

2012

Penn Township

COMPREHENSIVE PLAN



CHESTER COUNTY • PENNSYLVANIA

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**PENN TOWNSHIP
CHESTER COUNTY, PENNSYLVANIA
RESOLUTION 2013-02**

**A RESOLUTION ADOPTING THE 2013 COMPREHENSIVE PLAN
FOR PENN TOWNSHIP**

WHEREAS, the Board of Supervisors of Penn Township endeavors to protect the health, safety, and welfare of those persons living and working in the Township, and

WHEREAS, the Board recognizes the importance of thoughtful short-term and long-term Planning in order to effectively fulfill its endeavors, and

WHEREAS, the Pennsylvania Legislature has authorized and empowered municipalities to adopt and execute a comprehensive plan as provided in Article III of the Pennsylvania Municipalities Planning Code, Act of 1968, P.L. 805, No. 247 as reenacted and amended;

WHEREAS, the Board of Supervisors, Penn Township entered into a contract with the Chester County Vision Partnership Program on June 17, 2010.

WHEREAS, on January 16, 2013, the Board of Supervisors, Penn Township held a Public Hearing for the Comprehensive Plan. No comments were received.

WHEREAS, THE Penn Township Comprehensive Plan will include twelve chapters which are as follows: 1. Introduction, 2. Goals, 3. Population, 4. Natural Resources, 5. Historic and Scenic Resources, 6. Transportation 7. Community Facilities, 8. Parks, Recreation and Open Space, 9. Energy Assessment, 10. Existing Land Use. 11. Housing Inventory, 12. Implementation Strategies, Appendix A and Mapping. Also Figures 3-1 through 12-8.

WHEREAS, the Penn Township Comprehensive Plan creates the foundation for further continued planning.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the Township of Penn hereby adopts the 2013 Comprehensive Plan, and resolves to consider the Plan when making decisions.

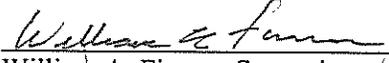
A complete copy of the Plan is attached hereto and made a part hereof.

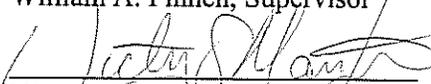
Resolved by the undersigned on this 6th day of February, 2013 and effective immediately.

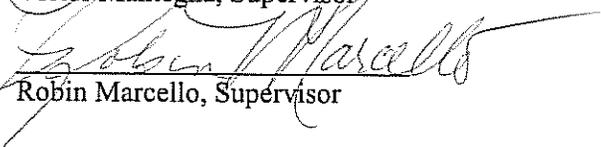
PENN TOWNSHIP
BOARD OF SUPERVISORS


Curtis Mason, Chairman

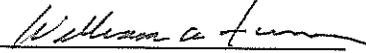

Tom Barlow, Vice-Chairman


William A. Finnen, Supervisor


Victor Mantegna, Supervisor


Robin Marcello, Supervisor

ATTEST:


William A. Finnen, Secretary

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PENN TOWNSHIP COMPREHENSIVE PLAN CHESTER COUNTY, PENNSYLVANIA

Comprehensive Plan Task Force

Board of Supervisors

Curtis A. Mason, Sr., Chairman
Robin Marcello, Vice-Chairman
William A. Finnen, Secretary
Tom Barlow
Victor Mantegna

Planning Commission

John Stefanco, Chairman
Tom Sinsheimer, Vice-Chairman
J. Denis Newbold, Secretary
Stephen B. Selinger
Murray G. (Skip) McGrew

Task Force Chairman

Ed Wandersee

This project was funded through a grant from the Chester County Commissioner's Vision Partnership Program and through Penn Township.

The plan has been prepared in conjunction with the principles of Chester County's comprehensive policy plan, *Landscapes2*, as a means of achieving greater consistency between local and county planning programs.

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PENN TOWNSHIP COMPREHENSIVE PLAN

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Introduction

With population on the rise and new development occurring at a rapid rate within Penn Township, the Township seeks to take a proactive approach to growth management. Planning for an appropriate level of development in an area where it can clearly be accommodated, while simultaneously protecting sensitive environmental resources and community character, will help meet the land use challenges of the coming decade.

The purpose of this Comprehensive Plan is to guide future land use decisions by delineating the policies on which those decisions will be based over the next decade. To ensure that Plan recommendations are capable of being implemented and will meet area goals and objectives, analyses of factors affecting land use and how they interrelate is necessary. The various physical characteristics of the land such as natural resources, transportation and circulation conditions, and historic resources must be assessed in terms of the land's overall capability of supporting different types of uses at differing densities. Together, the assessment of existing conditions and development of policies leads to the development of a comprehensive plan to guide future decisions for Penn Township.

This chapter addresses the following:

- Process
 - Contents
 - Implementation
 - Public Participation and Plan Adoption
- Regional Setting and Influences
- Relationship to *Landscapes*²



Process

The comprehensive planning program was lead by an 11 member task force consisting of representatives of the Township’s Board of Supervisors, Planning Commission, and one resident. The task force met on a monthly basis beginning in August 2010 to compile, analyze and evaluate pertinent data affecting land use, transportation, community facilities, and resource protection in Penn Township.

This comprehensive planning process began with a review and evaluation of the area’s existing physical characteristics and demographic qualities. An inventory of community facilities and services was conducted and the adequacy of these facilities in terms of meeting local needs was analyzed. A survey of existing land uses by residential, commercial and industrial use categories was undertaken emphasizing the proximity and interrelationships among those uses. Natural and historic resource preservation efforts were assessed and the role of these resources relative to the character of the community was evaluated. The transportation and circulation system was analyzed. These efforts created the background or inventory of this Comprehensive Plan.

Based on this information, plans and specific recommendations were developed. Each recommendation was discussed in detail. The final chapter is an action plan that focuses on implementation strategies, and assigns priorities and timelines to each recommendation found in this Plan. All maps for the Plan are located in Appendix A. Elements addressed in this Plan include:

- Natural Resources
- Historic and Scenic Resources
- Transportation and Circulation Systems
- Community Facilities and Services
- Parks, Recreation, and Open Space
- Energy
- Land Use
- Housing

Contents

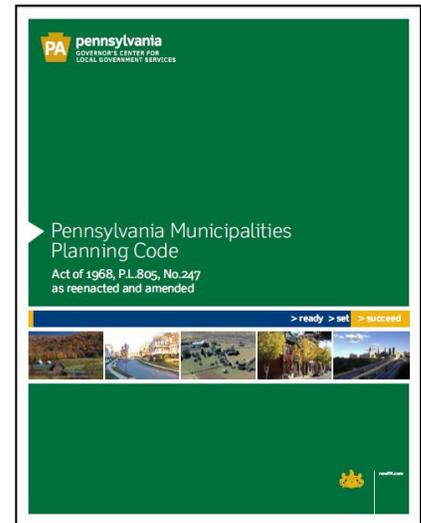
The Comprehensive Plan was completed in compliance with the provisions of Article III of the Pennsylvania Municipalities Planning Code (MPC), Act 247 of 1968, as reenacted and amended. This legislation enables municipal land use controls in Pennsylvania and provides the framework for developing and implementing plans and land use regulations. It specifically enables municipalities to produce and adopt comprehensive plans to regulate development through the use of various regulatory tools including zoning, and subdivision and land development ordinances.



Elements addressed in the plan ranged from housing to natural resources to land use, and included discussion of the extensive nursery operations in Penn Township.

The required contents of a comprehensive plan as specified by the MPC are summarized as follows:

- A statement of objectives of the municipality concerning its future development, including, but not limited to, the location, character and timing of future development.
- A plan for land use, which may include provisions for the amount, intensity, character and timing of land proposed for residence, industry, business, agricultural, major traffic and transit facilities, utilities, community facilities, public grounds, parks and recreation, preservation of prime agricultural lands, flood plains and other areas of special hazards and other similar uses.
- A plan to meet the housing needs of present residents and of those individuals and families anticipated to reside in the municipality, which may include conservation of presently sound housing, rehabilitation of housing in declining neighborhoods and the accommodation of expected new housing in different dwelling types and at appropriate densities for households of all income levels.
- A plan for movement of people and goods, which may include expressways, highways, local street systems, parking facilities, pedestrian and bikeway systems, public transit routes, terminals, airfields port facilities, railroad facilities and other similar facilities or uses.
- A plan for community facilities and utilities, which may include public and private education, recreation, municipal buildings, fire and police stations, libraries, hospitals, water supply and distribution, sewerage and waste treatment, solid waste management, storm drainage and flood plain management, utility corridors and associated facilities, and other similar facilities or uses.
 - A statement of the interrelationships among the various plan components, which may include an estimate of the environmental, energy conservation, fiscal, economic development and social consequences on the municipality.
 - A discussion of short and long range plan implementation strategies, which may include implications for capital improvements programming, new or updated development regulations, and identification of public funds potentially available.
- A statement indicating that the existing and proposed development of the municipality is compatible with the existing and proposed development and plans in contiguous municipalities, or a statement indicating measures which have been taken to provide buffers or other transitional devices between disparate uses, and a statement indicating that the existing and proposed development of the municipality is generally consistent with the objectives and plans of the county comprehensive plan.
- A plan for the protection of natural and historic resources to the extent not preempted by federal or state law. This clause includes, but is not limited to, wetlands and aquifer recharge zones, woodlands, steep slopes, prime agricultural land, flood plains, unique natural areas and historic sites. The plan shall be consistent with and may not exceed those requirements imposed under the following:
 - Act of June 22, 1937 (P.L.1987, No.394), known as “The Clean Streams Law”;
 - Act of May 31, 1945 (P.L.1198, No.418), known as the “Surface Mining Conservation and Reclamation Act”;
 - Act of April 27, 1966 (1st sp.sess., P.L.31, No.1), known as “The Bituminous Mine Subsidence and Land Conservation Act”;



The Pennsylvania Municipalities Planning Code (MPC) is also referred to as Act 247 of 1968.

- Act of September 24, 1968 (P.L.1040, No.318), known as the “Coal Refuse Disposal Control Act”;
 - Act of December 19, 1984 (P.L.1140, No.223), known as the “Oil and Gas Act”;
 - Act of December 19, 1984 (P.L.1093, No.219), known as the “Noncoal Surface Mining Conservation and Reclamation Act”;
 - Act of June 30, 1981 (P.L.128, No.43), known as the “Agricultural Area Security Law”;
 - Act of June 10, 1982 (P.L.454, No.133), entitled “An Act Protecting Agricultural Operations from Nuisance Suits and Ordinances Under Certain Circumstances”;
 - Act of May 20, 1993 (P.L.12, No.6), known as the “Nutrient Management Act,” regardless of whether any agricultural operation within the area to be affected by the plan is a concentrated animal operation as defined under the act.
- The comprehensive plan shall include a plan for the reliable supply of water, considering current and future water resources availability, uses and limitations, including provisions adequate to protect water supply sources. Any such plan shall be generally consistent with the State Water Plan and any applicable water resources plan adopted by a river basin commission. It shall also contain a statement recognizing that:
 - Lawful activities such as extraction of minerals impact water supply sources and such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities.
 - Commercial agriculture production impacts water supply sources.
 - The municipal, multimunicipal or county comprehensive plan may identify those areas where growth and development will occur so that a full range of public infrastructure services, including sewer, water, highways, police and fire protection, public schools, parks, open space and other services can be adequately planned and provided as needed to accommodate growth.

Implementation

The Comprehensive Plan is a policy document developed to define the Township’s future vision and identify the actions needed to achieve that vision. The actions are implemented through various means by different Township entities individually and in a joint effort in an organized and coordinated manner consistent with local goals. Many are implemented through the zoning ordinance or subdivision and land development ordinance, while others are implemented through special programs, administrative activities and planning activities. The planning horizon for the Penn Township Comprehensive Plan is ten years.

Public Participation and Plan Adoption

A critical component of a comprehensive planning process is resident input and participation. The task force consisted of representatives from the Township who

collectively presented their issues and concerns for discussion and incorporation. They represented a wide range of views on planning issues, thus providing for broad input on the issues. The task force typically held monthly meetings (which were open to the public), and held two public meetings in April 2011 and May 2012.

MPC procedures regarding a Planning Commission public meeting and Board of Supervisors public hearing prior to adoption were followed. All public meetings and the hearing were held pursuant to public notice as required by the MPC. The Penn Township Comprehensive Plan was adopted in accordance with the provisions stipulated in the MPC.

Regional Setting and Influences

Penn Township is located in southwestern Chester County in close proximity to major recreational, educational, and community services and facilities (see Map 1-1 in Appendix A). As some of the area's activity is oriented towards Delaware, the areas around Wilmington and Newark are included on the Regional Settings Map. The areas immediately surrounding Penn Township are primarily rural to the north and west and become more suburban in character as one moves to the east towards Philadelphia and southeast towards Wilmington. In this respect, the Township is located within a transitional area of Chester County, between the eastern suburbs and western rural areas, placing it under great pressure for development. Because of the Township's location, planning for the preservation of open space, protection of natural resources, and directing growth to the most appropriate areas is of great importance.

There are several significant recreational attractions within easy traveling distance from the area, including Longwood Gardens, Nottingham County Park and White Clay Creek Preserve. The University of Delaware, Lincoln University, West Chester University, and Cheyney University are in proximity, complementing the many colleges and universities located in the greater Philadelphia region. Regional community services depicted on Map 1-1 include hospitals, state police barracks, and primary and secondary schools. These resources provide services to the larger region and enhance the area's economy.

Major highway corridors, including Routes 1, 796, 896, 841, 926, and 41, are another significant regional influence in terms of moving people and goods in and through the area. Route 1, in particular, serves as a conduit for residential, commercial, and industrial growth throughout southern Chester County. Issues relating to highway corridors and transportation in general are discussed in Chapter Six, Transportation and Circulation Systems Inventory and Plan.



Development has brought residential uses in proximity to agricultural uses in Penn Township and the surrounding area.

Relationship to *Landscapes2*

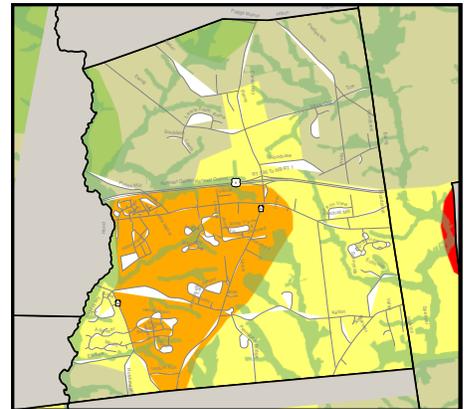
Chester County's Comprehensive Policy Plan *Landscapes2*, adopted in 2009, designates the portion of Penn Township north of Route 1 as primarily Rural, with limited areas of Agricultural and Suburban landscapes. The portion of Penn Township south of Route 1 is primarily Suburban Center towards the west and Suburban to the east. These designations reflect Penn Township's location in a transitional area of Chester County. These countywide categories are described below. Consistency between *Landscapes2* and the Penn Township Comprehensive Plan is discussed in Chapter 10, Existing Land Use Patterns and Land Use Plan.

The Rural landscape is characterized by open space dominated by woodland and other open areas. It contains agriculture and scattered residential lots and subdivisions on relatively large lots or with protected common open space. There is an auto-oriented land use pattern with limited non-residential uses. Development is primarily served by on-lot sewer and water systems.

The Agricultural landscape is dominated by a concentration of active farms, Agricultural Security Areas in proximity to farms, large clusters of land permanently protected by agricultural easements, and areas with municipal commitment to adopt effective agricultural zoning. This landscape is located in western Chester County, where the character is more similar to the large agricultural area in Lancaster and Berks Counties than to the Philadelphia metropolitan urban area. Agricultural production is diverse, including dairy production, horses and other livestock, poultry, mushrooms, nurseries, orchards, and field crops, making Chester County second among all Pennsylvania counties in the value of agricultural products sold. This landscape is not planned to accommodate future projected growth.

The Suburban landscape is dominated by the built environment. It has an auto-oriented transportation network and is primarily served by public sewer and water systems. This landscape includes land within the Census 2000 Urbanized Area and nearby areas with planned future development. It is characterized by residential subdivisions containing primarily single-family housing. This landscape contains concentrations of non-residential land uses and the largest employment centers in the county. It is concentrated in eastern and central Chester County, along the Schuylkill River, and along major highway corridors.

Suburban Centers are the focal point for intense mixed use growth in the suburban landscape and serve as economic centers for the county. These areas include a mix of commercial uses, office buildings, parks, and community facilities, and they are suitable for additional development and redevelopment. Suburban centers are located at major crossroads.



Penn Township and Landscapes2

CHAPTER 2

GOALS AND OBJECTIVES

Introduction

The goals and objectives outlined in this chapter together form the planning policies for Penn Township. The policies serve as the framework for planning efforts and guide the recommendations of this Comprehensive Plan. The policies were developed by the Penn Comprehensive Plan Task Force, which included the Board of Supervisors, Planning Commission, and one resident.

For the purposes of this Comprehensive Plan, goals, objectives, and policies are defined as follows:

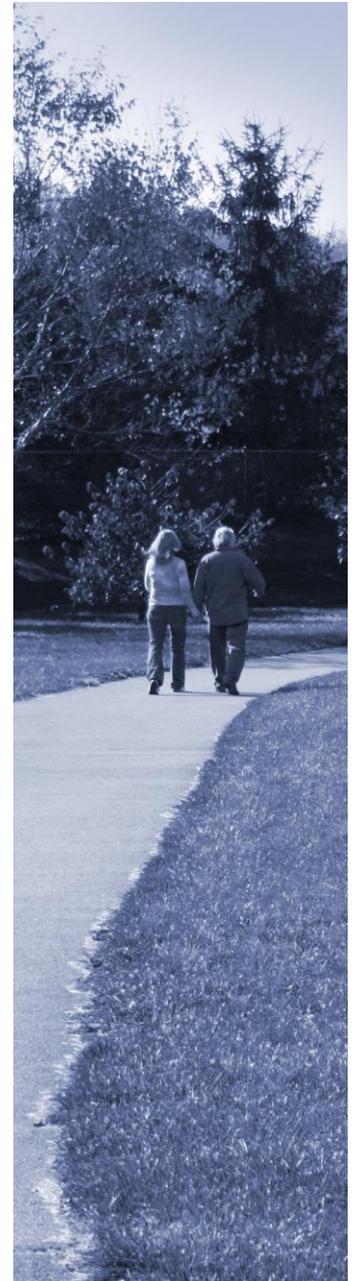
Goals: Establish the overall direction for preserving and enhancing the most desirable and positive aspects of the general community.

Objectives: More specific purpose statements that, if accomplished, will achieve the larger planning goal.

Policies: The goals and objectives together represent the planning policies for Penn Township.

The goals and objectives have been organized into the following categories:

- Land Use
- Housing
- Natural Resources
- Historic and Scenic Resources
- Transportation and Circulation
- Community Facilities and Services
- Parks, Recreation, and Open Space
- Energy
- Regional Cooperation and Planning



Goals and Objectives

Land Use Goal

Strengthen the community by planning for, accommodating, and managing the use of land in a manner that provides for a balance and range of uses, meets the needs of current and future residents, and establishes a balance between growth, protection of resources, and preservation of community character.

