCAP)

Small business loan guarantee program based on a portfolio concept. Designed to help borrowers that do not meet a bank's normal small business lending requirements. This is a program of the Pennsylvania Economic Development Financing Authority.

Pennsylvania Economic Development Financing Authority (PEDFA)

Statewide conduit issuer of taxable and tax-exempt Revenue Bonds, both in pooled and stand alone transactions, to be used to finance land, building, equipment and working capital, and to refinance existing debt.

Pennsylvania Industrial Development Authority (PIDA)

Provides low-interest loan financing through Industrial Development Corporations for land and building acquisition, construction and renovation, resulting in the creation or retention of jobs.

Pennsylvania Minority Business Development Authority

Provides low-interest loans to businesses that are owner and operated by minorities.

Second Stage Loan Program

Provides guarantees for bank loans to second stage manufacturers and technology companies for working capital and other financing needs. Targeted to manufacturing, advanced technology and biotechnology.

Small Business First Program

Provides low-interest financing for land, buildings, machinery and equipment, and working capital to businesses and farmers. Provides financing to businesses that need to come into compliance with environmental regulations or that are involved in municipal commercial recycling; companies impacted by the reduction in defense-related activities; and companies involved in export-related services.

Pennsylvania Department of Environmental Protection

Act 537 – Sewage Facilities Planning Assistance

This program supports major or significant municipal sewage facilities planning, including Act 537 update revisions and special studies. Also supports periodic long-term public health and environmental surveys that assess sewage disposal needs and methods appropriate for the planning area.

Solar Energy Program (SEP)

The Solar Energy Program provides financial assistance in the forms of grants and loan funds to promote the use of alternative energy in the Commonwealth. The program is administered jointly by the Department of Community and Economic Development (DCED) and the Department of Environmental Protection (DEP).

Renewable Energy Program (REP)

Geothermal & Wind Projects – The Renewable Energy Program provides financial assistance in the forms of grant and loan funds to promote the use of alternative energy in the state. The program is administered jointly by the Department of Community and Economic Development (DCED) and the Department of Environmental Protection (DEP).

Pennsylvania Department of Conservation and Natural Resources

Community Recreation and Conservation Program

This program funds projects that plan for, acquire, develop and / or rehabilitate public park, recreation, open space, greenway, trail and conservation areas and facilities.

Land Trust Program

This program funds projects that plan for and acquire critical habitat, as well as, open space and natural areas.

Pennsylvania Recreation Trails Program

This program funds projects that help develop and maintain recreational trails, as well as, trail related facilities for both motorized and non-motorized recreational trail use and provides for the purchase of trail related equipment.

Rails-to-Trails Program

This program funds projects that plan for, acquire and/ or develop rail-trail corridors, to include trails and support facilities, such as comfort stations, trail heads, interpretive facilities, landscaping, signage, etc.

Rivers Conservation Program

This program funds projects that help develop watershed/river-corridor conservation plans, assist with land acquisition and development projects contained and recommended within a registered River Conservation Plans.

Pennsylvania Department of Transportation**LTAP – The Pennsylvania Local Roads Program**

Provides training to and shares new road-related technology with municipal road and street officials. Also conducts nearly 200 one-on-one technical assistance sessions and disseminates information each year to public works officials.

Pennsylvania Infrastructure Bank

Loans for maintenance, construction and other projects. Loans are administered by PennDOT and have four accounts – highway / bridges, transit, aviation and rail freight. Term is 10 years.

Rail Freight Assistance

Grants to build or repair rails, lines, ties, plates, turnouts and other materials or for new construction. Funding cannot exceed 70 percent of eligible expenses; grantee provides the remaining 30 percent.

Safe Routes to School Program

Repair, redesign and reconstruct main streets, commercial corridors and major boulevards in older communities to support local revitalization plans. Eligible projects include sidewalks, crosswalks, bike lanes or trails, traffic diversion improvements, curb extensions, traffic circles, raised median islands, and walking paths.

Pennsylvania Infrastructure Investment Authority (PENNVEST)**Drinking Water, Wastewater and Stormwater Loans**

Low-interest loans for design and construction of system improvements for private or municipality owned water and / or sewer facilities or publicly owned storm water systems.

Federal Programs**United States Department of Agriculture (USDA)**

This program provides low interest loans and grants for Community Facilities for health care, public safety and public services.

13 Appendix Two

Census 2010

DP1 Profile of General Population and Housing Characteristics: 2010 Demographic Profile Data

Bern Township, Berks County, Pennsylvania		
Subject	Number	Percent
SEX AND AGE		
Total population	6,797	100.0
Under 5 years	228	3.4
5 to 9 years	302	4.4
10 to 14 years	305	4.5
15 to 19 years	430	6.3
20 to 24 years	424	6.2
25 to 29 years	380	5.6
30 to 34 years	392	5.8
35 to 39 years	404	5.9
40 to 44 years	502	7.4
45 to 49 years	523	7.7
50 to 54 years	577	8.5
55 to 59 years	466	6.9
60 to 64 years	427	6.3
65 to 69 years	351	5.2
70 to 74 years	247	3.6
75 to 79 years	237	3.5
80 to 84 years	226	3.3
85 years and over	376	5.5
Median age (years)	45.3	(X)
16 years and over	5,883	86.6
18 years and over	5,710	84.0
21 years and over	5,449	80.2
62 years and over	1,673	24.6
65 years and over	1,437	21.1
Male population	3,674	54.1
Under 5 years	113	1.7
5 to 9 years	139	2.0
10 to 14 years	172	2.5
15 to 19 years	264	3.9
20 to 24 years	325	4.8
25 to 29 years	255	3.8
30 to 34 years	259	3.8
35 to 39 years	238	3.5