Objectives

- Provide for growth in appropriate areas, through new development and redevelopment, as supported by the necessary infrastructure.
- Promote sustainable land use and building practices.
- Protect agriculture, natural resources, and open space through the use of regulatory controls and non-regulatory efforts.
- Discourage unmanaged development outside of designated growth areas while promoting open space and agricultural uses, and protecting natural resources.
- Review and update regulatory controls to ensure they support the land use policies of this Plan.
- Require preservation of significant historic and scenic resources as an integral part of all land use development design.
- Require provision of open space as an integral part of all land use development design.
- Promote economically viable and environmentally sustainable agriculture through the recognition of agriculture as a critical land use and industry within the community.
- Encourage the conservation of prime agricultural soils for agricultural purposes, and inclusion of agricultural lands in the Agricultural Security District.
- Encourage a balanced pattern of commercial and industrial development that complements the Township's character and is based on the availability of supporting infrastructure.
- Ensure that design standards for commercial, industrial, and institutional development are appropriate.
- Facilitate communication and coordination between businesses, economic development entities, and education providers to create a supportive environment for retention and expansion of commercial and industrial uses.
- Provide for a variety of residential development patterns that are compatible with existing land use and can be supported with available infrastructure.



A balance of land uses, including commercial development such as the Shoppes at Jenner's Village, is necessary to meet objectives.

Housing Goal

Provide for adequate, safe, and diverse housing to accommodate current and future residents in a manner compatible with existing development and which is supported with the necessary infrastructure.

Objectives

- Ensure that regulatory controls permit a range of housing types and densities to meet the diverse needs of current and future residents in a manner compatible with the overall character of the community.
- Ensure that regulatory controls permit and encourage a sustainable approach to neighborhood design.
- Ensure equal access to housing for all members of the classes protected under the federal Fair Housing Act and other applicable anti-discrimination legislation.
- Promote new housing development within growth areas, and provide a mix of uses where feasible.
- Promote strategies that attempt to reduce or avoid conflicts between new residential development and existing agricultural operations.



Residential use can be accommodated through a range of housing types.

Natural Resources Goal

Protect, restore, and maintain natural resource features, landscapes, and functions to sustain ecosystems, public health, and quality of life.

Objectives

- Enhance Township regulatory controls to improve their effectiveness in preserving and protecting natural resources.
- Protect water quality and quantity through regulation of surface waters, groundwater, wetlands, floodplains, and riparian buffers.
- Promote innovative stormwater management and wastewater disposal that emphasize the recharge of groundwater and water balance.
- Limit the disturbance of land resources such as steep slopes and woodlands to minimize runoff, prevent degradation of water quality, and maintain wildlife habitat.
- Preserve and protect areas that provide wildlife habitat and natural diversity, such as stream valleys, steep slopes, floodplains, woodlands, wetlands, and hedgerows.
- Promote public education regarding the importance of natural resources and voluntary measures to protect these resources.



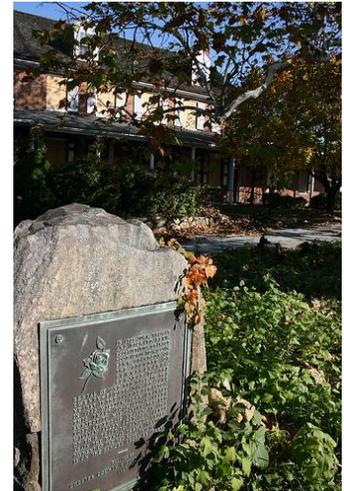
Protecting streams and improving riparian buffers are important objectives for Penn Township.

Historic and Scenic Resources Goal

Acknowledge the value and importance of the historic and scenic resources of the community and protect these resources from destruction and encroachment of incompatible development.

Objectives

- Protect and maintain historic and scenic resources by supporting public education efforts and activities.
- Maintain a database that defines, inventories, maps, and prioritizes historic resources within the community.
- Maintain a database that defines, inventories, and maps scenic resources.
- Define and identify items that may visually impair the landscape, such as inappropriate signage, lighting, parking, and utility infrastructure, in order to minimize their negative impacts.
- Adopt regulations that will minimize the impact of development on historic and scenic resources.
- Encourage the maintenance, rehabilitation, and adaptive reuse of historic resources.



Historic resources such as the Red Rose Inn are a valuable part of Penn's history and its future.

Transportation and Circulation Goal

Promote a safe, effective, and diversified circulation system that addresses current and future needs in coordination with land use planning.

Objectives

- Maintain and enhance a roadway network that safely and effectively accommodates vehicular traffic while supporting other community development objectives.
- Manage roadway design, speed, volume, and safety in and around areas with increased pedestrian activities, such as schools and parks.
- Review and update, as necessary, current road design standards for new development to ensure they are appropriate.
- Continue the multi-year road transportation improvement and maintenance program.
- Promote public transportation, car-pooling, and ride sharing techniques to reduce the burden on Township roadways.
- Promote expansion of bus service within the Township and the region overall.
- Enhance opportunities for pedestrian and bicyclist mobility within the Township.
- Work collaboratively with the Route 896 Task Force, Chester County Planning Commission, Delaware Valley Regional Planning Commission, and PennDOT to identify and prioritize necessary improvements to the transportation network.



Pedestrian and bicyclist mobility is increasing valued by communities.

Community Facilities and Services Goal

Provide community facilities and services, within the constraints of available fiscal resources, which are commensurate with current and future needs of the community.

Objectives

- Provide government services in an efficient and cost effective manner.
- Maintain a capital budget that addresses long term capital improvement needs throughout the community.
- Explore intermunicipal provision of services.
- Maintain open communication with Township residents and businesses through the Township website, newsletter, and other media.
- Ensure adequate and safe sewage disposal throughout the Township.
- Prepare and maintain comprehensive sewage facilities plans.
- Ensure adequate and safe water supply throughout the Township.
- Encourage the expansion of public water service areas in appropriate areas.
- Ensure that solid waste disposal and recycling services and facilities are available to the community.
- Ensure proper management of stormwater runoff through regulations that are current with evolving technology.
- Encourage use of Best Management Practices, green infrastructure, and other voluntary measures to reduce runoff and encourage infiltration.
- Support an emergency services system that protects the health and safety of residents.
- Support continued quality education opportunities and facilities.
- Support the programs of area public libraries.
- Support continued quality health care services.



Institutional uses, such as the Technical College High School, provide critical services and employment for Township residents and the broader region.

Parks, Recreation, and Open Space Goal

Promote the establishment and maintenance of, and programming for, a network of park and recreation facilities, and permanently protect open space to provide public health, ecological, economic, and quality of life benefits.

Objectives

- Establish sufficient publicly-owned and managed parks, recreation facilities, trails, and open space to provide a variety of active and passive recreation opportunities.

- Provide for continued maintenance and improvements to existing parks, recreation facilities, trails, and open space areas to ensure adequate recreational areas for residents.
- Require developers to help meet the increased demand for public recreation created by new development.
- Encourage recreation programming that serves all segments of the population.
- Pursue public and private grants and funding sources for recreation while continuing to dedicate municipal funding for recreation capital improvements, maintenance, programming, and other necessary costs.
- Establish a township-wide open space network and identify priority parcels with significant cultural or natural resources, including farmland soils, to permanently protect as open space.
- Encourage the preservation of, and funding for, open space in appropriate areas by landowners, public agencies, and non-profit organizations.
- Balance the protection of resources in open space with the desire for public access and recreation.
- Ensure that open space protection efforts include planning and funding for the long term maintenance of the property and, if needed, the restoration of the property.
- Provide fiscally responsible security, safety, and liability for public recreational facilities in perpetuity.
- Establish adaptable recreation programming to meet the needs of the community, and provide administration and sufficient staffing to implement such programming.
- Pursue joint public-private recreation initiatives, and support private and institutional entities that provide community recreation opportunities such as community events, organized team sports, and school related play and athletics.



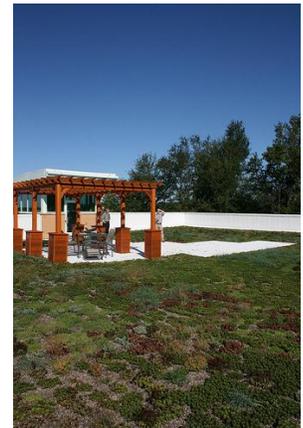
The Penn Township Community Park provides a variety of recreation opportunities, enhancing its value to the community.

Energy Goal

Encourage energy conservation and the effective utilization of renewable energy resources to reduce energy costs and environmental impacts.

Objectives

- Encourage the development, distribution, and use of alternative fuels and energy sources where appropriate, with a preference for those energy sources that are renewable, sustainable, and locally generated.
- Promote the design and construction of subdivision and land development utilizing energy efficient, sustainable, and green technologies.
- Support the development and use of energy efficient technologies in residences and commercial, industrial, and institutional uses where appropriate.



Dansko used a variety of energy efficient design choices and technologies, such as this green roof.

Regional Cooperation and Planning Goal

Encourage communication and cooperative planning efforts with adjacent communities and other public or private entities.

Objectives

- Communicate and coordinate with contiguous municipalities regarding land use and transportation planning and development.
- Promote regional provision of community services.

Conclusion

Penn Township has identified a vision for the future. These goals and objectives are the foundation of that vision. This Comprehensive Plan is built on this foundation, and specifies the strategies and tools available to implement these policies.

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POPULATION AND ECONOMIC PROFILE

Introduction

The demographic profile of Penn Township provides a means of anticipating and planning for future growth and shifts in the population composition. Significant changes in population have implications for housing demand, land development, the need for facilities and services, and pressures on natural resources and open space. Age, income, and similar data provide a snapshot of where Penn Township is now and helps to anticipate future trends. Information specific to housing issues can be found in Chapter 11, Housing Inventory and Plan.

This chapter analyzes the following information:

- Population Profile
 - Historic Population Trends
 - Population Projections
 - Population by Race and Hispanic Origin
 - Age Distribution
- Economic Profile
 - Income Levels
 - Education
 - Employment and Industry Characteristics
 - Commuting Patterns
- Planning Implications



Population Profile

Historic Population Trends

Penn Township has witnessed a tremendous level of growth over the last 40 years. When looking at individual decades, the data indicate that both the 1970s and 2000s were very high growth periods (Figure 3-1 and Figure 3-2). This population growth can be accounted for in terms of births (although the birth rate is decreasing) as well as immigration of new residents. As compared with the County, the region's municipalities (corresponding to those municipalities in the Avon Grove School District), and the region as a whole, Penn's growth rate overall since 1970 has been higher than all but New London Township.

Figure 3-1: Historic Population Growth 1970 - 2010

	1970	1980	1990	2000	2010	Increase 1970-2010	
Penn	989	1,888	2,257	2,812	5,364	4,375	442.4%
Avondale	1,025	891	954	1,108	1,265	240	23.4%
Franklin	1,043	1,920	2,779	3,850	4,352	3,309	317.3%
London Britain	963	1,546	2,671	2,797	3,139	2,176	226.0%
London Grove	3,109	3,531	3,922	5,265	7,475	4,366	140.4%
New London	938	1,312	2,721	4,583	5,631	4,693	500.3%
West Grove	1,870	1,820	2,128	2,652	2,854	984	52.6%
Avon Grove Region	9,937	12,908	17,432	23,067	30,080	20,143	202.7%
Chester County	277,746	316,660	376,396	433,501	498,886	221,140	79.6%

Source: U.S. Census Bureau.

Figure 3-2: Percent Population Change by Decade

	1970-1980	1980-1990	1990-2000	2000-2010
Penn	90.9	19.5	24.6	90.8
Avondale	-13.1	7.1	16.1	14.2
Franklin	84.1	44.7	38.5	13.0
London Britain	60.5	72.8	4.7	12.2
London Grove	13.6	11.1	34.2	42.0
New London	39.9	107.4	68.4	22.9
West Grove	-2.7	16.9	24.6	7.6
Avon Grove Region	29.9	35.1	32.2	30.4
Chester County	14.0	18.9	15.3	15.1

Source: U.S. Census Bureau.

As seen in Figure 3-2, there is wide variation in growth percentage from one decade to the next and among the municipalities of the region. The Penn Township rate of growth during 2000 – 2010 was essentially equal to that of 1970 – 1980, both very high growth decades. In 2010, the Pennsylvania State Data Center named Penn Township the fastest growing municipality in the state. It is interesting to note that the region as a whole experienced a relatively stable growth rate from 1970 to 2010, which was consistently about twice the rate of growth for the County.

Population Projections

The Township population is projected to increase 36 percent between 2010 and 2030 (see Figure 3-3). These projections indicate a slowing of the growth rate in Penn Township, as compared to 2000 to 2010, to one slightly higher than the region’s overall projected rate of growth (31 percent). Based on these projections, Penn Township will maintain the highest rate of population growth of all the municipalities in the region between 2010 and 2030.

Figure 3-3: Population Projections 2000 - 2030

	2000 Actual	2010 Actual	Projected Population		Estimated Increase 2010-2020		Estimated Increase 2010-2030	
			2020 Projection	2030 Projection	Number	Percent	Number	Percent
Penn	2,812	5,364	6,084	7,320	720	13.4	1,956	36.5
Avondale	1,108	1,265	1,397	1,622	132	10.5	357	28.2
Franklin	3,850	4,352	4,851	5,710	499	11.5	1,358	31.2
London Britain	2,797	3,139	3,271	3,498	132	4.2	359	11.4
London Grove	5,265	7,475	8,474	10,189	999	13.5	2,714	36.3
New London	4,583	5,631	6,355	7,600	724	12.9	1,969	35.0
West Grove	2,652	2,854	3,055	3,402	201	7.0	548	19.2
Avon Grove Region	23,067	30,080	33,487	39,341	3,407	11.3	9,261	30.8
Chester County	433,501	498,886	538,809	607,407	39,923	8.0	108,521	21.8

Source: Delaware Valley Regional Planning Commission Forecasts, 2012; Us Census Bureau.

The population projections were produced in 2012 by the Delaware Valley Regional Planning Commission (DVRPC) in coordination with the Chester County Planning Commission (based on the 2010 Census). DVRPC employed the cohort-component method, which uses expected trends in fertility, mortality, and migration rates to carry the population forward in five-year increments, for the entire County. Projections for municipalities were then based on a ratio-share method recommended by the U.S. Census, using the overall DVRPC projection as the baseline. Population projections are particularly valuable in predicting potential residential development needed to accommodate new residents. The actual population increase in Penn Township will also be affected by such factors as available developable land, municipal land use regulations, and trends in the economy.

Population by Race and Hispanic Origin

Figures 3-4 and 3-5 indicate the composition of Penn Township’s population by race and Hispanic origin. These are shown as two separate categories because a person of Hispanic origin can be of any race. In terms of racial composition, Penn Township is less diverse than the overall County population. However, Penn Township has shown an increase in the number of Hispanic residents, and has a greater proportion of Hispanic residents than that of the County in both Census years.

Figure 3-4: Population by Race 2010

	White		African American		Asian		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Penn	4,904	91.4	156	2.9	88	1.6	216	4.0
Chester County	426,707	85.5	30,623	6.1	19,296	3.9	22,260	4.5

Source: U.S. Census Bureau.

Figure 3-5: Population by Hispanic Origin 2000 and 2010

	2000		2010		Percent Change
	Number	Percent	Number	Percent	
Penn	166	5.9	435	8.1	162.1
Chester County	16,126	3.7	32,503	6.5	101.6

Source: U.S. Census Bureau.

In recent years, the composition of the Hispanic population has been experiencing changes. While previously a large segment of the Hispanic population consisted of single males, current trends include married men with families. As Hispanic populations increase, potential implications include more demand for affordable housing, bilingual medical care and other services, school programs, and assistance with assimilation into the local culture. It is noted that accurate counts of immigration groups can be difficult to obtain for wide variety of reasons. As a result, Census counts are likely to be somewhat lower and, in some cases significantly lower, than the actual number.

Age Distribution

As reflected in Figure 3-6, the largest numerical change in age categories between 2000 and 2010 was the 65 and older age group (a gain of 168.5 percent). This age group also increased from 20 percent to 28 percent of the total population. Another notable change is the 20 to 44 age group, which fell from 31 percent to 22 percent of the total population.

In Penn Township the primary in-migration group is the retired single or married couple, looking for housing in a lower cost range with minimal maintenance requirements, in closer proximity to necessary services or closer to other residents of similar age. This is supported by the marked increase in age-restricted housing in the Township. The median age has also increased significantly (Figure 3-7).

Figures 3-6: Age Distribution 2000 and 2010

Age Range	2000		2010		Percent Change
	Number	Percent of Population	Number	Percent of Population	
0 to 19	742	26.4	1,349	25.2	82.8
20 to 44	869	30.9	1,181	22.0	35.9
45 to 64	627	22.3	1,293	24.1	106.2
65 and up	574	20.4	1,541	28.7	168.5

Source: U.S. Census Bureau.

Figure 3-7: Median Age 2000 and 2010

	2000	2010
Penn	41.1	47.1
Chester County	36.9	39.3

Source: U.S. Census Bureau.

The median age in the County, as in the United States, has been increasing due to the aging of the Baby Boom generation, which corresponds to a need for facilities and services to accommodate the growing older age groups. Depending on how long-term the retiree in-migration is, this will play a critical role in determining the future age distribution of Penn Township. If the area continues to be a prime location for the relocation of retirement age groups, the age distribution pyramid may become top-loaded, with implications for planning issues such as housing, community facilities, and services.

Economic Profile

Income Levels

Penn has a median household income that is clearly lower than the County median (Figure 3-8). In addition, the number of individuals living at or below the poverty level in the Township increased at a higher rate than that of the County (Figure 3-9). An increase in the incidence of poverty is consistent with other parts of southern Chester County. Poverty levels relate to the need for social services which may include basic needs assistance (housing, food, clothing, and health care), educational support, and employment and training assistance.

Figure 3-8: Median Household Income 2000 and 2005-2009 Average¹

	2000	2005-2009 Average	Percent Change
Penn	\$57,949	\$71,534	23.4
Chester County	\$65,295	\$83,759	28.3

Source: U.S. Census Bureau, American Community Survey.

Figure 3-9: Persons below Poverty Level 2000 and 2005-2009 Average

	2000	2005-2009 Average	Percent Change 2000 to 2005-2009 Average
	Number	Number	
Penn	174	256	47.1
Chester County	22,542	29,307	30.1

Source: U.S. Census Bureau, American Community Survey.

Education

Analyzing the level of education attained by residents helps to predict employment demand and can be related to the economic prosperity of the residents in a municipality. Figure 3-10 shows the educational levels of Penn Township and Chester County residents. In Penn Township, 28.5 percent of the residents are college graduates (9.2 percent have advanced degrees). This level compares to a college graduate population of 46.9 percent for Chester County, which ranks among the highest in the state. In both the Township and the County, the percentage of residents with less than a high school education has fallen while the percentage of college graduates has increased. Higher levels of education generally correspond to higher income levels and lower poverty levels.

Figure 3-10: Highest Educational Attainment by Percent 2000 and 2005-2009 Average

Educational Attainment	Penn		Chester County	
	2000	2009*	2000	2009*
Less Than High School	19.2	11.2	10.7	7.9
High School	28.7	36.0	26.0	24.8
Some College or Associate Degree	20.4	24.3	20.9	20.4
Bachelor's Degree	22.9	19.3	26.6	28.7
Graduate or Professional Degree	8.9	9.2	15.9	18.2

Source: U.S. Census Bureau, American Community Survey.

The ability to draw on education for targeted economic development efforts cannot be overstated. Penn Township has been a township with a minimum of industrial investment to date. However, there are opportunities within the Township to provide

¹ The American Community Survey is an ongoing effort of the U.S. Census Bureau, a statistical survey that samples a small percentage of the population every year. Data from the American Community Survey are estimates based upon annual sampling of the population. The decennial census no longer provides detailed population and housing data as it did in the past. American Community Survey data is averaged over a five year period to account for the limited sample size in smaller areas such as within Penn Township.

for industrial or commercial development. Focusing on the educational base of the area is a critical point in these efforts.

Employment and Industry Characteristics

Employment characteristics provide a baseline of the types of businesses in which Township residents are employed. Changes in these characteristics show trends in the overall economy of a region and changes in the types of employment available.

Resident Employment by Industry

Industry is defined as the type of business conducted by a person’s employing organization. Figure 3-11 indicates the overall breakdown by industry for all employed residents in Penn Township and for Chester County overall. Noting the comparison of 2000 and 2005-2009 average data indicates that both Penn Township and Chester County saw the greatest decreases in the Services industry. However, more Penn Township and Chester County residents are employed in the Services industry than any other. Unlike the countywide trends, the percentage of Penn Township residents employed in Manufacturing has increased in the last decade.

The most significant decrease for Penn Township residents’ employment was the Agriculture industry and the highest increase was in the Transportation/Utilities industry. It is difficult to identify what may have accounted for the fluctuations considering the unstable economic conditions that were prevalent in the later part of the decade.

Figure 3-11: Employment Characteristics by Industry - Percent of Residents Working in Selected Industry 2000 and 2005-2009 Average

	Penn			Chester County		
	2000	2005-2009 Average	Percent Change	2000	2005-2009 Average	Percent Change
Agriculture	4.3%	0.6%	-3.7	2.0%	1.9%	-0.1
Construction	7.6%	12.6%	5.0	5.6%	6.0%	0.5
Manufacturing	11.9%	17.3%	5.4	14.8%	12.4%	-2.4
Transportation/Utilities	0.9%	8.8%	7.9	4.1%	3.8%	0.3
Information	2.8%	0.4%	-2.4	3.0%	2.3%	-0.7
Wholesale Trade	2.8%	3.0%	0.2	4.0%	3.6%	0.4
Retail Trade	11.5%	11.4%	-0.1	11.2%	11.3%	0.1
F,I,R,E	8.9%	6.0%	-2.9	10.0%	10.1%	0.1
Services*	46.9%	20.8%	-26.1	43.1%	21.2%	-21.9
Public Administration	2.3%	3.4%	1.1	2.3%	2.0%	0.3

Source: U.S. Census Bureau, American Community Survey.

F,I,R,E includes Finance, Insurance, and Real Estate.

*Services include business, personal, health, educational and other services.

Penn Township Industries

In 2010, there were 2,188 primary jobs in Penn Township. Figure 3-12 shows the top ten industries, by employment (2010), located in the Township. The 2005 counts are given also to show trends over the five year period.

Figure 3-12: Top Penn Township Industries by Employment 2005 and 2010

	Penn Township		
	2005	2010	Percent Change
Health Care and Social Assistance	681	783	15.0
Other Services	171	246	43.9
Wholesale Trade	144	220	52.8
Retail Trade	198	194	-2.0
Accommodation and Food Services	156	187	19.9
Manufacturing	100	175	75.0
Agricultural, Forestry	13	133	923
Professional, Scientific, and Technical	79	66	-16.5
Administrative and Waste Management	102	44	-56.9
Arts, Entertainment, and Recreation	0	33	-
Total Number of Jobs	1,709	2,188	28.0

Source: U.S. Census Bureau, Longitudinal Employer Household Dynamics, 2005, 2010.

In Penn Township between 2005 and 2010 total job growth was approximately 28 percent. This compares to an 8.1 percent growth rate for the County over the same period of time. The most significant increases in Penn Township came in Agriculture and in Manufacturing, likely related to specific employers in the Township (such as nurseries). The Administrative and Waste Management sector had the most significant decrease in jobs. Some of the changes might be attributed to a change in the way that jobs are classified. However, it is clear from the data that Health Care and Social Assistance is the industry with the highest level of employment in the Township consistently over the five year period.

Commuting Patterns

Figure 3-13 shows where Penn Township’s residents commute to work. While almost 60 percent of residents work within the County, just under 19 percent commute to another Pennsylvania county and approximately 22 percent commute to locations outside of Pennsylvania (predominantly New Castle County, Delaware). More detail on transportation patterns can be found in Chapter 6, Transportation and Circulation Systems Inventory and Plan.

Figure 3-13: Penn Township Commuter Destinations

Destination	2005-2009 Average	
	Number	Percent
Chester County	1,341	59.1
Other PA County	422	18.6
Outside PA	505	22.3
Total	2,268	

Source: U.S. Census Bureau, American Community Survey.

Planning Implications

The demographics analysis indicates the following planning implications for Penn Township:

Regional Growth

The Township is experiencing increased growth from two sources of population: retirement and in-migration from elsewhere in Chester County and from across state lines. These pressures are likely to continue. Existing land use patterns, land use regulations, and site constraints will also affect future growth. There is a need to manage the location, size, and services offered to address Penn Township's role as a retirement and bedroom community.

Planning for Future Growth

Population and housing projections indicate approximately 1,956 additional residents and 715 new homes could be located in Penn Township between 2010 and 2030. Policies and regulations should direct projected future growth into the most appropriate areas, such as within or near suburban landscapes, suburban centers, and villages.

Growth Climate

Based on available Census data, residential development in the Township has been increasing in number and intensity since the 1970s. There is a need to ensure that regulations are in place that direct growth in ways consistent with land use policies.

Employment and Industry Characteristics

The greatest number of jobs located within Penn Township fall within the Health Care and Social Assistance industry. Other Services, Wholesale Trade, Retail Trade, and Accommodation and Food Services round out the top five industries by employment. It is significant to note that Manufacturing was the industry with the sixth highest number of jobs, increasing 75 percent between 2005 and 2010.

Commuting Patterns

Approximately 40 percent of Penn Township's residents commute to jobs outside of Chester County, with 22 percent commuting outside of Pennsylvania. These commuting patterns indicate that the Township is to a degree a bedroom community and these commuting patterns must be factored in regional transportation planning.

Links

U.S. Census Bureau

www.census.gov

U.S. Census Bureau – American Community Survey

www.census.gov/acs

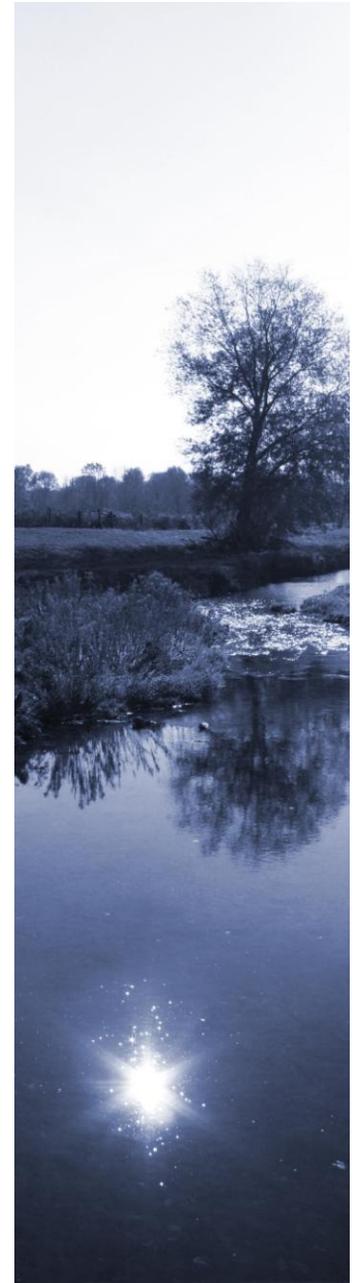
NATURAL RESOURCES INVENTORY AND PLAN

Introduction

Penn Township adopted an Open Space, Recreation and Environmental Resources Plan in 1993, which included a detailed inventory of natural resources organized under the broad categories of water, land, and biotic resources. The Joint Comprehensive Plan (2003) provided a broader inventory of natural resources information under the categories of aquatic, land, and biotic resources. This chapter identifies the major natural resources found within the Township, their characteristics, and measures currently in place for their protection. This information provides a basis for a coordinated course of action for resource protection.

This chapter addresses the following topics:

- Water Resources
 - Watersheds
 - Stream Designations
 - Floodplains
- Land Resources
 - Geology
 - Slopes
 - Agricultural Soils
- Biotic Resources
 - Woodlands
 - Pennsylvania Natural Heritage Program
 - Wetlands
 - Threats to Biotic Diversity
- Current Resource Protection Measures
- Planning Implications
- Recommendations



Inventory

Water Resources

The creeks and streams throughout Penn Township have influenced development patterns and quality of life for centuries. Proper management of water resources to meet growing demands, avoid and minimize degradation, and improve water quality where needed is a complex and challenging task. An accurate understanding of the resources present is a critical first step in this task.

Watersheds

A watershed (or drainage basin) is an area of land, bounded by a ridge, which drains into a river or lake. Water flows from each ridgeline divide toward the stream within the basin. A portion of the precipitation that falls into a watershed becomes part of the area's streams and groundwater, while a percentage is transpired by plants or evaporated. Two watersheds (or drainage basins) essentially divide Penn Township in half, with the divide located along Route 796. The White Clay Creek (Middle Branch and Western Branch) drains the eastern portion of the Township, while Big Elk Creek (Eastern Branch) drains the western portion (see Map 4-1 in Appendix A). The White Clay Creek is a tributary of the Christina River, which drains into the Delaware River, while Big Elk Creek converges with Little Elk Creek to form Elk River, a tributary of the Chesapeake Bay.

Within a watershed, stream ordering is used to classify streams. The smallest streams have no tributaries and are called first order streams. When two first order streams converge, they form a second order stream; when two second order streams converge, they form a third order stream, and so on. First and second order streams, or headwaters, are important from a planning perspective because their watersheds often contain critical recharge areas. Additionally, these streams exhibit very small flows and are highly vulnerable to impacts from pollutants and stormwater runoff. Most of Penn Township is a headwaters area due to the topography of the Township, with critical implications for water quality purposes both within the Township and downstream.

Another important consideration within a watershed is the condition of the riparian area. Riparian areas are the lands adjacent to water bodies that serve as a transition between aquatic and terrestrial environments and directly affect or are affected by that body of water. A riparian area that consists of mature vegetation, preferably including forest cover, can create an effective buffer between upland land uses and the receiving water body. A forested riparian buffer can provide multiple functions, reducing the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals; and supplying food, cover, and thermal protection to fish and other wildlife. Buffers can also serve to slow stormwater runoff, improving flood control. Within Penn Township, the limited extent of woodlands (depicted on



Many streams in Penn Township, including Big Elk Creek, lack a forested riparian buffer, leading to impaired water quality.

Map 4-4 and discussed under biotic resources), indicates that riparian areas are not functioning as well as they could be. However, the limited areas of woodlands present are typically clustered around streams, within both the White Clay Creek and Big Elk Creek watersheds. Many sections of streams lack forest cover within their riparian areas however, or have a limited width of forest cover extending from the streambanks.

Stream Designations

White Clay Creek

In the fall of 2000, a majority of the streams and tributaries of the White Clay Creek were designated as a National Wild and Scenic River. The Wild and Scenic River program was established by the U.S. Congress in 1968 to encourage cooperation between state, local, and federal agencies, non-government organizations, and private citizens to protect rivers in a way that is sensitive to the needs and concerns of local people. To qualify, a river or river segment must be in a free-flowing condition and must be deemed to have one or more “outstandingly remarkable” scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values.

The process of designating the White Clay Creek began in 1992, and a taskforce prepared a Watershed Management Plan. A total of 191 miles, 24 miles classified as scenic and 167 miles classified as recreational, of the White Clay Creek and its tributaries received designation into the National Wild and Scenic River System, including all the tributaries within Penn Township. As of 2012, there is a proposal to expand the designation to include additional sections; these areas are outside of Penn Township (New Garden Township and Delaware).

The Pennsylvania Department of Environmental Protection (PADEP) identifies the White Clay Creek as a Trout Stocking Fishery (TSF), and designates aquatic life as a use for the stream. However, most sections of the stream within Penn Township are noted to be non-attaining for this use, due to negative impacts from agricultural uses within the watershed, specifically nutrients, siltation, and suspended solids, as well as impacts from municipal point source nutrients. Map 4-1 depicts those sections of the White Clay Creek watershed that are non-attaining.

In addition to its status as a Wild and Scenic River, the White Clay Creek watershed has several important characteristics to be aware of when considering management of the resource, including its use as a major source of public drinking water supply in southern Chester County and northern New Castle County, Delaware, the impaired status of portions of the watershed, and the projected population growth within the watershed. Priority management objectives for the watershed, as identified in Chester County’s *Watersheds* (2002) include:

- Engage and educate individuals, communities and governments in watershed stewardship.
- Enhance recreational and cultural resources.
- Preserve natural resources.
- Improve water quality.
- Reduce stormwater runoff and flooding.
- Protect watershed water balances.
- Integrate utility and municipal planning to meet future water supply and wastewater needs.



The White Clay Creek is significant for its ecological and scenic value as well as its use for public drinking supply downstream from Penn Township.

Big Elk Creek

Big Elk Creek and its watershed have been designated as High Quality/Trout Stocking Fishery (HQ/TSF) by PADEP. The High Quality (HQ) classification is for streams and watersheds that have excellent quality waters which require special water quality protection. These protections take the form of additional requirements for potential stream discharges as permitted by the PADEP. Additionally, PADEP designates aquatic life as a use for Big Elk Creek. However, most stream sections of the watershed within Penn Township are noted to be non-attaining for this use, due to negative impacts from grazing related agricultural uses within the watershed, specifically organic enrichment and low dissolved oxygen. Map 4-1 depicts those sections of Big Elk Creek watershed that are non-attaining.



Big Elk Creek and its watershed have been designated as High Quality by PADEP, requiring special water quality protection.

In addition to Big Elk Creek's status as HQ, the efforts to improve water quality within the Chesapeake Bay, which are continuing to evolve and becoming more mandated and regulatory in nature, is another characteristic to be aware of when considering management of the resource. States within the watershed of the Chesapeake Bay are required to submit a Watershed Implementation Plan (WIP) to meet permitted levels of Total Maximum Daily Load (TMDL). Priority management objectives for the Elk Creek watershed, as identified in Chester County's *Watersheds* (2002) include:

- Reduce agricultural nonpoint source pollutants to groundwater and streams.
- Reduce stormwater runoff to reduce flooding, erosion and sedimentation, to improve water quality.
- Protect and expand forested riparian buffer networks, particularly for first order streams.
- Integrated water supply/wastewater planning and protection to meet future needs.
- Protect and enhance recreational, cultural, natural and historic resources.

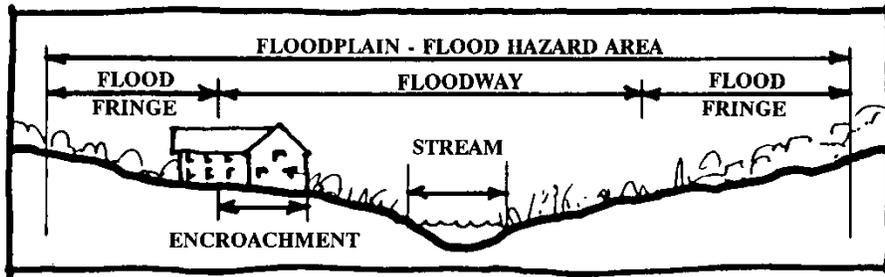
Floodplains

Naturally vegetated floodplain areas filter sediments from floodwaters, reduce the velocity of floodwaters, and provide valuable wildlife habitat and outdoor recreational opportunities. Because disturbance and development of floodplains creates a high potential for erosion, downstream sedimentation, flooding, and potential threats to life, property, wildlife habitat, and water quality, protection of these areas is critical. Their potential value as greenways and passive recreational areas is another reason for protecting floodplains.

The 100 year floodplain and the floodway shown on Map 4-1 are based on the Federal Emergency Management Agency (FEMA) maps (2006). The 100 year floodplain represents the highest level of flooding that, on the average, is likely to occur every 100 years or, from another perspective, a flood level that has a one percent potential of occurring each year. The floodway is located within the 100 year floodplain (see Figure 4-1). As defined by FEMA, the floodway must be reserved to carry the base floodwaters without increasing the base flood elevation more than one foot. This area should be regulated to prohibit any obstructions that might raise the base flood elevation. The remainder of the 100 year floodplain beyond the floodway, known as the flood fringe, may be developed if structures are elevated or floodproofed. However, many

communities within Pennsylvania choose to prohibit all or most development within the entire 100 year floodplain.

Figure 4-1: Typical Floodplain



Source: Chester County Planning Commission

There is identified 100 year floodplain along all of Big Elk Creek and portions of its tributaries, as well as portions of White Clay Creek and its tributaries (Map 4-1). Given that much of Penn Township is within headwaters areas, and because few first order streams have FEMA-mapped floodplains, it is also important to be aware of the presence of alluvial soils, which can be used to identify or confirm potential flood areas. Alluvial soils are those soils which have been eroded, transported and deposited by flooding water over time and thus, generally indicate a strong potential for flooding. Most areas of alluvial soils are narrow and found immediately adjacent to streams. Alluvial soils are depicted on Map 4-1, and closely correspond to the 100 year floodplain areas, but also extend beyond those areas within both watersheds. Within Penn Township, alluvial soils include Codorus silt loam (Co) and Hatboro silt loam (Ha). Wetlands and hydric soils are also related to flood-prone areas and poor drainage; these are discussed as a biotic resource.

Land Resources

Land resources should be protected not only for their production value (agriculture, forests, and meadows) but because inappropriate uses and poor maintenance practices can lead to the degradation of water, wildlife, and plant resources. Land resources are the basis for all other natural resources, and help form the character of an area.

Geology

Geologic Formations

Penn Township falls entirely within the Piedmont Province, a band of gently undulating to steeply rolling countryside that stretches from the Hudson River to Georgia, between the Atlantic Coastal Plain and the Blue Ridge. This Province is further divided into three sections based on geologic history and landscape – the Piedmont Uplands, Triassic Lowlands, and the Conestoga Valley. All of Penn Township (and over 80 percent of Chester County) is located in the Piedmont Uplands section. The variable resistance to weathering and erosion of the underlying geology has led to a hilly to gently rolling landscape of low ridges and narrow valleys. Generally speaking, much of the land in the

Piedmont Uplands has been cleared for farmland or development, with slopes and wet soils remaining forested with a mix of oak, tulip poplar, and beech.