**DP1 Profile of General Population and Housing Characteristics:
2010 Demographic Profile Data**

Bern Township, Berks County, Pennsylvania		
Subject	Number	Percent
40 to 44 years	301	4.4
45 to 49 years	307	4.5
50 to 54 years	296	4.4
55 to 59 years	237	3.5
60 to 64 years	215	3.2
65 to 69 years	168	2.5
70 to 74 years	113	1.7
75 to 79 years	106	1.6
80 to 84 years	79	1.2
85 years and over	87	1.3
Median age (years)	41.2	(X)
16 years and over	3,209	47.2
18 years and over	3,109	45.7
21 years and over	2,915	42.9
62 years and over	664	9.8
65 years and over	553	8.1
Female population	3,123	45.9
Under 5 years	115	1.7
5 to 9 years	163	2.4
10 to 14 years	133	2.0
15 to 19 years	166	2.4
20 to 24 years	99	1.5
25 to 29 years	125	1.8
30 to 34 years	133	2.0
35 to 39 years	166	2.4
40 to 44 years	201	3.0
45 to 49 years	216	3.2
50 to 54 years	281	4.1
55 to 59 years	229	3.4
60 to 64 years	212	3.1
65 to 69 years	183	2.7
70 to 74 years	134	2.0
75 to 79 years	131	1.9
80 to 84 years	147	2.2
85 years and over	289	4.3
Median age (years)	50.8	(X)
16 years and over	2,674	39.3
18 years and over	2,601	38.3

**DP1 Profile of General Population and Housing Characteristics:
2010 Demographic Profile Data**

Bern Township, Berks County, Pennsylvania		
Subject	Number	Percent
21 years and over	2,534	37.3
62 years and over	1,009	14.8
65 years and over	884	13.0
RACE		
Total population	6,797	100.0
One Race	6,725	98.9
White	6,185	91.0
Black or African American	393	5.8
American Indian and Alaska Native	6	0.1
Asian	45	0.7
Asian Indian	14	0.2
Chinese	6	0.1
Filipino	4	0.1
Japanese	0	0.0
Korean	1	0.0
Vietnamese	12	0.2
Other Asian [1]	8	0.1
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	96	1.4
Two or More Races	72	1.1
White; American Indian and Alaska Native [3]	10	0.1
White; Asian [3]	14	0.2
White; Black or African American [3]	23	0.3
White; Some Other Race [3]	14	0.2
Race alone or in combination with one or more other races: [4]		
White	6,248	91.9
Black or African American	423	6.2
American Indian and Alaska Native	19	0.3
Asian	64	0.9
Native Hawaiian and Other Pacific Islander	1	0.0
Some Other Race	117	1.7
HISPANIC OR LATINO		
Total population	6,797	100.0
Hispanic or Latino (of any race)	632	9.3
Mexican	41	0.6

**DP1 Profile of General Population and Housing Characteristics:
2010 Demographic Profile Data**

Bern Township, Berks County, Pennsylvania		
Subject	Number	Percent
Puerto Rican	131	1.9
Cuban	4	0.1
Other Hispanic or Latino [5]	456	6.7
Not Hispanic or Latino	6,165	90.7
HISPANIC OR LATINO AND RACE		
Total population	6,797	100.0
Hispanic or Latino	632	9.3
White alone	498	7.3
Black or African American alone	15	0.2
American Indian and Alaska Native alone	1	0.0
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	96	1.4
Two or More Races	22	0.3
Not Hispanic or Latino	6,165	90.7
White alone	5,687	83.7
Black or African American alone	378	5.6
American Indian and Alaska Native alone	5	0.1
Asian alone	45	0.7
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	50	0.7
RELATIONSHIP		
Total population	6,797	100.0
In households	5,212	76.7
Householder	2,080	30.6
Spouse [6]	1,337	19.7
Child	1,315	19.3
Own child under 18 years	939	13.8
Other relatives	235	3.5
Under 18 years	78	1.1
65 years and over	63	0.9
Nonrelatives	245	3.6
Under 18 years	18	0.3
65 years and over	56	0.8
Unmarried partner	127	1.9
In group quarters	1,585	23.3
Institutionalized population	1,545	22.7

**DP1 Profile of General Population and Housing Characteristics:
2010 Demographic Profile Data**

Bern Township, Berks County, Pennsylvania		
Subject	Number	Percent
Male	1,096	16.1
Female	449	6.6
Noninstitutionalized population	40	0.6
Male	29	0.4
Female	11	0.2
HOUSEHOLDS BY TYPE		
Total households	2,080	100.0
Family households (families) [7]	1,565	75.2
With own children under 18 years	514	24.7
Husband-wife family	1,337	64.3
With own children under 18 years	410	19.7
Male householder, no wife present	93	4.5
With own children under 18 years	46	2.2
Female householder, no husband present	135	6.5
With own children under 18 years	58	2.8
Nonfamily households [7]	515	24.8
Householder living alone	397	19.1
Male	166	8.0
65 years and over	48	2.3
Female	231	11.1
65 years and over	166	8.0
Households with individuals under 18 years	574	27.6
Households with individuals 65 years and over	705	33.9
Average household size	2.51	(X)
Average family size [7]	2.84	(X)
HOUSING OCCUPANCY		
Total housing units	2,168	100.0
Occupied housing units	2,080	95.9
Vacant housing units	88	4.1
For rent	7	0.3
Rented, not occupied	1	0.0
For sale only	25	1.2
Sold, not occupied	12	0.6
For seasonal, recreational, or occasional use	16	0.7
All other vacants	27	1.2
Homeowner vacancy rate (percent) [8]	1.3	(X)
Rental vacancy rate (percent) [9]	2.8	(X)

**DP1 Profile of General Population and Housing Characteristics:
2010 Demographic Profile Data**

Bern Township, Berks County, Pennsylvania		
Subject	Number	Percent
HOUSING TENURE		
Occupied housing units	2,080	100.0
Owner-occupied housing units	1,834	88.2
Population in owner-occupied housing units	4,679	(X)
Average household size of owner-occupied units	2.55	(X)
Renter-occupied housing units	246	11.8
Population in renter-occupied housing units	533	(X)
Average household size of renter-occupied units	2.17	(X)

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.

[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

Source: U.S. Census Bureau, 2010 Census.

DP2 SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
HOUSEHOLDS BY TYPE				
Total households	1,813	+/-211	1,813	(X)
Family households (families)	1,323	+/-143	73.0%	+/-5.2
With own children under 18 years	398	+/-72	22.0%	+/-3.8
Married-couple family	1,139	+/-135	62.8%	+/-5.8
With own children under 18 years	341	+/-78	18.8%	+/-4.0
Male householder, no wife present, family	101	+/-53	5.6%	+/-2.9
With own children under 18 years	45	+/-33	2.5%	+/-1.9
Female householder, no husband present, family	83	+/-54	4.6%	+/-2.9
With own children under 18 years	12	+/-21	0.7%	+/-1.1
Nonfamily households	490	+/-128	27.0%	+/-5.2
Householder living alone	462	+/-125	25.5%	+/-5.1
65 years and over	352	+/-105	19.4%	+/-4.6
Households with one or more people under 18 years	487	+/-92	26.9%	+/-5.2
Households with one or more people 65 years and over	706	+/-112	38.9%	+/-3.1
Average household size	2.52	+/-0.15	(X)	(X)
Average family size	3.01	+/-0.15	(X)	(X)
RELATIONSHIP				
Population in households	4,576	+/-459	4,576	(X)
Householder	1,813	+/-211	39.6%	+/-2.3
Spouse	1,137	+/-132	24.8%	+/-2.2
Child	1,204	+/-193	26.3%	+/-2.9
Other relatives	318	+/-149	6.9%	+/-3.2
Nonrelatives	104	+/-71	2.3%	+/-1.5
Unmarried partner	45	+/-35	1.0%	+/-0.8
MARITAL STATUS				
Males 15 years and over	3,559	+/-283	3,559	(X)
Never married	1,709	+/-281	48.0%	+/-5.1
Now married, except separated	1,375	+/-134	38.6%	+/-4.6
Separated	92	+/-48	2.6%	+/-1.3
Widowed	168	+/-68	4.7%	+/-1.8
Divorced	215	+/-97	6.0%	+/-2.8
Females 15 years and over	2,606	+/-246	2,606	(X)
Never married	551	+/-127	21.1%	+/-4.4
Now married, except separated	1,229	+/-128	47.2%	+/-5.4
Separated	60	+/-51	2.3%	+/-1.9

DP2 SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
Widowed	537	+/-185	20.6%	+/-5.9
Divorced	229	+/-73	8.8%	+/-2.8
FERTILITY				
Number of women 15 to 50 years old who had a birth in the past 12 months	66	+/-55	66	(X)
Unmarried women (widowed, divorced, and never married)	13	+/-23	19.7%	+/-32.1
Per 1,000 unmarried women	25	+/-44	(X)	(X)
Per 1,000 women 15 to 50 years old	61	+/-52	(X)	(X)
Per 1,000 women 15 to 19 years old	0	+/-235	(X)	(X)
Per 1,000 women 20 to 34 years old	89	+/-97	(X)	(X)
Per 1,000 women 35 to 50 years old	52	+/-61	(X)	(X)
GRANDPARENTS				
Number of grandparents living with own grandchildren under 18 years	201	+/-130	201	(X)
Responsible for grandchildren	29	+/-48	14.4%	+/-24.7
Years responsible for grandchildren				
Less than 1 year	29	+/-48	14.4%	+/-24.7
1 or 2 years	0	+/-15	0.0%	+/-11.7
3 or 4 years	0	+/-15	0.0%	+/-11.7
5 or more years	0	+/-15	0.0%	+/-11.7
Number of grandparents responsible for own grandchildren under 18 years	29	+/-48	29	(X)
Who are female	14	+/-24	48.3%	+/-5.5
Who are married	29	+/-48	100.0%	+/-48.3
SCHOOL ENROLLMENT				
Population 3 years and over enrolled in school	950	+/-155	950	(X)
Nursery school, preschool	79	+/-73	8.3%	+/-7.4
Kindergarten	65	+/-71	6.8%	+/-7.2
Elementary school (grades 1-8)	327	+/-120	34.4%	+/-11.5
High school (grades 9-12)	286	+/-109	30.1%	+/-10.1
College or graduate school	193	+/-65	20.3%	+/-7.2
EDUCATIONAL ATTAINMENT				
Population 25 years and over	5,118	+/-177	5,118	(X)
Less than 9th grade	277	+/-132	5.4%	+/-2.6
9th to 12th grade, no diploma	722	+/-162	14.1%	+/-3.2
High school graduate (includes equivalency)	1,956	+/-198	38.2%	+/-3.7
Some college, no degree	842	+/-161	16.5%	+/-3.1