The Wissahickon Formation, Oligoclase-Mica Schist underlies the vast majority of Penn Township (see Map 4-2 in Appendix A). Limited areas of Mafic Gneiss occur within the Township, all on the eastern side of the Township. A small area of Cockeysville Marble is located on the northeastern boundary of Penn Township.

The Wissahickon Formation, Oligoclase-Mica Schist forms hills of medium relief, with moderately steep but stable slopes. The rock is relatively soft to moderately resistant to weathering. Cockeysville Marble generally forms elongated valleys, and is moderately resistant to weathering. Joint and solution channels and sinkholes are common. Additionally, Radon-222 levels can be high in Cockeysville Marble. Mafic Gneiss, a type of Gneissic rock, is a metamorphosed rock that is moderately to highly resistant to weathering. Gneissic rock forms hills of medium to high relief with fairly steep and stable slopes.¹

Geology and Groundwater

An aquifer is the underground area where groundwater is stored in voids within soil and rock and the cracks, fractures, and solution channels in bedrock. The water-producing capability of an aquifer is largely determined by the geology and precipitation of an area. Because many residents in Penn Township continue to be dependent on on-lot wells that draw from groundwater, the protection of this resource is critical. Water quantity and protection of groundwater for use by on-lot wells is also addressed within Chapter 8, Community Facilities and Services.

Hardrock geologic formations such as gneiss and schist are harder and denser than marble and their value for groundwater availability and recharge is less significant. Their more limited water yields present a limiting factor for development that utilizes groundwater wells, although yields are typically suitable for residential use (see Figure 4-2). Due to the carbonate nature of Cockeysville Marble, and resulting solution channels and sinkholes, it is particularly critical to minimize potential contaminants in an area underlain by Cockeysville Marble.

Figure 4-2: Reported Domestic Well Yields

Geologic Formation	Range (gallons per minute)	Median (gallons per minute)
Cockeysville Marble	4 to 240	20
Wissahickon Oligoclase-Mica Schist	0 to 400	12
Gneissic Rocks*	<1 to 270	12

*Mafic Gneiss is one of several forms of Gneissic Rocks; the well yield data reflects the entire grouping.
Source: *Geohydrology of Southeastern Pennsylvania*, USGS, 2002.

Map 4-2 identifies five dike lines within Penn Township. Dikes are a geologic body that cuts discordantly into a larger geologic formation, a form of intrusion. In Penn Township, the dikes consist of diabase and pegmatite. Two cross Baltimore Pike and three are located in the northeastern portion of the Township.

¹ *Geohydrology of Southeastern Pennsylvania*, USGS, 2002.

There are several wells located in Penn Township that have groundwater quality problems, of which a major concentration is located in the vicinity of the old Agway facility, which contaminated area wells with the herbicide Alachlor. The Agway facility was located southeast of the intersection of Route 896 and the rail line, and the contamination plume extends to the northwest. Properties impacted by this contamination have public water available to them for their use, although not all have chosen to tie into public water at this point in time. Those properties remain on wells with filtration systems.

Slopes

For the purposes of this Plan, steep slopes are considered to include any land with a slope of 15 - 25 percent. Very steep slopes are those greater than 25 percent. Steep slopes and very steep slopes in Penn Township are limited in extent, with most of the Township consisting of moderate to rolling terrain (see Map 4-2).

Slopes are often covered by woodlands, are adjacent to streams, and have shallow soils that are easily eroded. Slopes are very vulnerable to erosion, particularly when natural vegetation has been disturbed. Limiting developing, and maintaining wooded slopes, provides a natural system of erosion protection and valuable wildlife habitat, as well as minimizes water pollution and flooding.

Agricultural Soils

For the purposes of this Plan, agricultural soils include Prime Farmland and Farmland of Statewide Importance. Prime Farmland, as identified by the U.S. Natural Resources Conservation Service (NRCS) is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. Farmland of Statewide Importance is designated by Pennsylvania agencies, and generally includes areas of soils that nearly meet the requirements for Prime Farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. With the exception of the stream valleys, most of Penn Township is considered Prime Farmland, a reflection of the soil quality and lack of slopes across much of the Township. There are limited areas of Farmland of Statewide Importance. Map 4-3 (Appendix A) depicts the extent of both resources, and Figure 4-3 lists the soils.



The rich soils of Penn Township have benefitted traditional crop farming and nursery operations.



Figure 4-3: Agricultural Soils in Penn Township

Designation	Soil Name	Soil Symbol*
Prime Farmland		
	Chester silt loam	CdA, CdB
	Clarksburg soil loam	CIA
	Codorus silt loam	Co
	Comus silt loam	Cs
	Gladstone gravelly loam	GdB
	Glenelg silt loam	GgA, GgB
	Glenville silt loam	GIA, GIB
	Manor loam	MaB
	Mount Lucas silt loam	MIB
Farmland of Statewide Importance		
	Glenelg silt loam	GgC
	Manor loam	MaC
	Neshaminy silt loam	NvC

* Soil Symbols indicate the soil type and the slope on which the soil is found (A = 0-3%, B = 3-8%, C = 8-15%).
 Source: Soils Mapping: Chester County Soil Survey, NRCS, Web Soil Survey, National Cooperative Soil Survey, 2011; Prime and Statewide Important Soils Listing: NRCS, 2008.

The qualities that make Prime Farmland and Farmland of Statewide Importance favorable for agricultural uses also make them suitable for building. Within Penn Township a significant portion of the soil areas designated as Prime Farmland and Farmland of Statewide Importance have already been developed. Soils are important considerations in farmland easement programs, Agricultural Security Areas, and other planning related issues.

Biotic Resources

Biotic resources include plant and animal life, and their habitats. This section identifies important habitat areas in Penn Township, as well as sites that have been identified for special protection. Protection of biotic resources is critical, as they ensure a diverse community of species and habitats can continue to exist, despite development pressure and resulting habitat fragmentation. Undeveloped lands can be roughly classified into three categories: open field, forest, and wetlands. To continue the sustainability of a healthy and diverse landscape, it is especially critical to reserve sufficient areas of each of these habitats as interconnected habitat networks.

Woodlands

Chester County is located in the eastern deciduous forest biome, a large ecological community. Within this biome, the forests of Penn Township, and the wider southern Chester County region, are part of the oak-hickory association forest. This forest association produces large amounts of mast (nuts) and is generally dominated by the species shown in Figure 4-4. Map 4-4 (Appendix A) depicts woodlands within Penn Township, which are primarily found along streams and are limited in extent. Woodlands within the Township are scattered, without a significant large area of woodland or connections between the smaller, fragmented areas.



Woodlands are generally limited to areas along waterways in Penn Township.

Figure 4-4: Typical Trees and Shrubs of the Oak-Hickory Forest

	Canopy Trees	Understory Trees and Shrubs
Upland Areas	Red, White, Black, and Scarlet Oaks; Mockernut, Bitternut, and Pignut Hickories; American Beech, White Ash, and Tulip Poplar	Flowering Dogwood, Sassafras, Ironwood, Spicebush, and Blackhaw, Mapleleaf, and Arrowwood Vibernums, Pumplonium, Palonium
Riparian Zones	Red and Silver Maples, Sweet Gum, Red Ash, and Eastern Sycamore	Silky Dogwood, Box Elder, Common Witch Hazel, Spicebush, and Northern Arrowwood Viburnum

Source: *Chester County Soil Survey*, USDA Soil Conservation Service, 1963.

Woodlands provide protective ground cover and stability for soils on steep slopes and contribute to stream water quality. As part of a riparian buffer, woodlands can increase the functioning of the riparian area, and provide multiple benefits. Canopies of trees play an important role in reducing the amount and intensity of rainfall, providing shade, and reducing the impacts of temperature extremes. Woodlands serve as buffers from the cold northwesterly wind, visual infringements, and noise while also providing scenic quality and improving land value.

Woodlands are also a critical component in maintaining natural diversity and provide vital habitat for native vegetation and wildlife. In some cases, a healthy forest ecosystem is critical in the survival of certain species of forest plants and wildlife. Several species of songbirds, such as the colorful warblers, are specifically adapted to forest interior conditions and will not nest in any other location. In addition, various species of wildflowers will only bloom on the rich, moist soils that make up the forest floor.

Pennsylvania Natural Heritage Program

The Pennsylvania Natural Heritage Program provides scientific information, expertise, and assistance to support the conservation of biological diversity. The program includes several efforts, such as the Pennsylvania Natural Diversity Inventory (PNDI), which provides site-specific information describing significant natural resources of the Commonwealth, and County Natural Heritage Inventories, which detail resources by county. The Chester County Natural Areas Inventory was initially compiled and written by the Pennsylvania Science Office of the Nature Conservancy and published by the Chester County Planning Commission in 1994, and was updated in 2000. The inventory contains information on the locations of rare, threatened, and endangered species and the highest quality natural areas in the County. The inventory also provides general management recommendations for the protection of the identified species. Exact locations and the species are not publicly identified for their protection.



According to the Chester County Natural Areas Inventory, there are two PNDI sites located within or near Penn Township. Both PNDI sites are classified as Statewide Significance. One of these is the Wickerton North Woods, in the southeast corner of Penn Township. The area includes a site with a rare statewide plant along the middle branch of the White Clay Creek, and a rare animal found in the wet meadows and marshlands adjacent to the White Clay Creek. This site is currently privately owned, and open to development. Protection of riparian areas and wetlands is critical to the PNDI species on this site. The other site of Statewide Significance is just to the east of Penn Township, near Tice Road in London Grove Township. This site has a potentially rare plant that is rarely located anywhere else in the Commonwealth. There are no PNDI classified sites rated as sites of Local Significance within Penn Township.

Wetlands

Wetlands are recognized for being one of the world's most productive ecosystems. They offer key wildlife habitat, are important storage areas for surface and groundwater, and filter nutrients and sediments from runoff. The Army Corps of Engineers regulates wetlands under Section 404 of the Clean Water Act, while the PADEP regulates wetlands under 25 PA Code § 105. From a regulatory standpoint, the presence of wetland areas is determined based on a site's soil, hydrology, and vegetation.

There is no comprehensive inventory of wetlands. However, the National Wetlands Inventory (NWI) identifies certain wetland areas based on aerial photography (see Map 4-4). Identified NWI wetlands in Penn Township primarily lie along stream corridors. Site specific wetland delineations remain the only method to accurately determine the presence of wetlands, and it should be understood that the NWI mapping depicts only a portion of the wetlands present in the Township.

Hydric soils contain high amounts of moisture, are very poorly drained, and are typically found within floodplain and wetland areas, and thus can serve as an indicator of possible wetland areas. Map 4-4 depicts the extent of hydric soils within Penn Township. They are located along many of the streams within the Township, and overlap with most of the NWI wetlands, although the hydric soils are more extensive than the NWI wetlands.

In addition to their potential to indicate the presence of wetlands, the characteristics of hydric soils create difficulties with site development and construction. Potential development problems associated with hydric soils include failed on-lot septic systems, flooded basements, poor foundation stability, disturbance of natural drainage and groundwater recharge areas, and the risk of surface and groundwater contamination. Hydric soils in Penn Township include Hatboro silt loam and Baile silt loams. Glenville silt loams often have hydric inclusions within their boundaries.

Threats to Biotic Diversity

As is the case in much of Chester County, woodlands and wetlands are being overrun by invasive species. Characteristics of invasive species include a rapid growth rate, adaptability, high reproduction rate, and a lack of control mechanisms in the local environment. Invasive species displace native vegetation, typically offer reduced food and cover benefits to native wildlife, result in a reduction of plant and wildlife diversity, and impede the ability of woodlands to regenerate. Within woodlands, riparian areas, meadows, hedgerows, and along roadways, species including the Norway Maple, Multiflora Rose, Autumn Olive, Oriental Bittersweet, Japanese Honeysuckle, Japanese Knotweed, and Mile-a-Minute Weed are overrunning the existing native species and becoming the dominant species in the area. Within wetlands, invasive species such as Common Reed, Purple Loosestrife, and Reed Canary Grass can dominant the landscape, impairing the wildlife and filtration functions of the wetland.

The white-tailed deer population in Penn Township is also a threat to biotic diversity. The population has exploded for several reasons related to human influence. Agriculture and suburbanization have provided the deer with excellent habitat in the



"Edge" habitat is ideal for invasive plant species and

form of “edge” conditions and browse areas. Natural deer predators have been eliminated by direct human action. The increased deer population threatens woodlands due primarily to the increase in browsing in forests for the young buds, seedlings, and shoots of native species. As a result, the forest is increasingly incapable of regenerating itself, and invasive species that thrive on disturbance and can grow quickly are provided an opportunity to expand their range. Increasing development in the area fragments the deer’s habitat, separating it with yards, roads, and agricultural operations, which increase the likelihood of human encounters with deer. These encounters are a public health and safety concern due to the risks of Lyme Disease and the potential of deer/vehicle collisions. The deer also impact the local agricultural operations, including the nurseries in the area, through crop browsing and the related time, money and effort spent by agricultural operations to minimize their economic loss.

Resource Protection Measures

Figure 4-5 provides a summary of the existing local natural resource protection measures in Penn Township. Understanding the level of protection that is currently afforded by the Zoning Ordinance and Subdivision and Land Development Ordinance is a key first step in understanding where improvements are needed to meet Penn Township’s goals and objectives related to natural resources.

Figure 4-5: Assessment of Existing Natural Resource Protection Measures

	SLDO*	Zoning Ordinance**
Water Resources		
Floodplains/Flood Hazard District	Y; § 405	Y; § 1402
Groundwater Protection District	N	N
Streams	N	L; § 1515
Wetlands	Y; § 414.14	L
Wetlands Margins	Y; § 414.14	N
Riparian Buffers	Y; § 414.10	N
Erosion Control	Y; § 414	L; § 1400
Stormwater Management	Y; § 414	N
Land Resources		
Steep Slopes	L; § 414.11	L; § 1401
Agricultural Soils	N	N
Biotic Resources		
Woodlands	N	L; § 700, § 1602.G
Timber Harvesting Plan/Tree Replacement Required	N	N
Tree Protection during Construction	N	L; § 700, § 1602.G
Specimen Vegetation/PNDI Sites	N	N
Administrative		
Plan Requirements for Natural Resources	L; § 300.2, § 410	N
Provisions for Continued Protection	N	L; § 700
Protection Standards Centrally Located	N	N
Definitions complete and consistent between ordinances	N	N

Y: significant regulations in place (may still require minor changes); L: limited regulations in place; N: no significant regulations in place.

*Adopted 2000, amended through April 2010; **Adopted 1968, amended through March 2012.

Source: Chester County Planning Commission

As evident in Figure 4-5, regulation of certain resources is lacking, and there is little consistency between the Subdivision and Land Development Ordinance and the Zoning Ordinance in regulating natural resources. In a few cases, an ordinance lists a resource and recommends protection, but without specific disturbance limits it is difficult to enforce these standards, or compliance varies from project to project.

Planning Implications

Watersheds

Planning and management of water resources is most effective at the watershed level. Consideration needs to be given to developing consistent and effective protection for streams, ponds, and their riparian areas throughout Penn Township.

Stream Designations

Both watersheds within Penn Township have important designations – Wild and Scenic status for White Clay Creek, and High Quality for Big Elk Creek. Additionally, new regulations that are evolving for the Chesapeake Bay will impact the Big Elk Creek watershed. Protecting the water quality of these streams, and improving the water quality in certain areas, should be a priority.

Floodplains

Floodplains and areas of alluvial soils should remain undeveloped to the greatest extent possible to minimize risk and preserve other functions these areas provide, including filtration and wildlife habitat. In addition, floodplains should be considered recreational resources for their value as potential locations for trails and greenways.

Geology

Given its susceptibility to contamination, special protection measures should be developed for areas underlain by the Cockeysville Marble formation.

Slopes

Limiting development of steep and very steep slopes is an important measure for preventing erosion of soils and sedimentation of streams. Consistent standards for limiting disturbance should be incorporated into Penn Township's ordinances.

Agricultural Soils

Measures to protect this valuable economic and natural resource should be implemented for those areas of Penn Township currently under cultivation and in keeping with the future land use vision of the Township.

Woodlands

Woodlands provide critical functions in a community, and they are currently very limited and fragmented within Penn Township. Maintaining this resource, and expanding and

connecting it where possible, should be a priority, both through regulatory and voluntary means.

PNDI

The Township should support preservation of the one PNDI site within its boundaries.

Wetlands

Though regulated at the State and Federal level, local requirements for identification and protection of wetlands can be an effective method to preserve the wetlands as well as a buffer for this valuable resource. Ensuring that wetlands, and a surrounding buffer zone, are protected will improve water quality throughout a watershed.

Biotic Diversity

Habitat loss and fragmentation impact biotic diversity, as do threats such as high deer populations and invasive species. Management of these issues will minimize impacts to biotic diversity.

Current Resource Protection Standards

To most effectively protect sensitive environmental resources across Penn Township, resource protection standards should include specific standards and disturbance limits, and be consistent in both the Subdivision and Land Development Ordinance and the Zoning Ordinance. The identification and protection of natural resources should be a primary determinant for the location of appropriate development in Penn Township.

Recommendations

The recommendations below focus on how best to protect natural resources in Penn Township and best implement the natural resources goal and objectives (as discussed in Chapter 2), based on the resources present in the Township and the regulations and other measures currently in place. The natural landscape is an integral component of scenic and rural character and an essential element in maintaining a healthy and safe environment for residents of the area. The goal regarding natural resources is to:

Protect, restore, and maintain natural resource features, landscapes, and functions to sustain ecosystems, public health, and quality of life.

Interrelationships between natural resources create both complexity and opportunity, and for those reasons it is critical to be mindful of the influence those interrelationships have in the landscape and of the multiple benefits that can be achieved by a single regulatory measure. In addition to the general recommendations discussed below, there are additional recommendations discussed in the context of the resource type most directly impacted by the recommendation. Because a combination of measures is the

best approach to effectively protecting natural resources, these recommendations should be viewed as an integrated protection program.

General

4-1 Direct growth to the most appropriate areas, as identified in the Future Land Use Plan and supported by the Act 537 Plan, Zoning Ordinance, Subdivision and Land Development Ordinance (SLDO), and review of natural and historic resource mapping.

The Future Land Use Plan sets the vision of land use within the Township, and other plans and ordinances should support this vision. It is critical that the zoning and subdivision and land development regulations of Penn Township require and encourage development to avoid and minimize impacts to natural and historic resources. This can be accomplished through requirements that these resources be mapped for all projects requiring a zoning permit or undergoing subdivision or land development review, which enables a thorough review of resources potentially impacted by projects. In terms of regulations, the Township should establish appropriate disturbance limits on an individual resource basis and ensure that those limits are adhered to during the permit, review, and construction process. Additional detail on the Future Land Use Plan is contained within Chapter 9. Details on disturbance limits are covered under the resource focused recommendations below.