DP2 SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
Associate's degree	327	+/-108	6.4%	+/-2.1
Bachelor's degree	680	+/-162	13.3%	+/-3.1
Graduate or professional degree	314	+/-104	6.1%	+/-2.0
Percent high school graduate or higher	(X)	(X)	80.5%	+/-3.7
Percent bachelor's degree or higher	(X)	(X)	19.4%	+/-3.7
VETERAN STATUS				
Civilian population 18 years and over	5,975	+/-164	5,975	(X)
Civilian veterans	590	+/-119	9.9%	+/-2.0
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION				
Total Civilian Noninstitutionalized Population	4,614	+/-466	4,614	(X)
With a disability	625	+/-160	13.5%	+/-3.4
Under 18 years	794	+/-157	794	(X)
With a disability	0	+/-15	0.0%	+/-3.1
18 to 64 years	2,868	+/-305	2,868	(X)
With a disability	335	+/-121	11.7%	+/-4.0
65 years and over	952	+/-128	952	(X)
With a disability	290	+/-94	30.5%	+/-10.2
RESIDENCE 1 YEAR AGO				
Population 1 year and over	6,809	+/-48	6,809	(X)
Same house	5,193	+/-385	76.3%	+/-5.6
Different house in the U.S.	1,616	+/-378	23.7%	+/-5.6
Same county	1,130	+/-295	16.6%	+/-4.3
Different county	486	+/-139	7.1%	+/-2.1
Same state	335	+/-106	4.9%	+/-1.6
Different state	151	+/-96	2.2%	+/-1.4
Abroad	0	+/-15	0.0%	+/-0.4
PLACE OF BIRTH				
Total population	6,844	+/-26	6,844	(X)
Native	6,591	+/-80	96.3%	+/-1.2
Born in United States	6,276	+/-140	91.7%	+/-2.0
State of residence	5,214	+/-303	76.2%	+/-4.5
Different state	1,062	+/-266	15.5%	+/-3.9
Born in Puerto Rico, U.S. Island areas, or born abroad to American parent(s)	315	+/-121	4.6%	+/-1.8

DP2 SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
Foreign born	253	+/-79	3.7%	+/-1.2
U.S. CITIZENSHIP STATUS				
Foreign-born population	253	+/-79	253	(X)
Naturalized U.S. citizen	115	+/-64	45.5%	+/-15.6
Not a U.S. citizen	138	+/-41	54.5%	+/-15.6
YEAR OF ENTRY				
Population born outside the United States	568	+/-139	568	(X)
Native	315	+/-121	315	(X)
Entered 2010 or later	0	+/-15	0.0%	+/-7.6
Entered before 2010	315	+/-121	100.0%	+/-7.6
Foreign born	253	+/-79	253	(X)
Entered 2010 or later	20	+/-31	7.9%	+/-11.6
Entered before 2010	233	+/-74	92.1%	+/-11.6
WORLD REGION OF BIRTH OF FOREIGN BORN				
Foreign-born population, excluding population born at sea	253	+/-79	253	(X)
Europe	50	+/-46	19.8%	+/-15.7
Asia	30	+/-39	11.9%	+/-14.1
Africa	5	+/-9	2.0%	+/-3.7
Oceania	0	+/-15	0.0%	+/-9.4
Latin America	152	+/-58	60.1%	+/-19.9
Northern America	16	+/-25	6.3%	+/-10.5
LANGUAGE SPOKEN AT HOME				
Population 5 years and over	6,619	+/-93	6,619	(X)
English only	5,644	+/-228	85.3%	+/-3.5
Language other than English	975	+/-232	14.7%	+/-3.5
Speak English less than "very well"	368	+/-96	5.6%	+/-1.4
Spanish	766	+/-214	11.6%	+/-3.2
Speak English less than "very well"	306	+/-80	4.6%	+/-1.2
Other Indo-European languages	197	+/-97	3.0%	+/-1.5
Speak English less than "very well"	62	+/-68	0.9%	+/-1.0
Asian and Pacific Islander languages	0	+/-15	0.0%	+/-0.4
Speak English less than "very well"	0	+/-15	0.0%	+/-0.4
Other languages	12	+/-14	0.2%	+/-0.2
Speak English less than "very well"	0	+/-15	0.0%	+/-0.4

DP2 SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
ANCESTRY				
Total population	6,844	+/-26	6,844	(X)
American	497	+/-352	7.3%	+/-5.1
Arab	0	+/-15	0.0%	+/-0.4
Czech	36	+/-43	0.5%	+/-0.6
Danish	0	+/-15	0.0%	+/-0.4
Dutch	123	+/-81	1.8%	+/-1.2
English	382	+/-165	5.6%	+/-2.4
French (except Basque)	117	+/-76	1.7%	+/-1.1
French Canadian	0	+/-15	0.0%	+/-0.4
German	2,285	+/-317	33.4%	+/-4.6
Greek	48	+/-50	0.7%	+/-0.7
Hungarian	39	+/-33	0.6%	+/-0.5
Irish	964	+/-290	14.1%	+/-4.2
Italian	572	+/-211	8.4%	+/-3.1
Lithuanian	74	+/-64	1.1%	+/-0.9
Norwegian	47	+/-52	0.7%	+/-0.8
Polish	303	+/-133	4.4%	+/-1.9
Portuguese	4	+/-7	0.1%	+/-0.1
Russian	26	+/-31	0.4%	+/-0.5
Scotch-Irish	53	+/-42	0.8%	+/-0.6
Scottish	162	+/-114	2.4%	+/-1.7
Slovak	148	+/-117	2.2%	+/-1.7
Subsaharan African	14	+/-13	0.2%	+/-0.2
Swedish	91	+/-111	1.3%	+/-1.6
Swiss	85	+/-64	1.2%	+/-0.9
Ukrainian	35	+/-33	0.5%	+/-0.5
Welsh	142	+/-81	2.1%	+/-1.2
West Indian(excluding Hispanic origin groups)	35	+/-35	0.5%	+/-0.5

Source: U.S. Census Bureau, 2008-2012 American Community Survey Explanation of Symbols:

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DP3 **SELECTED ECONOMIC CHARACTERISTICS**
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
EMPLOYMENT STATUS				
Population 16 years and over	6,105	+/-159	6,105	(X)
In labor force	2,630	+/-317	43.1%	+/-5.4
Civilian labor force	2,615	+/-314	42.8%	+/-5.3
Employed	2,460	+/-314	40.3%	+/-5.3
Unemployed	155	+/-82	2.5%	+/-1.3
Armed Forces	15	+/-24	0.2%	+/-0.4
Not in labor force	3,475	+/-361	56.9%	+/-5.4
Civilian labor force	2,615	+/-314	2,615	(X)
Percent Unemployed	(X)	(X)	5.9%	+/-3.2
Females 16 years and over	2,568	+/-238	2,568	(X)
In labor force	1,195	+/-207	46.5%	+/-7.5
Civilian labor force	1,195	+/-207	46.5%	+/-7.5
Employed	1,146	+/-213	44.6%	+/-7.6
Own children under 6 years	290	+/-145	290	(X)
All parents in family in labor force	145	+/-82	50.0%	+/-34.4
Own children 6 to 17 years	477	+/-164	477	(X)
All parents in family in labor force	370	+/-147	77.6%	+/-25.1
COMMUTING TO WORK				
Workers 16 years and over	2,393	+/-317	2,393	(X)
Car, truck, or van -- drove alone	1,895	+/-253	79.2%	+/-5.8
Car, truck, or van -- carpooled	372	+/-145	15.5%	+/-5.1
Public transportation (excluding taxicab)	0	+/-15	0.0%	+/-1.0
Walked	39	+/-50	1.6%	+/-2.1
Other means	9	+/-17	0.4%	+/-0.7
Worked at home	78	+/-71	3.3%	+/-3.0
Mean travel time to work (minutes)	18.9	+/-2.4	(X)	(X)
OCCUPATION				
Civilian employed population 16 years and over	2,460	+/-314	2,460	(X)
Management, business, science, and arts occupations	805	+/-193	32.7%	+/-7.0
Service occupations	496	+/-160	20.2%	+/-6.0
Sales and office occupations	634	+/-155	25.8%	+/-4.6
Natural resources, construction, and maintenance occupations	199	+/-84	8.1%	+/-3.1
Production, transportation, and material moving occupations	326	+/-100	13.3%	+/-4.2