4-2 Establish net-out provisions for natural resources.

To preserve valuable natural resources such as floodplains, wetlands, and steep slopes, consideration should be given to a broader implementation of “net-out” of these and other natural resources. A net-out provision is implemented through the Zoning Ordinance and excludes these resources (or a portion of them) from the parcel or tract area prior to the density calculation. In this manner, the disturbance of natural resources is potentially minimized by removing them from the density calculation (disturbance limits further protect resources and should be used in combination with net-out provisions; see the resource focused recommendations below for additional detail). Net-out provisions help ensure that the minimum lot area is useful land, which can be critically important in areas where on-lot water and on-lot septic systems are utilized.

Resources can be split into two categories – primary resources are typically netted out in their entirety (100 percent net-out for resources such as very steep slopes, floodplains, and wetlands), while secondary resources are netted out to some degree (perhaps a 50 percent net-out for resources such as moderately steep slopes, agricultural soils, and woodlands). As an example, if an applicant’s 100-acre property contained ten acres of very steep slopes, five acres of floodplain, six acres of woodlands, and ten acres of agricultural soils the density calculation would be based on 77 acres (100 percent net-out of very steep slopes and floodplain – 15 acres, and 50 percent net-out of woodlands and agricultural soils – eight acres).

4-3 Encourage natural resource protection at the individual level through public education regarding the value of natural resources.

Individuals, whether they are residents, own a business, work in Penn Township, or utilize services within the Township, can benefit from learning about the importance of protecting natural resources and what they can do on an individual basis to protect them. Information on such topics as the importance of protecting riparian buffers, woodland management, control of invasive plant species, or the potential damage to streams from the over-use of fertilizers and pesticides could be covered in the Township newsletter, published on the Township website, and made available at the municipal building. Contacts where residents can get additional information on various subjects from state, county, and federal agencies could also be made available.

Water Resources

4-4 Monitor the Pennsylvania Watershed Improvement Plan (WIP), Total Maximum Daily Load (TMDL) requirements, and related issues for Chesapeake Bay tributaries to ensure compliance in the Big Elk Creek watershed.

The Environmental Protection Agency (EPA) approved the Watershed Implementation Plan (WIP) for the Chesapeake Bay watershed in Pennsylvania in late 2010. The WIP focuses on stricter enforcement of existing regulations, including Concentrated Animal Feeding Operations (CAFOs) under the National Pollutant Discharge Elimination System (NPDES) program, the Nutrient Management Act (Act 38), and the Clean Streams Law (Chapter 102). The EPA will be monitoring compliance with the WIP and sediment and nutrient pollution levels, and will perform a full review every two years. If progress is not satisfactory, other measures will be implemented. TMDL limits were approved for the Chesapeake Bay basin watersheds in late 2010. Penn Township should remain informed of regulatory actions that impact the Big Elk Creek watershed, and work to ensure compliance; see below for specific measures. Proactive measures to protect and improve water quality through activities such as protection and restoration of riparian buffers are very effective; improvements mandated after TMDL limits are exceeded could prove far more difficult to implement and costly in the long term. Additional detail on TMDLs is available at the Chester County Water Resources Authority website, www.chesco.org/water.

4-5 Monitor TMDL requirements within the White Clay Creek watershed to ensure compliance, and coordinate with other organizations to identify opportunities to improve water quality and wildlife habitat within the watershed.

TMDL limits have been in place within the Christina River Basin, of which the White Clay Creek is a tributary, for several years. Penn Township should work to improve water quality within the watershed; see below for specific measures.

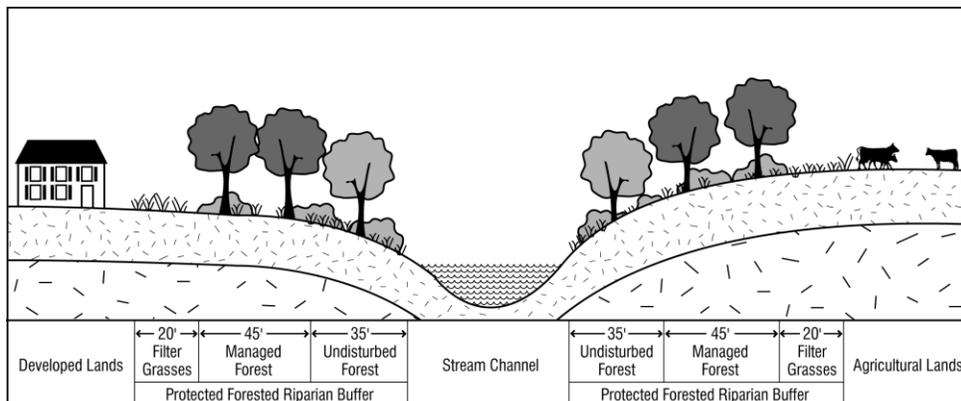
4-6 Work to improve surface water quality through regulatory controls as well as partnerships with other municipalities and organizations.

Many municipalities and organizations have a vested interest in the health of waterways within the Big Elk Creek and White Clay Creek watersheds. Regarding the White Clay Creek, the White Clay Creek Watershed Management Committee, White Clay Creek Watershed Association, and Christina Clean Water Partnership are active organizations. The Chesapeake Bay Foundation is a resource for the entire Bay watershed. Penn Township should coordinate with these groups to become aware of potential opportunities to partner on restoration projects and identify critical issues.

4-7 Create consistent regulations in the Zoning Ordinance and SLDO to protect riparian areas through establishment and regulation of riparian buffers.

The use of riparian buffers is one of the most effective techniques for the protection of surface waterways and groundwater from the impacts of human activities such as farming, grazing, lumbering, fertilizing, and development. Riparian buffer standards are currently within the stormwater management portion of the SLDO. The existing regulations include the division of the riparian buffer zone into three zones, with varying degrees of protection. These regulations should be updated, and moved into their own section within the SLDO. Definitions should be made consistent between the SLDO and Zoning Ordinance in regard to riparian buffers and the different zones, and the Township should determine an appropriate level of riparian buffer protection within the Zoning Ordinance. In updating these regulations, the Township should consider extending Zone 1 (the zone immediately adjacent to the stream) to 35 feet in all cases, as recommended in the Chester County Water Resources Plan, *Watersheds: An Integrated Water Resources Plan for Chester County, Pennsylvania and its Watersheds*. Consideration could also be given to simplifying the regulatory structure by identifying only two zones, an inner zone of 35 feet, and an outer zone that extends 100 feet from the top of the streambank. Additionally, in cases where the riparian area is degraded within the buffer zone, the Township should require planting to establish a forested riparian buffer.

Figure 4-6: Riparian Buffer



Source: Chester County Water Resources Authority

- 4-8 Update floodplain regulations within both the Zoning Ordinance and the SLDO, and make them consistent between the two documents in order to protect regulated floodplains from encroachment, ensure safe conveyance of 100 year flood waters, and minimize public risk and costs associated with flooding.**

While the existing language provides substantial regulation of the floodplain, the Pennsylvania Department of Community and Economic Development (DCED) has a newer model ordinance that includes a variety of minor updates to provide additional protection of this resource. Penn Township should review their existing language against the model ordinance and update their existing regulations accordingly.

- 4-9 Establish a groundwater protection zone and protective measures within that zone that protect recharge areas, quantity, and quality of groundwater to sustain stream baseflows, wetlands, and water supply.**

This zone should be established in areas where residents rely on private, on-lot wells to provide their drinking water (which is primarily north of Route 1, but also throughout areas zoned R-2), and particularly in areas underlain by Cockeysville Marble due to its potential to develop solution channels and sinkholes. Protective measures could include more restriction limits on impervious coverage, encouragement of stormwater management Best Management Practices that result in greater filtration, and other techniques to limit potential contamination and encourage filtration. Consideration of the nursery operations in the Township, and their heavy draws on groundwater, should also be taken when establishing a groundwater protection zone and protective measures.

Land Resources

- 4-10 Ensure erosion and sedimentation regulations are up to date and encourage best management practices.**

Erosion and sedimentation controls are included within the stormwater management updates that the Township enacted in 2008 within the SLDO. These provisions, and any others within the SLDO or Zoning Ordinance, should be reviewed to ensure that they provide appropriate erosion and sedimentation controls for land-disturbing activities. Stormwater management is also discussed as part of Community Facilities and Services, Chapter 7. The Chester County Conservation District (CCCD) provides a review service for any project that disturbs one or more acres of land during the life of the subdivision or land development. To further protect against soil erosion and sedimentation, municipalities can enter into a memorandum of understanding with the Conservation District that enables them to review erosion and sedimentation controls proposed on smaller development sites. The Conservation District can also review municipal erosion and sedimentation standards to ensure they are comprehensive and effective.

4-11 Update slope protection regulations to be consistent and regulate activities on all slopes 15 percent or greater.

Penn Township’s existing regulations regarding slopes are inconsistent between the Zoning Ordinance and SLDO. The SLDO language is more restrictive, with the regulations applying to all slopes greater than 15 percent, and with different restrictions between Precautionary Slopes (greater than 15 percent and less than or equal to 25 percent) and Prohibitive Slopes (greater than 25 percent). The Zoning Ordinance provides minimal restrictions to slopes greater than 25 percent. Establishing a steep slope overlay district within the Zoning Ordinance that regulates uses on all slopes 15 percent and greater, setting specific disturbance limits, and making the regulations consistent with those within the SLDO, would provide improved protection for steep slopes, as well as streams, given that the location of the slopes is commonly within stream valleys. It is common for regulations to split slope regulation into two categories, 15 – 25 percent, and greater than 25 percent. In cases where use is permitted on regulated slopes, performance restrictions or slope stabilization practices should be required to minimize erosion and sedimentation during and after construction activities.

4-12 Investigate options to protect agricultural soils, such as net-out provisions and related options such as support of agricultural easements, encouragement of Secondary/Accessory Agricultural Businesses, encouraging enrollment in Agricultural Security Areas and the Clean and Green programs (Act 43 and Act 319), and encouraging the activities of land preservation non-profit organizations.

There are multiple tools available to aid in the preservation of agriculture. Some focus on retaining the agricultural soils that are most valuable, others focus on maintaining agriculture as open space, and some focus on retaining agriculture as a viable economic industry within a region. Regarding agricultural soils specifically, utilizing a net-out provision at some percentage of the existing resource in calculating permitted density should be investigated to preserve this resource, as well as SLDO language that encourages development layouts that are sensitive to active agricultural operations and agricultural soils. Another regulatory measure to support agriculture is zoning language that permits and encourages Secondary and Accessory Agricultural Businesses.

A non-regulatory option for protecting agriculture is supporting agricultural easements, whether through a state or county program or a non-profit organization. Funding for easements is limited, and the support of the local government can be critical to a farm within its bounds being eased. Another non-regulatory option is encouraging enrollment in Agricultural Security Areas and the Clean and Green Programs.

Biotic Resources

To maintain diversity within the biotic community, it is necessary to provide connected high quality habitats that are large enough to sustain a variety of wildlife and plant species. Implementing the previous recommendations regarding streams, riparian buffers, floodplains, and steep slopes will help protect biotic resources. Those

recommendations, combined with those specific to biotic resources (noted below) can protect the existing biotic resources, and with time, strengthen those resources.

4-13 Encourage the use of native plant species through Township ordinances and public education and outreach.

Invasive plant species currently pose a serious threat to the long-term health and quality of woodland and wetland ecosystems. Penn Township should include an updated native plant species list in the Zoning Ordinance and SLDO, and prohibit the planting of invasive species while encouraging the use of native species. Additionally, providing residents with information on the benefits of using native plants through existing outreach methods will promote their use in private landscaping applications. The Pennsylvania Natural Heritage Program has a wealth of information available regarding native and invasive species in support of its mission to conserve biological diversity (<http://www.naturalheritage.state.pa.us/>). Land preservation organizations that work in southeastern Pennsylvania also have information and services available related to sustainable land stewardship.

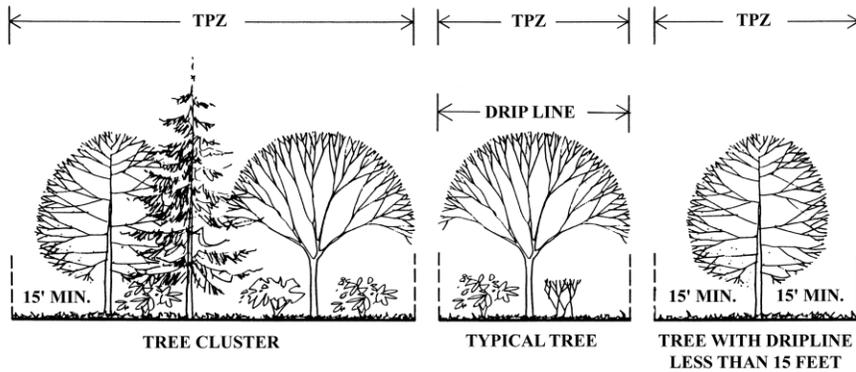
4-14 Encourage the protection and linking of significant undeveloped areas to preserve biotic resources.

Protecting and linking habitat to preserve biotic resources is best accomplished through a combination of methods. Potential options include natural resource net-out provisions, review of subdivision and land development projects to avoid and minimize impacts to primary and secondary natural resources, mandatory park dedication or fee-in-lieu of, and encouraging private land conservation programs. This topic is also discussed in the Parks, Recreation, and Open Space Chapter.

4-15 Revise ordinances to include specific disturbance limitations for woodlands, hedgerows, and other vegetation that prescribe the maximum area that can be disturbed and establish tree replacement requirements where the disturbance is unavoidable.

Existing regulations in Penn Township are limited and require a full update to adequately protect trees and woodlands. Existing woodlands should be identified early in the subdivision and land development process, and the Township should establish a maximum area that can be disturbed and tree replacement requirements where disturbance is unavoidable or extensive. Woodlands could be identified as a secondary natural resource, with a percentage of the existing resource netted-out prior to density calculations. The Township should require a Timber Harvesting Plan to protect the existing woodlands of Penn Township. Tree protection during construction should be comprehensively covered within Township regulations, to prevent encroachment during construction activities. Adequate tree protection zones are depicted in Figure 4-7.

Figure 4-7: Tree Protection Zone



Source: Chester County Planning Commission

4-16 Encourage tree planting to increase the tree coverage throughout the Township.

In addition to regulatory controls, the Township should encourage tree planting, particularly within riparian areas, hedgerows, recreation areas, business parks, parking lots, and residential settings, both to improve wildlife habitat and provide the aesthetic benefits of trees and woodlands – a natural buffer and scenic beauty. By partnering with area businesses, institutions, and organizations, and utilizing existing public outreach methods, the Township can encourage individual residents and members of the business community to plant trees for their many benefits.

4-17 Maintain an awareness of unique habitats, migration corridors, and plant and animal species that are designated as rare, threatened and endangered (by Federal or state agencies) and encourage the protection, restoration, or establishment of viable habitat for these species.

Penn Township currently has one PNDI site within its boundaries. Maintaining an awareness of this site, and the requirements of the species present, enables the Township to provide as much protection as possible within the limits of existing regulations. More generally, protecting areas such as riparian buffers, floodplains, woodlands, and wetlands, provides a minimal level of protection for all species found within the Township.

4-18 Investigate options for management of the deer population within Penn Township.

Neighboring municipalities also face this issue, and some have formed deer management committees to investigate options and advise the municipality. Kennett Township is one example. Hunting has traditionally been the primary method for controlling deer population numbers. The Pennsylvania Game Commission considers southeastern Pennsylvania a “Special Regulation Area” and increased deer permits are available. This program does not appear to have had a significant impact on the deer population however, which can partially attributed to limited areas available for hunting.

The following options are available to the Township and residents for deer management:

Habitat Modification

Penn State Cooperative Extension has a useful publication entitled “Deer Proofing Your Garden”, which is available at the Chester County office. Options discussed in the brochure include fencing, repellents, and use of deer resistant plants. A list of plants rarely damaged by deer, as well as frequently damaged plants, is included. Another publication available through Cooperative Extension is “Landowner’s Guide to Wildlife Control and Prevention Laws in Pennsylvania”, which includes additional deer control methods, but also covers a range of other nuisance wildlife. This publication also describes the laws and regulations pertaining to landowner control of wildlife damage. Both publications could be made available at the Township office and promoted by the Township newsletter and website.

Hunting Arrangements

An option for large landowners, including homeowners associations, is to work with groups of hunters to allow them access to their property. This method has worked successfully in Pennsbury and Birmingham townships to help control deer populations. The landowners can set rules in addition to state game laws, such as more restrictive hours or methods of hunting. Any hunter within the Township should be fully aware of hunting regulations and safety zones in residential areas. State game laws can be accessed at the Game Commission website at www.pgc.state.pa.us.

Under very specific circumstances, such as the destruction of crops, a landowner may be able to take specific actions to remove wildlife that is causing property damage. Property owners should always contact the regional Game Commission office before taking any action to control nuisance wildlife so they fully understand what is permitted in regard to the capture, removal or harassment of wildlife. Any wildlife taken to protect property must be done in a humane and lawful manner. Laws pertaining to control of nuisance wildlife are covered in Title 58 Section 141.3 of the Pennsylvania Code.

The initiatives noted above could be promoted by the Township newsletter and website.

In a municipality with a serious deer overpopulation problem, one management option is the issuance of a “deer control permit.” These permits are obtained only through application by the municipality to the Game Commission. A deer management plan must be submitted providing deer density estimates and the number of animals to be removed. It should be noted that it may take up to one to two years from the time of application until the permit is issued.

Other programs may be available through the Game Commission, and coordination should be undertaken with the regional office should the Township wish to aggressively pursue reduction of the deer population.

4-19 Update the Wetland Protection Zone regulations in the SLDO and make the measures consistent in the Zoning Ordinance to protect and manage wetlands for their hydrologic and ecologic functions.

The existing language in the SLDO is an excellent starting point and includes protection of wetland margins, but to consistently protect wetlands, the regulations should be within their own section in the SLDO (not under the stormwater management regulations), and include protection of alluvial soils. Regarding wetland margins, development within these areas should be prohibited rather than strongly discouraged, or a maximum disturbance limit should be established.

Links

White Clay Creek Wild and Scenic Management Committee

www.whiteclay.org/

White Clay Creek Watershed Association

<http://home.ccil.org/~wcwa/>

Christina Basin Clean Water Partnership

www.wra.udel.edu/publicservice/regionalwatershedmanagement/christinabasinpartnership

Chesapeake Bay Foundation

www.cbf.org/

Watersheds

<http://dsf.chesco.org/water/cwp/view.asp?a=3&q=610690>

Chester County Water Resources Authority

www.chesco.org/water

Chester County Conservation District

www.chesco.org/conservation

Pennsylvania Natural Heritage Program

www.naturalheritage.state.pa.us

Pennsylvania Game Commission

www.pgc.state.pa.us

HISTORIC AND SCENIC RESOURCES INVENTORY AND PLAN

Introduction

Historic and scenic resources help define an area's character and sense of place, and contribute to the experiences of residents and visitors. Historic resources provide a reminder of original settlement patterns – such as land uses and railroads – that helped create the landscape of today. Historic and scenic resources in Penn Township can be found in the villages of Jennersville, Kelton, and Elkview, as well as in the surrounding agricultural, rural, and natural landscapes.