DP3 SELECTED ECONOMIC CHARACTERISTICS
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
INDUSTRY				
Civilian employed population 16 years and over	2,460	+/-314	2,460	(X)
Agriculture, forestry, fishing and hunting, and mining	27	+/-42	1.1%	+/-1.7
Construction	52	+/-43	2.1%	+/-1.7
Manufacturing	248	+/-103	10.1%	+/-3.9
Wholesale trade	145	+/-83	5.9%	+/-3.3
Retail trade	499	+/-175	20.3%	+/-6.5
Transportation and warehousing, and utilities	107	+/-62	4.3%	+/-2.6
Information	15	+/-24	0.6%	+/-1.0
Finance and insurance, and real estate and rental and leasing	150	+/-69	6.1%	+/-2.7
Professional, scientific, and management, and administrative and waste management services	279	+/-107	11.3%	+/-4.4
Educational services, and health care and social assistance	537	+/-121	21.8%	+/-3.9
Arts, entertainment, and recreation, and accommodation and food services	239	+/-116	9.7%	+/-4.5
Other services, except public administration	99	+/-59	4.0%	+/-2.4
Public administration	63	+/-51	2.6%	+/-2.1
CLASS OF WORKER				
Civilian employed population 16 years and over	2,460	+/-314	2,460	(X)
Private wage and salary workers	2,120	+/-298	86.2%	+/-4.0
Government workers	222	+/-93	9.0%	+/-3.5
Self-employed in own not incorporated business workers	106	+/-56	4.3%	+/-2.4
Unpaid family workers	12	+/-20	0.5%	+/-0.8
INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)				
Total households	1,813	+/-211	1,813	(X)
Less than \$10,000	52	+/-45	2.9%	+/-2.4
\$10,000 to \$14,999	13	+/-21	0.7%	+/-1.1
\$15,000 to \$24,999	154	+/-74	8.5%	+/-3.7
\$25,000 to \$34,999	217	+/-94	12.0%	+/-4.9
\$35,000 to \$49,999	244	+/-103	13.5%	+/-5.5
\$50,000 to \$74,999	409	+/-111	22.6%	+/-6.0
\$75,000 to \$99,999	209	+/-79	11.5%	+/-4.2
\$100,000 to \$149,999	375	+/-105	20.7%	+/-5.3
\$150,000 to \$199,999	72	+/-44	4.0%	+/-2.4
\$200,000 or more	68	+/-43	3.8%	+/-2.4
Median household income (dollars)	65,582	+/-10,113	(X)	(X)
Mean household income (dollars)	81,754	+/-11,923	(X)	(X)

DP3 **SELECTED ECONOMIC CHARACTERISTICS**
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
With earnings	1,355	+/-144	74.7%	+/-4.9
Mean earnings (dollars)	81,174	+/-13,475	(X)	(X)
With Social Security	805	+/-116	44.4%	+/-4.0
Mean Social Security income (dollars)	18,346	+/-1,645	(X)	(X)
With retirement income	547	+/-119	30.2%	+/-5.5
Mean retirement income (dollars)	25,729	+/-11,273	(X)	(X)
With Supplemental Security Income	77	+/-41	4.2%	+/-2.4
Mean Supplemental Security Income (dollars)	11,453	+/-5,060	(X)	(X)
With cash public assistance income	65	+/-63	3.6%	+/-3.5
Mean cash public assistance income (dollars)	2,609	+/-3,209	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	39	+/-37	2.2%	+/-2.1
Families	1,323	+/-143	1,323	(X)
Less than \$10,000	10	+/-15	0.8%	+/-1.2
\$10,000 to \$14,999	0	+/-15	0.0%	+/-1.9
\$15,000 to \$24,999	27	+/-31	2.0%	+/-2.3
\$25,000 to \$34,999	93	+/-62	7.0%	+/-4.6
\$35,000 to \$49,999	173	+/-95	13.1%	+/-7.3
\$50,000 to \$74,999	354	+/-103	26.8%	+/-7.6
\$75,000 to \$99,999	174	+/-71	13.2%	+/-5.1
\$100,000 to \$149,999	368	+/-104	27.8%	+/-6.8
\$150,000 to \$199,999	72	+/-44	5.4%	+/-3.3
\$200,000 or more	52	+/-34	3.9%	+/-2.6
Median family income (dollars)	75,296	+/-8,522	(X)	(X)
Mean family income (dollars)	96,767	+/-15,105	(X)	(X)
Per capita income (dollars)	25,070	+/-3,446	(X)	(X)
Nonfamily households	490	+/-128	490	(X)
Median nonfamily income (dollars)	28,567	+/-1,922	(X)	(X)
Mean nonfamily income (dollars)	40,690	+/-12,019	(X)	(X)
Median earnings for workers (dollars)	22,346	+/-7,445	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	43,558	+/-5,538	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	39,135	+/-11,565	(X)	(X)
HEALTH INSURANCE COVERAGE				
Civilian noninstitutionalized population	4,614	+/-466	4,614	(X)
With health insurance coverage	4,245	+/-462	92.0%	+/-3.5

DP3 **SELECTED ECONOMIC CHARACTERISTICS**
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
Related children under 5 years	(X)	(X)	0.0%	+/-10.5
Related children 5 to 17 years	(X)	(X)	0.0%	+/-4.4
18 years and over	(X)	(X)	4.2%	+/-2.2
18 to 64 years	(X)	(X)	4.5%	+/-2.5
65 years and over	(X)	(X)	3.2%	+/-2.9
People in families	(X)	(X)	0.5%	+/-0.8
Unrelated individuals 15 years and over	(X)	(X)	22.4%	+/-11.2

Source: U.S. Census Bureau, 2008-2012 American Community Survey

Explanation of Symbols:

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DP 4 SELECTED HOUSING CHARACTERISTICS
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
HOUSING OCCUPANCY				
Total housing units	1,978	+/-226	1,978	(X)
Occupied housing units	1,813	+/-211	91.7%	+/-4.4
Vacant housing units	165	+/-92	8.3%	+/-4.4
Homeowner vacancy rate	5.5	+/-5.1	(X)	(X)
Rental vacancy rate	0.0	+/-6.9	(X)	(X)
UNITS IN STRUCTURE				
Total housing units	1,978	+/-226	1,978	(X)
1-unit, detached	1,757	+/-214	88.8%	+/-4.6
1-unit, attached	37	+/-32	1.9%	+/-1.6
2 units	0	+/-15	0.0%	+/-1.3
3 or 4 units	82	+/-48	4.1%	+/-2.4
5 to 9 units	0	+/-15	0.0%	+/-1.3
10 to 19 units	45	+/-65	2.3%	+/-3.2
20 or more units	40	+/-28	2.0%	+/-1.4
Mobile home	17	+/-24	0.9%	+/-1.3
Boat, RV, van, etc.	0	+/-15	0.0%	+/-1.3
YEAR STRUCTURE BUILT				
Total housing units	1,978	+/-226	1,978	(X)
Built 2010 or later	0	+/-15	0.0%	+/-1.3
Built 2000 to 2009	175	+/-68	8.8%	+/-3.1
Built 1990 to 1999	251	+/-94	12.7%	+/-4.8
Built 1980 to 1989	279	+/-105	14.1%	+/-5.0
Built 1970 to 1979	306	+/-91	15.5%	+/-4.4
Built 1960 to 1969	269	+/-102	13.6%	+/-5.0
Built 1950 to 1959	339	+/-109	17.1%	+/-5.0
Built 1940 to 1949	104	+/-61	5.3%	+/-3.0
Built 1939 or earlier	255	+/-87	12.9%	+/-4.3
ROOMS				
Total housing units	1,978	+/-226	1,978	(X)
1 room	0	+/-15	0.0%	+/-1.3
2 rooms	0	+/-15	0.0%	+/-1.3
3 rooms	54	+/-48	2.7%	+/-2.4
4 rooms	72	+/-48	3.6%	+/-2.5
5 rooms	318	+/-112	16.1%	+/-5.7
6 rooms	406	+/-160	20.5%	+/-7.3
7 rooms	395	+/-111	20.0%	+/-5.3

DP 4 **SELECTED HOUSING CHARACTERISTICS**
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
8 rooms	301	+/-107	15.2%	+/-5.0
9 rooms or more	432	+/-119	21.8%	+/-5.8
Median rooms	6.9	+/-0.4	(X)	(X)
BEDROOMS				
Total housing units	1,978	+/-226	1,978	(X)
No bedroom	0	+/-15	0.0%	+/-1.3
1 bedroom	48	+/-37	2.4%	+/-1.9
2 bedrooms	315	+/-94	15.9%	+/-4.6
3 bedrooms	1,022	+/-195	51.7%	+/-7.5
4 bedrooms	540	+/-123	27.3%	+/-5.5
5 or more bedrooms	53	+/-49	2.7%	+/-2.4
HOUSING TENURE				
Occupied housing units	1,813	+/-211	1,813	(X)
Owner-occupied	1,488	+/-193	82.1%	+/-5.8
Renter-occupied	325	+/-116	17.9%	+/-5.8
Average household size of owner-occupied unit	2.49	+/-0.16	(X)	(X)
Average household size of renter-occupied unit	2.69	+/-0.69	(X)	(X)
YEAR HOUSEHOLDER MOVED INTO UNIT				
Occupied housing units	1,813	+/-211	1,813	(X)
Moved in 2010 or later	54	+/-45	3.0%	+/-2.5
Moved in 2000 to 2009	773	+/-134	42.6%	+/-6.0
Moved in 1990 to 1999	364	+/-97	20.1%	+/-5.5
Moved in 1980 to 1989	213	+/-82	11.7%	+/-4.1
Moved in 1970 to 1979	149	+/-72	8.2%	+/-3.8
Moved in 1969 or earlier	260	+/-92	14.3%	+/-4.3
VEHICLES AVAILABLE				
Occupied housing units	1,813	+/-211	1,813	(X)
No vehicles available	57	+/-39	3.1%	+/-2.2
1 vehicle available	426	+/-117	23.5%	+/-5.0
2 vehicles available	763	+/-145	42.1%	+/-6.1
3 or more vehicles available	567	+/-112	31.3%	+/-6.3
HOUSE HEATING FUEL				
Occupied housing units	1,813	+/-211	1,813	(X)
Utility gas	355	+/-83	19.6%	+/-4.3
Bottled, tank, or LP gas	113	+/-65	6.2%	+/-3.6