Historic preservation is an important element in the planning process because it protects and retains historic resources and provides an understanding of a community's past. A plan for historic resource protection is required under Act 68 of 2000 amending PA Act 247, the Pennsylvania Municipalities Planning Code (MPC).

Scenic preservation is not mandated, but is a worthy goal given the value of scenic resources to a community's sense of place. Scenic resources can be found in diverse forms such as scenic vistas or corridors.

This chapter includes:

- Inventory
 - Historic Resources
 - Historic Overview
 - What is a Historic Resource?
 - Township Historic Resources
 - Local Historic Preservation Activities
 - Federal, State, and County Policy and Programs
 - Scenic Resources
 - Types of Scenic Resources
 - Existing Scenic Resources
 - Scenic Intrusions
- Resource Protection Measures
- Planning Implications
- Recommendations
 - Historic Resources
 - Scenic Resources



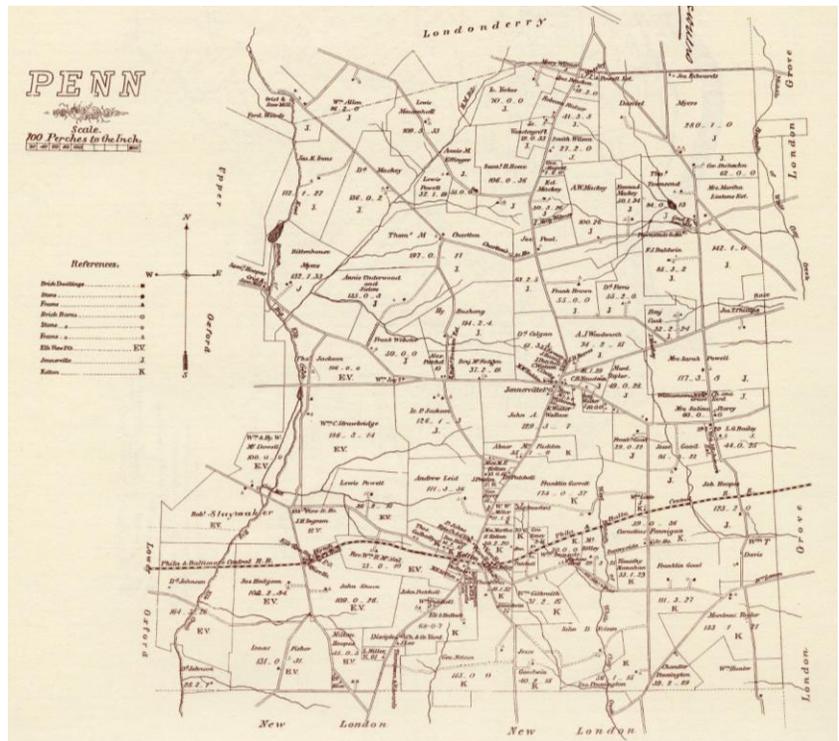
Inventory

Historic Resources

Historic Overview

The earliest inhabitants of Penn Township, as with the rest of Chester County, were known collectively as the Lenni-Lenape Indians.¹ Although no substantial Indian settlements are believed to have been located in the Township, it is believed that Route 796 was originally an Indian trail, and artifacts such as arrowheads and tomahawks have been found in the Township that testify to the presence of the Lenni-Lenape. Formal European settlement was initiated when Penn Township was included within a land grant from King Charles II to William Penn in 1681. Scotch-Irish immigrants started to settle in the vicinity of Penn Township about 1718, with a second wave of immigrants arriving about 1772. The Lenni-Lenape moved permanently from the area with the outbreak of the French and Indian War in 1753. Penn Township was formally established in 1817; prior to that time, the area was within Londonderry Township.

Transportation routes shape development in every landscape, and Penn Township is no exception. The original alignment of Route 1 was paved by 1920 and designated as part of US 1, the original north-south artery that extends from Maine to Florida. After the opening of the Route 1 Bypass in 1969 and 1970, the original alignment was re-named Baltimore Pike. Routes 796 and 896 are also important to the history of the Township, with the oldest (1908) section of paved road being Route 796 between Jennersville and Kelton. Jennersville, Kelton, and Elkview grew up along these roadways, and in the case of Kelton and Elkview, along the rail line. The Philadelphia and Baltimore Central Railroad Company was incorporated in 1853 and began construction on a line that would extend from Philadelphia to Port Deposit. The entire length of the line was completed



Penn Township as depicted in the 1883 Breous Farm Atlas. The general development pattern of the area is already established.

¹ The historic overview description is credited to, and more information is available from: *Penn Township – 1817 to 1982*, Jean Steele and Louise Hutton (1982) and *Penn Township A Pictorial History 1681 – 2002*, James Boyd (2003).

by 1869, and transported passengers and freight, providing an important link to the broader region. Passenger service was discontinued in 1948, but freight service has continued.

The villages of Jennersville, Kelton and Elkview include some of the oldest structures in the Township, but others are found scattered across the Township, and are remnants of early farms. Within villages, structures often house a mix of uses over time. In Jennersville, the original portion of the Red Rose Inn was constructed prior to 1740, although it is unclear when the structure became a tavern. A significant addition was constructed in 1829. The property has housed a variety of uses. The Stively store and post office is another significant structure in Jennersville, home now to a real estate business, but formerly housing a general store. Development in Elkview and Kelton reflected the presence of the rail line, with train stations and related businesses, such as warehouses and a creamery, in addition to residential structures and the outlying farms.

Agriculture has historically been the economic base of Penn Township. Dairy farms have largely left the area, but nurseries remain. The Conard-Pyle Company, which has a significant nursery operation in the Township, can trace its history in the area back to the 1850s. In addition, there are several other nursery operations in the Township, earning it the nickname of Nursery Capital of Pennsylvania. Construction of the Jennersville Regional Hospital in 1959 provided a new focus for the Township's development, and today there are multiple medical and dental offices in the Township. Much of the development in the Township has been focused around Jennersville and more broadly the area south of Route 1. A combination of residential and commercial development has dramatically changed the landscape south of Route 1, while the landscape north of Route has been less significantly changed.



The rail line spurred development around Kelton and Elkview.

What is a Historic Resource?

Historic resources are defined in various ways by different agencies and organizations that are charged with, or have an interest in, the preservation of these resources. Broadly speaking, historic resources are buildings, sites, districts, objects, or structures evaluated as historically significant. At the federal level, it is the National Register of Historic Places that is the official inventory of historic resources that should be preserved. The National Register was authorized under the National Historic Preservation Act (NHPA) of 1966 and is administered by the National Park Service. Additional information on the NHPA and National Register is provided in the *Federal, State, County Policy and Programs* section, below. The National Register includes buildings, sites, structures, objects, and districts that are significant in American history, architecture, archeology, engineering, and culture. The National Park Service generally defines historic resource categories as follows:

- **Building:** A house, barn, church, hotel, or similar construction created principally to shelter form of human activity.
- **Site:** The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined or vanished, where the location itself possess historic, cultural or archaeological value.
- **Structure:** A building used for purposes other than sheltering human activity.
- **Object:** A form of simple construction that is primarily artistic in nature and relatively small in scale. It may be movable, but is generally associated with a specific setting or environment.

- *District*: A significant concentration, linkage, or continuity of site, buildings, structures, or objects united historically or aesthetically by plan or physical development.

A comprehensive historic preservation program begins with the identification and evaluation of historic resources, so that the nature and types of resources to be protected is understood. Once historic resources have been systematically identified through a survey, implementation strategies can be undertaken to protect these resources. It is important to remember that historic resources change over time and, depending on the type and degree of the change, it should be respected as part of the natural evolution of that resource.

Township Historic Resources

Multiple efforts have been undertaken to identify historic resources and help preserve the local heritage and character of Penn Township. The Chester County Historic Sites Survey (1979-82) identified 91 historic sites in Penn Township. The County Survey is considered a “preliminary” or “reconnaissance” survey, focusing on a listing of sites, primarily residential, and providing general information such as location and owner. Sites documented in the County Survey are on file at the Chester County Historical Society, as well as stored with the Township and Chester County Heritage Preservation Coordinator. A Township committee in 1988 identified a few additional sites, as well as the loss of at least one site that had been included in the County Survey. The *Penn Township Open Space, Recreation, and Environmental Resources Plan* (1993) mapped 93 resources. Of those 93 historic resources, more than one third were classified as agricultural complexes. Ten particularly well preserved complexes were identified as being representative of the Township’s agricultural history; of those ten, seven remain largely unchanged as of March 2011. Most of the remaining resources identified in the 1993 plan are dwellings, several of which are architecturally noteworthy for their age, log construction, design, or high state of preservation, dwellings originally built as one-room schools, and old churches; St. John’s being of particular significance for its Gothic Revival architecture.

At this time, the state database of historic resources website identifies two resources within the Township that have previously been determined eligible for listing on the NRHP; however this information is dated. One of those resources has been lost completely to development (all structures on the Hodgson Farm/Earl Hatton Property in Elkview were demolished for Elk Creek Estate) and the other changed significantly (Charlton/Lewis Farm barn and outbuildings along Ewing Road were demolished for new development, while the farmhouse remains).

Efforts to determine the potential eligibility of Jennersville as a historic district (a recommendation of the 1993 *Open Space, Recreation, and Environmental Resources Plan*) through coordination with the Pennsylvania Historical and Museum Commission (PHMC) ended with a determination by PHMC that the area did not rise to the level of eligibility for the National Register. PHMC is the organization charged with National Register eligibility determinations, as the State Historic Preservation Office. Additional information on PHMC is provided below, as part of the *Federal, State, and County Policy and Programs* section. Despite this determination, it remains that there are significant historic resources within the Township that the local community would like to preserve, and tools exist to assist the Township in that endeavor.



Historic farmsteads are an important part of understanding the history of Penn Township.

In 2011, Penn Township initiated a Historic Resource Atlas. The ***Chester County Historic Resource Atlas Project*** is an effort between the Chester County Heritage Preservation Coordinator and GIS Department in partnership with the Chester County Historic Preservation Network and municipalities. The *Atlas* identifies and inventories historic resources 50 years or older for planning purposes, and is being completed on a municipality-by-municipality basis. As of summer 2012, 35 municipalities in the County had completed their Historic Resource Atlases and others were underway. Draft mapping, based on prior historic inventory efforts and developed as part of a Historic Resource Atlas, was developed for Penn Township and provided to the Historical Commission to review in 2012. This mapping is the basis for Map 5-1: Historic Resources (Appendix A) and depicts 69 properties that the task force determined were locally significant historic resources.

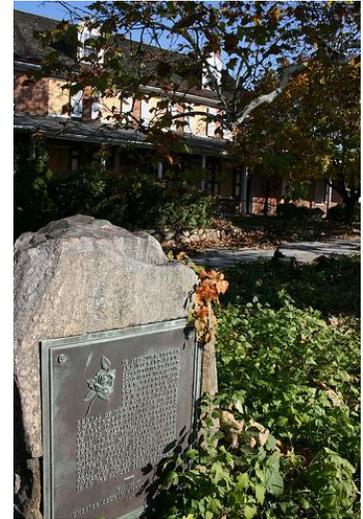
Local Historic Preservation Activities

Historic preservation activities in Penn Township have been driven by the Penn Township Historical Commission, as well as individual efforts. Formally established through a 2006 amendment to the Zoning Ordinance, the Historical Commission was charged with a variety of duties, including identifying historic sites, advising the Board of Supervisors, creating awareness of Township history, studying the feasibility of creating historic districts, and researching and nominating historic structures and sites for the National Register. They are also charged with duties related to the permit process for relocation or demolition of historic resources.

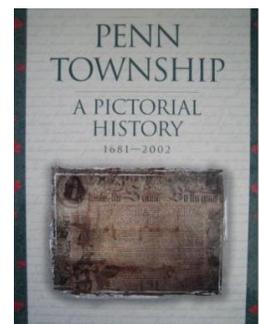
The Historical Commission was instrumental in preparing the materials for consideration by PHMC of Jennersville as a historic district, an effort that ended in PHMC's determination that the area was not significant enough to warrant listing on the National Register as a district. The Historical Commission was successful in gaining certification as a Chester County Historic Resource in 2008 for Jennersville, as a significant crossroads village. Following up on the effort to better recognize and protect historic resources in the Jennersville area, as well as the desire to improve public safety and community facilities, the Township acquired the Red Rose Inn in 2011. Potential plans for the site include restoration of the Inn to provide community meeting space.

In addition to the Township-led efforts, individuals have long played a role in preserving the history and historic resources of the Township. Jean Steele and Louise Hutton co-authored *Penn Township – 1817 to 1982*, preserving and publicizing many important events in the Township's history. James Boyd added to this local historical narrative with *Penn Township A Pictorial History 1681 – 2002*, which was published by the author and Penn Township in 2003. Various individuals have worked to preserve the Red Rose Inn, long seen as a focal point for the village of Jennersville and the Township overall. *Around Avondale and West Grove*, authored by Dolores Rowe and part of a postcard history series, was published in 2006 and includes images from Jennersville and Penn Township.

Historic preservation requires both public and private sector efforts and activities. There is an interdependent relationship between the public and private sectors: when the *public* sector is successful, it creates supportive policy and regulation, develops necessary infrastructure, supports economic activities, and creates a desirable quality of life; when the *private* sector is successful it creates a strong economic base, keeps property values high, and generates tax revenue.



The Red Rose Inn has been a focal point in Jennersville dating back to the 1700s.



Local efforts to the preserve the history of the Township include this pictorial history published in 2003.

Federal, State, and County Policy and Programs

There are a variety of federal, state, and county programs and policies that are relevant to historic resources and historic preservation. While the discussion below is not a comprehensive listing of these programs and policies, it does cover those most relevant to Penn Township.

Federal Policy and Programs

The **National Historic Preservation Act of 1966 (NHPA)** earmarked the beginning of a broad scale federal historic preservation policy and created a strong legal basis for the protection of historic resources through a framework of measures to be used at the federal, state, and local levels. The NHPA was a response to public outcry against the severe loss of historic resources, and was to create a comprehensive framework for protecting historic resources throughout the nation through a system of reviews, regulations, and incentives. The NHPA encouraged cooperation among federal, state, and local governments as well as individual agencies to address the protection of historic resources. Key NHPA programs and mandates include:

- Formalized the National Register of Historic Places.
- Requires any project that receives federal funds, sponsorship, or assistance review its impact on historic properties (Section 106 review).
- Authorized State Historic Preservation Offices (SHPO) to facilitate cooperation among governmental levels by coordinating preservation activities and administering preservation activities contained in the NHPA on a state level. In Pennsylvania, this agency is PHMC.
- Authorized the Certified Local Government (CLG) Program, which enables municipalities to participate directly in federal preservation programs and to access (through the state) certain funds slated for historic preservation activities.



The **National Register of Historic Places** is the official, comprehensive listing of districts, sites, buildings, structures, and objects of historical, architectural/engineering, or cultural significance to the prehistory and history of the locality, state, or nation that are deemed worthy of preservation. The list is maintained by the National Park Service under the US Department of the Interior. In Pennsylvania the National Register program is managed by PHMC (specifically its Bureau for Historic Preservation).

Sites on the National Register are termed 'National Register listed' sites. Through a preliminary review process, sites also may be determined to be eligible for listing, referred to as 'National Register eligible' sites or as having received a 'Determination of Eligibility' (DOE). In the case of a National Register Historic District, proposed District boundaries are delineated to include areas and properties determined to be significant; these properties are 'contributing' to the district. Within those boundaries may also be properties which are not considered significant to the district, and these properties are considered 'non-contributing'.

A National Register listing on its own does not affect the rights of property owners nor place obligations or restrictions on the use or disposition of property. Local governments can choose to locally regulate historic resources, and include National Register properties within their definition of historic resources. A National Register listing, or determination of eligibility, does impact the use of federal funds or assistance however, in that federal or federally assisted projects need to be reviewed for their

potential impact on National Register listed or eligible sites as described below under Section 106 Process.

To determine significance, there is a set of established criteria against which a property will be reviewed to determine whether it could be on the National Register. Criteria for Evaluation are:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- that are associated with events, activities, or patterns that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- that has yielded, or may be likely to yield, information important in prehistory or history.

National Register listed and eligible properties are included on a listing that is updated frequently and can be found on PHMC's website. As previously noted, the list indicates that Penn Township contains two National Register eligible sites, however one has been demolished and the other dramatically changed by development.

The **Section 106 process** was one of the most effective components of the NHPA in reducing the loss of historic resources. This section of the NHPA requires that any federally sponsored, funded or assisted project, including those requiring a federal permit, license, or approval, is reviewed for its impact on historic resources either listed on, or determined eligible for, the National Register. The federal agency directly or indirectly responsible for the project is responsible for insuring compliance with the review process. Section 106 does not necessarily protect historic resources from demolition or alteration, however, it requires an investigation of alternatives and consideration of mitigation measures for projects that are federally sponsored, funded, or assisted. For example, all PennDOT projects must ensure that a Section 106 review is conducted to determine a project's potential impact on historic resources prior to construction.

The **Certified Local Government (CLG) Program**, enabled under the NHPA, was established to facilitate greater participation in historic preservation at the local level. It strives to encourage local, state, and federal partnerships to protect historic resources and address historic preservation issues. A CLG is one that meets certain criteria including:

- The adoption and enforcement of historic preservation regulations,
- Establishment of an historical commission or similar body, and
- Engaging in the survey of historic properties.

One of the most important incentives of the CLG program is increased access to federal preservation funds. Ten percent of each state's allocation of historic preservation funds

(as authorized by the NHPA) must be allocated to the CLGs. In Pennsylvania, funds are administered by PHMC. As of March 2010, Penn Township was not a CLG.

The availability of ***federal income tax credits for historic preservation*** – specifically the rehabilitation of income producing historic resources - has proven to be a very effective means of encouraging their voluntary preservation. Investment tax credits first became available for historic preservation in 1976, and for the next 10 years, they served as a major incentive as billions of dollars were expended in the rehabilitation of historic properties. Although the program was scaled back in 1986, investment tax credits remain available and may result in substantial savings in rehabilitation costs, often making rehabilitation more financially feasible than new construction.

Section 47 of the Internal Revenue Code, promulgated after the Tax Reform Act of 1986, provides a rehabilitation tax credit of 20 percent for the rehabilitation of certified historic structures (for commercial, industrial, agricultural, or rental residential purposes, but not for structures used exclusively as an owner's private residence) or a rehabilitation tax credit of 10 percent for the rehabilitation of a non-historic buildings placed in service before 1936 (applies only to buildings rehabilitated for *non-residential* uses). A 'certified historic structure' is one that is either individually listed on the National Register or is certified as "contributing" to a National Register Historic District.