DP 4 SELECTED HOUSING CHARACTERISTICS
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
Electricity	293	+/-97	16.2%	+/-4.8
Fuel oil, kerosene, etc.	923	+/-165	50.9%	+/-6.4
Coal or coke	23	+/-27	1.3%	+/-1.5
Wood	51	+/-40	2.8%	+/-2.2
Solar energy	0	+/-15	0.0%	+/-1.4
Other fuel	55	+/-40	3.0%	+/-2.2
No fuel used	0	+/-15	0.0%	+/-1.4
SELECTED CHARACTERISTICS				
Occupied housing units	1,813	+/-211	1,813	(X)
Lacking complete plumbing facilities	45	+/-65	2.5%	+/-3.5
Lacking complete kitchen facilities	45	+/-65	2.5%	+/-3.5
No telephone service available	45	+/-65	2.5%	+/-3.5
OCCUPANTS PER ROOM				
Occupied housing units	1,813	+/-211	1,813	(X)
1.00 or less	1,813	+/-211	100.0%	+/-1.4
1.01 to 1.50	0	+/-15	0.0%	+/-1.4
1.51 or more	0	+/-15	0.0%	+/-1.4
VALUE				
Owner-occupied units	1,488	+/-193	1,488	(X)
Less than \$50,000	31	+/-32	2.1%	+/-2.0
\$50,000 to \$99,999	40	+/-37	2.7%	+/-2.6
\$100,000 to \$149,999	197	+/-73	13.2%	+/-4.6
\$150,000 to \$199,999	263	+/-95	17.7%	+/-6.1
\$200,000 to \$299,999	705	+/-151	47.4%	+/-8.0
\$300,000 to \$499,999	231	+/-85	15.5%	+/-5.4
\$500,000 to \$999,999	7	+/-11	0.5%	+/-0.8
\$1,000,000 or more	14	+/-23	0.9%	+/-1.5
Median (dollars)	225,500	+/-10,922	(X)	(X)
MORTGAGE STATUS				
Owner-occupied units	1,488	+/-193	1,488	(X)
Housing units with a mortgage	891	+/-150	59.9%	+/-7.2
Housing units without a mortgage	597	+/-139	40.1%	+/-7.2
SELECTED MONTHLY OWNER COSTS (SMOC)				
Housing units with a mortgage	891	+/-150	891	(X)
Less than \$300	0	+/-15	0.0%	+/-2.8
\$300 to \$499	0	+/-15	0.0%	+/-2.8
\$500 to \$699	0	+/-15	0.0%	+/-2.8

DP 4 SELECTED HOUSING CHARACTERISTICS
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
\$700 to \$999	47	+/-35	5.3%	+/-4.0
\$1,000 to \$1,499	250	+/-101	28.1%	+/-9.6
\$1,500 to \$1,999	298	+/-96	33.4%	+/-9.8
\$2,000 or more	296	+/-98	33.2%	+/-9.3
Median (dollars)	1,803	+/-130	(X)	(X)
Housing units without a mortgage				
Less than \$100	0	+/-15	0.0%	+/-4.1
\$100 to \$199	16	+/-25	2.7%	+/-4.1
\$200 to \$299	0	+/-15	0.0%	+/-4.1
\$300 to \$399	47	+/-43	7.9%	+/-7.2
\$400 or more	534	+/-135	89.4%	+/-8.4
Median (dollars)	551	+/-30	(X)	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENT-AGE OF HOUSEHOLD INCOME (SMOCAPI)				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	891	+/-150	891	(X)
Less than 20.0 percent	280	+/-100	31.4%	+/-9.9
20.0 to 24.9 percent	149	+/-78	16.7%	+/-7.9
25.0 to 29.9 percent	137	+/-64	15.4%	+/-6.9
30.0 to 34.9 percent	81	+/-57	9.1%	+/-6.5
35.0 percent or more	244	+/-91	27.4%	+/-8.7
Not computed	0	+/-15	(X)	(X)
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)				
Less than 10.0 percent	253	+/-85	42.4%	+/-10.7
10.0 to 14.9 percent	73	+/-54	12.2%	+/-8.3
15.0 to 19.9 percent	96	+/-51	16.1%	+/-9.1
20.0 to 24.9 percent	38	+/-29	6.4%	+/-4.6
25.0 to 29.9 percent	27	+/-27	4.5%	+/-4.5
30.0 to 34.9 percent	82	+/-59	13.7%	+/-8.9
35.0 percent or more	28	+/-32	4.7%	+/-5.1
Not computed	0	+/-15	(X)	(X)
GROSS RENT				
Occupied units paying rent	230	+/-89	230	(X)
Less than \$200	3	+/-5	1.3%	+/-2.1

DP 4 **SELECTED HOUSING CHARACTERISTICS**
2008-2012 American Community Survey 5-Year Estimates

Bern Township, Berks County, Pennsylvania				
Subject	Estimate	Margin of Error	Percent	% Margin of Error
\$200 to \$299	0	+/-15	0.0%	+/-10.3
\$300 to \$499	9	+/-15	3.9%	+/-6.5
\$500 to \$749	8	+/-13	3.5%	+/-6.1
\$750 to \$999	105	+/-50	45.7%	+/-17.3
\$1,000 to \$1,499	94	+/-69	40.9%	+/-21.5
\$1,500 or more	11	+/-19	4.8%	+/-8.9
Median (dollars)	976	+/-104	(X)	(X)
No rent paid	95	+/-85	(X)	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	202	+/-91	202	(X)
Less than 15.0 percent	3	+/-5	1.5%	+/-2.4
15.0 to 19.9 percent	0	+/-15	0.0%	+/-11.6
20.0 to 24.9 percent	57	+/-42	28.2%	+/-20.2
25.0 to 29.9 percent	28	+/-33	13.9%	+/-15.3
30.0 to 34.9 percent	0	+/-15	0.0%	+/-11.6
35.0 percent or more	114	+/-76	56.4%	+/-24.5
Not computed	123	+/-92	(X)	(X)

Source: U.S. Census Bureau, 2008-2012 American Community Survey

Explanation of Symbols:

An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.

An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.

An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.

An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.

An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.

An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.

An '(X)' means that the estimate is not applicable or not available.

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