For historic preservation purposes, a preservation easement is a legal agreement designed to protect a significant historic, archaeological, or cultural resource, or a portion thereof. Under an easement, a property owner grants a portion of the property rights to a qualified organization. Many times easements are specifically for the preservation of a historic building's façade – called a façade easement - whereby the focus is to ensure that the historic building's façade will be maintained, protected, and preserved in perpetuity. There are potential financial benefits for a property owner from the charitable donation of a facade easement to a tax-exempt organization. The donation of a façade easement must be made for conservation purposes, such as the protection of a National Register listed historic structure, and must be made in perpetuity. Unlike the rehabilitation tax credit, an easement donation can be for a structure used for either business or non-business use.

State Policy and Programs

The ***Pennsylvania History Code, Title 37*** of the Pennsylvania Consolidated Statutes reiterates many of the federal mandates required through NHPA. The code pertains to the conservation, preservation, protection, and management of historical and museum resources and identifies PHMC as the responsible agency. It outlines Pennsylvania's legal framework for historic preservation and also mandates cooperation among other state entities in identifying and protecting historic and archeological resources. Additional state legislation addresses preservation, supplementing the provisions of the History Code.

The ***Pennsylvania Historical and Museum Commission (PHMC)*** is responsible for maintaining and administering the state's sites and museums, making determinations of eligibility for the National Register, managing the State Archives, and administering a wide variety of historic preservation programs as the State Historic Preservation Office (SHPO). PHMC also provides education and outreach about historic preservation and assists municipalities, preservation organizations, and other preservation groups in preservation topics and issues.

Building Better Communities: The Preservation of Place in Pennsylvania - Pennsylvania's Statewide Historic Preservation Plan 2012 - 2017 is the most recent update to Pennsylvania's historic preservation plan, first developed in 1999 by PHMC and its partners. The five main goals of the plan are as follows:

- *Goal 1:* Increase preservation planning at the local level.
- *Goal 2:* Expand and strengthen state and federal partnerships.
- *Goal 3:* Bolster the efforts of preservation advocates and partners.
- *Goal 4:* Identify, recruit and engage new audiences.
- *Goal 5:* Administer an effective and proactive statewide historic preservation plan.

Act 167, Historic District Act of 1961, authorizes municipalities to create local historic districts and protect historic and architectural character through regulating the erection, reconstruction, alteration, restoration, demolition, or razing of buildings within those historic districts, once they are formally certified through PHMC. Act 167 also requires the appointment of an historic architectural review board (HARB) to advise the local governing body on the appropriateness of building activity in the district. As of March 2011, there are no Act 167 Certified Historic Districts in Penn Township.

Act 247, the Pennsylvania Municipalities Planning Code (MPC) authorizes the use of municipal land use controls such as use regulations and area and bulk requirements to protect historic resources. MPC enabled regulations primarily focus on land use-oriented provisions, in contrast to the Act 167 regulations that focus on architectural character. The MPC regulates places having unique historical, architectural, or patriotic interest or value through the creation of a specific zoning classification. In Chester County, the MPC has been often applied to protect historic resources through adoption of municipal-wide historic overlay zoning. Relevant portions of the MPC are as follows:

Article I of the MPC establishes General Provisions for the Act:

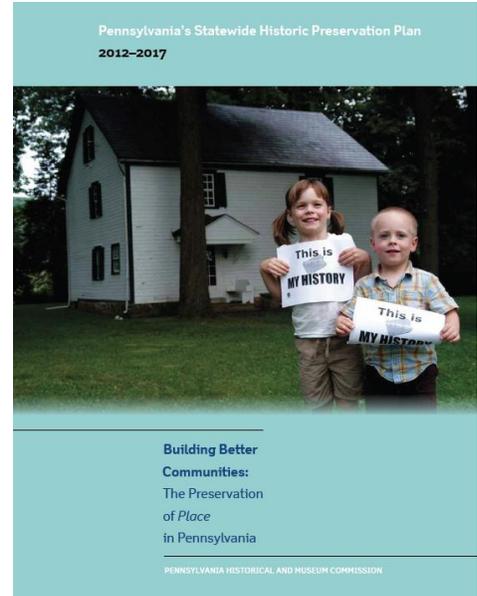
Section 105, Purpose of Act - "It is the intent, purpose and scope of this act to protect and promote safety, health and morals; ...to promote the preservation of this Commonwealth's natural and historic resources and prime agricultural land;to encourage the preservation of prime agricultural land and natural and historic resources through easements, transfer of development rights and rezoning;..."

Section 107, Definitions - "Preservation or protection," when used in connection with natural and historic resources, shall include means to conserve and safeguard these resources from wasteful or destructive use,..."

Section 107, Definitions - "Public grounds," includes: ..."(3) publicly owned or operated scenic and historic sites."

Article III of the MPC establishes the basis for comprehensive planning:

Section 301(a)(6) - "The municipal, multi-municipal or county comprehensive plan...shall include...a plan for the protection of natural and historic resources...This clause includes.... historic sites."



The latest Statewide Historic Preservation Plan focuses on local efforts and partnerships.

Article VI of the MPC establishes the basis for zoning ordinances and provides for the protection of historic resources through zoning as follows:

Section 603(a) – “Zoning ordinances should reflect the policy goals of the statement of community development objectives [which should generally reflect municipal policy goals of the comprehensive plan, as feasible] and give consideration to the character of the municipality, the needs of the citizens, and the suitabilities and special nature of particular parts of the municipality.”

Section 603(b)(2) – “Zoning ordinances...may permit, prohibit, regulate, restrict and determine [among other provisions]...size, height, bulk, location, erection, construction, repair, maintenance, alteration, razing, removal and use of structures...”

Section 603(b)(5) - “Zoning ordinances ...may permit, prohibit, regulate, restrict and determine [among other provisions]...protection and preservation of natural and historic resources and prime agricultural land and activities.”

Section 603(c)(7) – “Zoning ordinances may contain: [among other provisions]...provisions to promote and preservation prime agricultural land, environmentally sensitive areas and areas of historic significance.”

Section 603(g)(2) – “Zoning ordinances shall provide for protection of natural and historic features and resources.”

Section 604(1) – “The provisions of zoning ordinances shall be designed to promote, protect and facilitate any or all of the following: ...[among other provisions] preservation of the natural, scenic and historic values in the environment...”

Section 605(2)(vi) – “...Where zoning districts are created, all provisions shall be uniform for each class of uses or structures, within each district, except that additional classifications may be made within any district: [among other provisions] ...for the regulation, restriction or prohibition of uses and structures at, along or near: [among other provisions] ...places having unique historical, architectural or patriotic interest or value...”

PHMC’s Historical Marker Program, established in 1946, is one of the PHMC’s oldest, most popular, and recognized state programs. Located throughout Pennsylvania, the blue and gold markers highlight people, places, and events significant in history. New markers are approved and erected along Pennsylvania roadways every year. PHMC owns and maintains the markers after they are installed and dedicated. There are over 2,000 markers statewide.

Act 537, the Pennsylvania Sewage Facilities Act, requires each municipality in Pennsylvania to have an Official Sewage Facilities Plan that addresses existing and future sewage disposal needs. With limited exceptions, PADEP requires the completion of formal sewage facilities planning modules for new subdivisions and/or land development to update the municipal Act 537 plan before a subdivision is created. Once a planning module has been completed by an applicant, it is given to the municipality in which the project is proposed for review, as well as PADEP, Chester County Health Department and Planning Commission, and at times Chester County Conservation District.

Prior to PADEP review of the planning module, PHMC reviews project activities for their potential effect on significant historical and archeological resources and provides

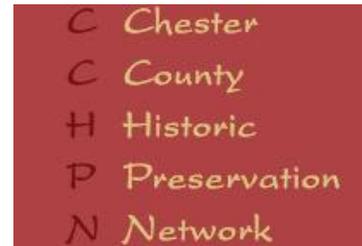


PHMC’s markers raise awareness of historically significant people, places, and events in a community.

- **Technical expertise and educational assistance** is provided to the public and municipalities including residents, businesses, property owners, taskforces, historic preservation organizations, and historical commissions, committees and societies, and covers historic preservation issues as well as historic structures preservation and maintenance standards.

Other Programs and Entities

The **Chester County Historic Preservation Network (CCHPN)** is a non-profit organization that provides support to grassroots historic preservation efforts. CCHPN’s mission is to be an affiliation of local organizations and individuals dedicated to protecting and preserving Chester County’s historic resources and landscapes through education, facilitation, and public and private advocacy. Activities include educational programs for municipal officials and historical commissions on preservation-related topics, a summer picnic that recognizes volunteers and highlights a successful preservation project in the county, publishing a newsletter, providing support to the Chester County GIS Historic Resources Atlas project, and co-sponsoring (with Chester County Heritage Preservation Coordinator and Conference and Visitors Bureau) the Chester County Town Tours and Village Walks program.



Past federal transportation funding bills have included a **Transportation Enhancement (TE) Program** to strengthen the cultural, aesthetic, and environmental aspects of the nation’s intermodal transportation system. The recently enacted federal funding bill (MAP-21) eliminated the TE Program, but maintained a funding stream for similar project types under a **Transportation Alternatives** program.

The **National Trust for Historic Preservation** has helped protect historic resources for more than 50 years. The Trust provides leadership, education, and advocacy to save America's diverse historic places and revitalize communities. The Trust owns and operates a collection of nationally significant house museums and provides a wide range of preservation services across the country, including grant programs.

Partners for Sacred Places, based in Philadelphia, is the nation's only non-denominational, non-profit organization devoted to helping Americans embrace, maintain and make good use of older and historic religious structures. Partners for Sacred Places provides assistance and serves as an information clearinghouse for groups interested in finding out more information on how to maintain historic structures, share property and uses, and conduct outreach and fundraising.

Scenic Resources

Similar to historic character, Penn Township’s scenic character is formed in part by the variety of uses imposed on the area’s landscapes and the communities that developed on those landscapes. The confluence of agricultural properties, natural resources, open space, historic villages and resources, and developed areas help to create the character that Penn Township residents recognize as their own. Scenic resources are an important part of this local character, forming the visual image that residents carry with them of the place they call home. Preserving existing scenic resources, and minimizing intrusions on the landscape, helps preserve local characteristics and quality of life.

Scenic resources can and do overlap with natural, historic, and agricultural features. While natural and agricultural features that are scenic will be discussed in this section, in order to avoid duplication, all historic resources identified and/or referred to earlier in this chapter should be considered scenic. Whether agricultural, historic, or natural, all scenic resources are categorized based on their most prominent attributes that promote the Township's character. This Chapter also addresses intrusions and negative impacts on the scenic landscape, such as light pollution, signage, and utilities. Scenic qualities are also lost through large scale land development, and incrementally through poor quality siting and design.



A view along the Corby Road scenic corridor.

Types of Scenic Resources

Two categories of scenic resources were identified for Penn Township: **Vistas** and **Corridors**. Each category has unique characteristics that separate it from the others. Scenic resources were selected broadly based on the representative nature of Penn Township's landscapes, character, and cultural feel, and on the specific criteria of individual categories as noted below. Photographs and illustrations provided below offer further clarification on these types of resources.

Scenic Vista (or Viewshed)

A physiographic area composed of natural, historic, agricultural, and/or cultural elements that may be viewed from a public area such as a roadway or park, and which has inherent scenic qualities and/or aesthetic values.

Scenic Corridor

A corridor, such as a roadway or waterway and its adjacent area, that provides opportunities for the enjoyment of exceptional beauty or natural, historic, or cultural features. For the purposes of this Plan, a scenic corridor includes scenic features within view of the roadway or waterway. A scenic corridor moves the experience of the driver, pedestrian, cyclist, fisherman, or boater beyond the immediate area to those attributes within view.



Much of the adjacent land to Big Elk Creek remains undeveloped, creating an extensive scenic corridor.

Existing Scenic Resources

Map 5-2 (Appendix A) depicts the locations of, and Figure 5-1 notes the key features of, scenic resources within Penn Township. As previously noted, resources identified by the Township as historic shall also be considered scenic; however they are not included in Map 5-2 or Figure 5-1. The inventory of scenic resources was initially taken from the *Joint Comprehensive Plan (2003)*, which was based heavily on the *Open Space, Recreation and Environmental Resources Plan (1993)*. Resources were then reviewed using aerial photography and field checked as necessary. Development since the 1993 and 2003 plans eliminated or negatively impacted several scenic resources. Those changes were taken into account in creating Map 5-2 and Figure 5-1.

Figure 5-1: Existing Scenic Resources within Penn Township

Name	Description
Scenic Vistas	
Woodview N/E	Looking north and east from a topographically high point of Woodview Road, there is a view of agricultural buildings, fields and pasture with woodlands beyond.
Ewing NE	Looking northeast from Ewing Road, there is an extended view of agricultural buildings, fields, and pasture with wooded stream corridors and hills interspersed.
Ewing SW	Looking southwest from Ewing Road, there is a stream corridor with adjacent agricultural buildings and lands.
State Road W	Looking west from State Road, there is an extensive view of agricultural lands and woodlands, extending to the west of Sunnyside Road.
Sunnyside Road NW	Looking northwest from a point near the Sunnyside Road/State Road intersection there is a view of agricultural lands and buildings with woodlands beyond.
Sunnyside Road W	Looking west from Sunnyside Road, there is a view of agricultural buildings and fields with woodlands beyond.
Hutchinson Road W/NW	Looking west and northwest, there is a view of agricultural lands and woodlands.
Scenic Corridors	
Phillips Mill/Ewing/Tice/ Woodcrest	An agricultural area (primarily crop fields) with wooded stream corridor that runs parallel of Phillips Mill Road to the west and then crosses Woodcrest and Ewing roads.
Baker	An agricultural area of both pasture and crop fields, with woodlands beyond the fields. A wooded stream corridor crosses Baker Road in the western portion of the corridor.
Corby	An agricultural area (primarily crop fields) with wooded stream corridors both north and south of Corby Road, with a crossing mid-corridor.
Big Elk Creek	A stream corridor with woodlands or agricultural fields along much of the corridor. Directly adjacent development is limited to the Route 1/Baltimore Pike area, while residential development in the south is buffered with woodlands. The areas west of the creek are also largely woodlands or agricultural fields.

Scenic Intrusions

Scenic intrusions are those manufactured objects or structures that detract from the landscape, such as: poorly sited or designed development (residential, commercial, institutional, or industrial), light pollution, inappropriate signage, utility structures or transmission lines, parking facilities, and abandoned or unkempt properties. A single intrusion can tarnish an otherwise scenic landscape, and depending on how topography and landscaping either permit or obscure views, it can diminish a scenic landscape from multiple viewpoints. A comprehensive listing of existing, individual, scenic intrusions within Penn Township was not developed as part of this Plan because existing features are difficult to change. Avoiding the creation of new scenic intrusions is a feasible goal however, and the discussion below and recommendations at the end of this chapter focus on this purpose.



Being mindful of context can provide for better separation or buffering between incompatible uses.

Poorly Sited or Designed Development

This type of residential, commercial, institutional, or industrial development ignores the context and resources of the site and, in doing so, loses an opportunity to fit in with the existing landscape. In creating and maintaining an up-to-date listing of scenic resources, as well as requiring protection of natural resources, Penn Township can notify developers of the resources they consider critical early in the development process, enabling a site design that fits with the character of the site and surrounding area.

Light pollution

Light pollution is any adverse effect of artificial light including sky glow, glare, light trespass, light clutter, decreased visibility at night, and energy waste.² Light pollution is created by stray outdoor lighting that creates a halo of brightness, blocking out the Milky Way, individual stars, and other features visible under more natural conditions. One need only travel to an area without light pollution on a clear night and view the night sky in comparison to the typical Chester County night sky to understand the difference.

Light pollution is not just a concern because of the impact on our view of the night sky, or the nuisance one neighbor can inflict on another. Impacts can generally be grouped within the following categories: **human health, safety, energy, and wildlife**. **Human health** is impacted through disruption of circadian rhythms, impacts that are significant enough for the American Medical Association to adopt a resolution in 2009 to support the reduction of light pollution. **Safety** can be compromised by “disability glare” (particularly when excessive lighting impacts drivers), and by lighting that may be perceived as increasing security. Various studies, including a 1997 National Institute of Justice study, have shown no conclusive correlation between night lighting and crime. Light pollution is wasted **energy**, which translates to wasted money and wasted natural resources. **Wildlife** perhaps suffers the most from light pollution, as nocturnal animals become confused and disoriented. Species have experienced a decline in reproduction, difficulty foraging for food, increased exposure to predators, and increased mortality due to impairment of their night vision.³ Using the appropriate amount of light for the task at hand in the most efficient manner possible is being energy-efficient, safe, and preserves dark skies for everyone.

Utilities

Utilities come in many forms, and from a scenic perspective, it is the visible structures or transmission lines, such as cell towers, stormwater management facilities, and overhead transmission lines that are of most concern. As with other forms of development, the siting and design of these features should be regulated to the degree possible in order to avoid, minimize, or mitigate impacts to scenic features. Empty detention basins that lack landscaping quickly become eyesores – proper ordinance language regarding design can prevent this. While control of certain utilities, such as cell towers, comes under the purview of state or federal agencies, municipalities retain some control, such as location (within certain zoning districts) and design (such as a flag pole or silo structure).



Appropriate landscaping can minimize the negative aspects of detention basins, while use of alternative stormwater measures can reduce or eliminate the need for basins.

Other entities may also control some aspects of utility design and location. Construction of cell towers is considered a federal undertaking, which requires a review of potential impacts to historic resources that are listed or eligible for the National Register of Historic Places. Certain conservation programs, such as the Chester County Agricultural Conservation Easement Program, may prohibit construction of cell towers as part of

²As defined by the International Dark-Sky Association, www.darksky.org.

³International Dark-Sky Association, www.darksky.org.

easement conditions. Lands under conservation easement by any non-profit or government entity may have similar restrictions or prohibitions.

Overhead utility lines, particularly electric transmission towers and lines like those that span the Township, can also be significant scenic intrusions. Although little can be done with existing lines and structures, redevelopment in selected locations (such as an area transitioning from suburban to urban) may warrant the requirement that utility lines be located underground. Although costly to implement, in selected locations it may be beneficial in the long term.

Signage

Outdoor signage is a necessity, and when designed appropriately it can complement the character of an area. Advertising that is too close together, distracts drivers, or blocks a scenic vista is inappropriate. The MPC permits municipalities to regulate signage, including size, location, and lighting. Doing so provides municipalities a greater level of control over the impact of advertising.

Parking Facilities

Parking is another feature that can have an impact on a community's character without proper design. Endless pavement, lack of vegetation, and the locational prominence of a parking area can create a scenic intrusion. Appropriate layout and landscaping can turn a parking area into a less offensive, and even pleasant, feature of a development.

Abandoned Buildings/Unkempt Properties

Abandoned buildings and/or unkempt structures or properties are a public eyesore and can become a public nuisance and health concern if not addressed. In addressing this type of scenic intrusion, maintaining the public health and safety should be a primary consideration.

Resource Protection Measures

There are several existing resource protection measures for the preservation of historic resources in Penn Township. Sections 1404 through 1408 of the Zoning Ordinance establish two classes of historic resources, create a Historical Commission, and regulate the use and demolition of historic resources. However, the provisions have not had a significant impact on historic preservation within the Township. Additionally, the mapping and inventory historic resources regulated by these provisions are in need of an update due to development impacts. The Township adopted the International Existing Building Code (IEBC) under the Uniform Construction Code (UCC), and has not experienced any known problems with interpretation of building code standards or code enforcement issues interfering with or discouraging the preservation of historic resources.

There are no existing protection measures for scenic resources in Penn Township. There are provisions in the Zoning Ordinance and SLDO that address potential scenic intrusions, including lighting, signage, and parking, however these vary. For example,

lighting is addressed only minimally in the Zoning Ordinance (Section 1603), but is addressed more comprehensively in the SLDO (Section 422). Signage provisions in the Zoning Ordinance (Article XVIII) are also limited. Landscaping provisions, which impact a variety of scenic intrusions, are provided in both the Zoning Ordinance and SLDO, but were drafted prior to 1999 for the Zoning Ordinance (Article XVI). In the SLDO, stormwater management facilities landscaping provisions are broader, but for other forms of development or subdivision, the ordinance simply references the Zoning Ordinance.

Planning Implications

Historic Resources

Historic resources help maintain local heritage and community character. These resources need to be protected as they can be diminished and destroyed by improperly managed land use. Although protection measures are currently included within the Zoning Ordinance, they have not been effective in preserving historic resources.

Scenic Resources

Scenic features, vistas, roads, and corridors contribute to the image and character of Penn Township. Avoiding and minimizing impacts to scenic resources, and minimizing the impacts of scenic intrusions, helps retain community character. A lack of protection measures currently exposes these resources to degradation.

Recommendations

The recommendations below detail how Penn Township can protect and enhance the historic and scenic resources that are a critical part of community character and quality of life, with options ranging from regulatory to public education. Priorities for the implementation of these recommendations are established in Chapter 12, Implementation Measures. Implementation of the recommendations identified below will help Penn Township achieve its historic and scenic resources goal to:

Acknowledge the value and importance of the historic and scenic resources of the community and protect these resources from destruction and encroachment of incompatible development.

Historic Resources

Historic Resource Identification and Survey

5-1. Continue to identify and evaluate historic resources through historic resource surveys such as the Chester County Historic GIS Atlas project.

Penn Township should complete the *Historic Resource Atlas* it has begun in coordination with the Chester County Heritage Preservation Coordinator. This effort would create an electronic map and inventory of properties that are considered locally significant, and build on the mapping and inventory efforts that have already taken place in the Township (including Map 5-1). Once the *Atlas* is complete, a Comprehensive Historic Resource Survey could be undertaken when funding and time permit. In this way, the *Atlas* content could be enhanced to document architectural and historic features and significance. For consistency, the PA Historic Resource Survey Form should be used. This form is a useful tool because it is the form used when applying to PHMC for a National Register determination of eligibility.

5-2. Support nominations of high priority properties for eligibility and/or listing on the National Register of Historic Places to provide recognition of, education about, and increased interest in historic resources.

The National Register is an important honorary public educational tool including generating community pride and heightened recognition/interest in historic resources. The prestige of this formal recognition of a structure's high level of historical significance can be a helpful marketing tool for a property owner or area and has the potential to help attract historic tourism. National Register status also provides certain levels of protection for resources from the impacts of federally funded or permitted projects, and listing provides access to funding and federal tax credits for certain types of uses, primarily nonresidential.

Information previously collected by Penn Township, as well as any future survey efforts, can be used as an elementary baseline in pursuing Determinations of Eligibility submissions and nominations to the National Register. In addition to individual resources or district submission, the Township might also consider using a thematic approach, such as the rail line significance.

National Register listing is a two step process beginning with receiving a Determination of Eligibility from PHMC. A Pennsylvania Historic Resource Survey Form, ideally completed as part of the comprehensive historic resource survey, is submitted to PHMC for review and evaluation of National Register criteria. If a property is determined to be eligible, the second step is the completion of the National Register nomination form. There are many properties that do not pursue National Register listing. While an eligible resource is provided the same level of protection as a listed resource, federal investment tax credits for rehabilitation and other programs are only available for properties formally listed on the National Register.

Helpful NPS bulletins⁴ –

- How to Apply the National Register Criteria for Evaluation (Bulletin #15)
- How to Complete the National Register Registration Form (Bulletin #16A)
- How to Complete the National Register Multiple Property Documentation Form (Bulletin #16B)
- Guidelines for Evaluating and Documenting Rural Historic Landscapes (Bulletin #30)
- Guidelines for Evaluating and Registering Cemeteries and Burial Places (Bulletin #41)
- Guidelines for Evaluating and Documenting Properties Associated with Significant Persons (Bulletin #32)
- How to Evaluate and Nominate Designed Historic Landscapes (Bulletin #18)
- Guidelines for Evaluating and Registering Archeological Properties (Bulletin #36)

5-3. Contact PHMC to inform them that the Charlton/Lewis Farm has been impacted by development and request a determination on its status, and that the structures on the Hodgson Farm/Earl Hatton Property have been demolished and the site should no longer be designated as National Register eligible.

5-4. Investigate historic certification through the Chester County Historic Certification Program for individual resources or districts.

Jennersville was certified under this program in 2008. The Township should consider whether there are additional locally significant resources that should be considered for inclusion in this program.

Historic Resource Regulatory Recommendations

5-5. Review the existing historic resource provisions in the Zoning Ordinance and consider revising to further promote and create incentives for historic preservation.

Examples of potential changes include adding a density bonus for developments where historic resources are protected and reused, or allowing additional uses in historic structures that might not otherwise be permitted in a given underlying zoning district. Adaptive reuse is the process of converting or altering a building to accommodate a viable new use other than that for which the building was originally designed. This technique supports economic development as well as historic preservation objectives. Reuse can maintain a building's vitality, and the existing building stock, provides for economically viable new uses, conserves energy through using existing buildings, creates tax revenue, and provides broader development opportunities while preserving buildings, maintaining community character, and providing links to the past. One Penn Township example of reuse is the real estate office at the intersection of Route 796 and Baltimore Pike, which has served as the area's general store and post office at various points in the past.

⁴ See <http://www.nps.gov/history> and <http://www.nps.gov/nr/publications/bulletins.htm>

- 5-6. Consider including provisions in the subdivision and land development ordinance to help promote historic resource recognition and protection, such as requiring identification of historic resources on subdivision and land development plans and consideration of measures to avoid/minimize/mitigate impacts.**

The subdivision and land development process can be used as a means to identify historic resources and work with landowners to preferably avoid impacts to these resources, but at a minimum to minimize and mitigate impacts.

- 5-7. Review regulatory provisions which established the Historical Commission to ensure that ordinance elements are up to date and accurately reflect the duties of the Historical Commission.**

The duties of the Historical Commission should be established by ordinance (preferably free-standing), and be comprehensive of the activities of the Commission.

- 5-8. Continue to support the Historical Commission, which can serve as an advisor to the Board of Supervisor and residents, and act as a liaison between public and private organizations on historic preservation matters.**

A historical commission is a key element in promotion, advocacy, and education about community history, historic resources and their importance to community character, and historic resource rehabilitation, reuse, and protection.

- 5-9. Work to ensure all PHMC comments on projects requiring a sewage planning module have been received prior to granting preliminary or final plan approval.**

State regulations establish procedures for sewage planning module approvals and permit reviews. PHMC review for historic resources is a requirement of the PADEP sewage planning module process. With many entities at various agencies and locations involved in the review, procedural gaps can occur. Penn Township should ensure that they receive PHMC review comments in regard to the impacts of projects on historic resources prior to any action on a project.

Historic Resource Education and Outreach Recommendations

- 5-10. Conduct public outreach regarding local historic resources and the broader topic of historic preservation.**

There are a variety of ways to educate the public regarding historic issues, including providing educational brochures, hosting workshops given by other governmental agencies or non-profits, and providing historic resource information on the Township website or newsletter. These efforts promote knowledge about historic preservation and encourage the private preservation of historic resources. Important topic areas for public outreach would be the National Register of Historic Places and adaptive reuse. Another activity that would increase public awareness of historic resources is public recognition of business owners and homeowners that undertake construction, rehabilitation, or restoration projects that are sensitive to historic character.

5-11. Investigate installing historic markers, using PHMC’s Historical Marker Program or developing a local marker program, to identify and acknowledge important regional historic resources.

The historical marker program may be applied for annually by any person or organization. Limited matching grants are available for the manufacture of markers. PHMC’s website includes guidelines, information, and directions on how to nominate a marker. The Historical Commission should consider which sites should be nominated for state markers. Consideration should be given if other forms of public recognition, such as individual plaques for historic structures, should be undertaken separate from the state program. Most historical markers are dedicated in public events, which present opportunities for the community to both celebrate and understand their heritage.

5-12. Encourage private historic preservation measures, such as the sale or donation of easements, deed restrictions, and restrictive covenants, as a historic preservation strategy for individual owners of historic property.

Preservation easements are a voluntary means through which historic resources can be preserved, and the Township should make residents and businesses aware of this opportunity. There are potential financial benefits for a property owner from the charitable donation of a facade easement to a tax-exempt organization. The donation of a façade easement must be made for conservation purposes, such as the protection of a National Register listed historic structure, and must be made in perpetuity. Unlike properties eligible for the rehabilitation tax credit, an easement donation can be for a structure used for either business or non-business use.

Scenic Resources

Scenic Resource Recommendations

5-13. Update municipal ordinances to guide development to areas less likely to impact scenic resources.

Protection of scenic resources requires that municipal ordinances recognize scenic resources and their value. The following steps are critical to complete this process:

- Recognize the importance of scenic resources within ordinances (Purpose statements),
- Maintain a current listing of resources, and
- Require within ordinances that any proposed subdivision, land development, or permit action in the vicinity of a recognized scenic resource coordinate early and throughout project development with the municipality to avoid, minimize, and/or mitigate negative scenic impacts.

Avoidance could be as simple as relocating an access point to a different portion of a property, avoiding being in the line of a scenic vista. Minimization could be a design that reduces the prominence of new development from the public view.

Mitigation could be as simple as a well thought-out landscaping plan that provides a buffer between a new structure and an existing scenic resource. Early awareness and coordination regarding scenic resources is key to protecting the qualities that these resources bring to the community.

5-14. Update Township ordinances to protect historic, natural, park, recreation, open space, and agricultural resources, as these form a critical part of the scenic character of Penn Township.

Specific measures related to protection of these resources can be found in Chapters 4, 5 (historic section), and 8.

5-15. Coordinate with PennDOT (or Chester County as appropriate) on any proposed transportation projects early and throughout the project development process to ensure a context sensitive design.

Construction or rehabilitation of roads or bridges can create significant impacts to the local environment, including scenic, natural, historic, or agricultural resources. In any transportation project it is critical that the local community be involved at the earliest stages to identify critical resources and transportation needs in order to achieve a project that serves the transportation needs while protecting community resources.

5-16. Support efforts to organize volunteers to participate in PennDOT's Adopt-a-Highway Program and the Great Pennsylvania Cleanup Program.

Participants in PennDOT's Adopt-A-Highway program are requested to adopt a two-mile portion of state highway and pick up litter at least four times a year, with PennDOT providing safety training, safety vests, highway warning signs, and trash bags. PennDOT will also post signs acknowledging the volunteer's efforts and pick up bagged litter from the roadside. The Great American Cleanup of Pennsylvania program is a spring statewide community cleanup program and part of Keep Pennsylvania Beautiful. The program asks communities to organize and conduct local cleanups – recruit volunteers, promote the event, and report the results for inclusion in statewide and national cleanup totals.

Scenic Intrusion Recommendations

5-17. Update municipal ordinances to recognize the negative impact of scenic intrusions and require that applicants seeking to construct a new scenic intrusion, or redevelop an existing scenic intrusion, investigate options to avoid, minimize, or mitigate the negative scenic impacts of these intrusions.

Scenic intrusions can be addressed in part through regulations such as zoning and subdivision and land development ordinances. As sites with existing scenic intrusions are redeveloped or require any type of municipal permit, discussion of ways to minimize or mitigate the intrusion should occur between the municipality and the property owner. Early awareness and coordination regarding scenic intrusions is key to minimizing the negative aspects of these features within a community.

5-18. Adopt ordinance language to diminish the negative impacts of lighting and promote the continuance of dark skies.

Existing lighting provisions within the Penn Township Zoning Ordinance are minimal. The SLDO was amended in 2008 in regard to lighting, and more fully addresses glare, shielding, and the use of full cut-off fixtures. Penn Township can help preserve dark skies by updating the Zoning Ordinance to prevent glare and light pollution by requiring the use of reasonable lighting levels, luminaries that do not emit glare and light above the horizontal (full cut-off), and automatic extinguishing of lighting when it is not needed. The Pennsylvania Outdoor Lighting Council is a local resource for model ordinances and will present to municipal or other groups regarding light pollution on request.

5-19. Recognize the importance of dark skies protection and educate residents through the Penn Township newsletter, website, and other outreach methods.

Public education is always important to avoiding, minimizing, and mitigating the negative impacts of scenic intrusions, particularly with regard to lighting. Educational materials on reasons for promoting dark skies and reducing light pollution, as well as guidance for reducing light pollution within residential neighborhoods, are available from the International Dark-Sky Association.

5-20. Adopt ordinance provisions that will diminish the impact of outdoor signage, and investigate the option of developing specific design guidelines.

Strengthening signage regulations within the Zoning Ordinance is important to help prevent the overuse of signs of all types, ensure signs are not a distraction to drivers, promote good sign design guidelines, and avoid impacts on scenic resources. While Penn Township does have some sign standards in their zoning ordinance, these could be strengthened to minimize the scenic impact of outdoor advertising.

Specific design guidelines could address features such as size, color, material, lighting, legibility, and sign type. By creating guidelines for areas that have a concentration of commercial or mixed uses, a municipality can encourage a consistency in appearance that improves the scenic character of an area while allowing for flexibility and uniqueness. Penn Township could establish guidelines and then simply encourage adherence, or an incentive (such as a larger size) could be provided to further encourage adherence to the guidelines.

5-21. Review ordinance provisions to ensure they permit and encourage utility structures and transmission lines (such as cell towers, stormwater management facilities, and overhead utility lines) to respond to scenic qualities as well as functional requirements, and conduct coordination early with outside groups regarding construction of these features.

Early coordination on design issues for all utilities is most effective in creating an effective, efficient, and aesthetic facility, even when such coordination is not a regulatory requirement. Best management practices (BMPs) should be encouraged and required where appropriate through regulatory means. Regarding stormwater management, the *Pennsylvania Stormwater Management Practices*

Manual (DEP, 2006) and the Chester County Water Resources Authority's model *Post Construction Stormwater Management Ordinance* offer current guidance.

5-22. Review ordinance provisions to ensure they permit and encourage design of parking facilities to respond to scenic qualities as well as functional requirements.

Important issues to consider with parking facility design and construction are access, location, layout, surface treatment, screening, buffering, and landscaping. Inadequate consideration of these features can greatly impact aesthetics.

Encouraging or requiring the use of native trees, shrubs, and plants has multiple benefits. Ordinance language should be flexible enough to allow for innovative ideas (such as pervious pavement) without compromising minimum standards.

Links

National Park Service – Cultural Resources and the National Register

www.nps.gov/history and www.npa.gov/nr

Pennsylvania Historical and Museum Commission

www.portal.state.pa.us

Chester County Planning Commission – *Preserve our Places*

www.chesco.org/planning/lib/planning/documents/preservingplaces/hispresmanual.pdf

Chester County Historic Preservation Network

www.cchpn.org

National Trust for Historic Preservation

www.preservationnation.org

Partners for Sacred Places

www.sacredplaces.org

International Dark Sky Association

www.darksky.org

Pennsylvania Outdoor Lighting Council

www.polcouncil.org

PennDOT – Adopt a Highway

www.dot.state.pa.us/Internet/Bureaus/pdHwyBeau.nsf/AAHHome?OpenFrameset

Great Pennsylvania Cleanup

www.gacofpa.org

TRANSPORTATION AND CIRCULATION SYSTEMS INVENTORY AND PLAN

Introduction

The transportation and circulation system affects the character and efficiency of the Township and is an important factor in maintaining Penn Township's attractiveness as a place to live, work, and shop. Because development pressure is expected to continue in Penn Township, maintaining and where possible improving the ability to move within and through the community by a variety of means is critical, both for residents and businesses.

Advancing a variety of transportation options - a multi-modal network - is key to effective transportation planning. A balanced multi-modal network meets varied user needs, strengthens the Township as a business location, and improves the sustainability of the transportation network and the Township overall. This chapter describes the existing system of transportation and circulation facilities and recommendations to address the needs of the system.

This chapter addresses the following topics:

- Inventory
 - Land Use Patterns
 - Mode of Travel
 - Commuting Patterns
 - Parking
 - Identified Transportation Needs
 - Interrelationships among Transportation Modes
- Planning Implications
- Recommendations



Inventory

Land Use Patterns

The transportation system and land use patterns in Penn Township are closely related and contribute to the character and accessibility of the community. The location and intensity of different land uses impact the effectiveness of the circulation system and alter traffic patterns and quality of life for residents. Baltimore Pike has long been an important roadway connection, as well as Route 796, and it is no coincidence that early development in the Township focused around the intersection of these two roadways. The rail line in the southern portion of the Township played a significant role in generating land development in the villages of Kelton and Elkview, although only for a limited period of time.

Construction of the Route 1 bypass in the mid-twentieth century clearly made the roadway system the focal point of the transportation network. With the interchange located in the central portion of the Township and its close proximity to the Route 796/Baltimore Pike intersection and village of Jennersville, the Township has been poised for growth for some time in terms of its roadway system.

Development has followed the key transportation corridors, first Baltimore Pike and Route 796, then the rail line, and then radiating outward from the Route 1 interchange, changing Penn Township from a largely agrarian area to a community with an increasing diversity of commercial, industrial, institutional, and residential development. Aside from Route 1 however, the Township is still primarily served by two-lane roadways, many with narrow shoulders. Some of these roadways carry significant traffic volumes, such as Route 896 and State Road.

Mode of Travel

There are limited modes of travel (types of transportation) available to Penn Township residents. While there is an extensive roadway system, other options such as bus transportation, trails, and sidewalks are limited in the Township. Rail service is limited to freight at this time. Details on each mode of travel are provided below.

Roadways and Bridges

Ownership

Penn Township has a total of 29.3 miles of roadway within its 9.6 square miles of area, for a road density of 3.1 miles of roadway per square mile of area. Of the 29.3 miles, 9.4 miles (32 percent) of roads in Penn Township are owned and



The Route 1 bypass has brought growth to southern Chester County, and the Route 796 interchange improved access to Penn Township.



The rail line spurred development in Kelton and Elkview and remains an important transportation corridor, particularly for industrial and commercial uses.

maintained by PennDOT, which is similar to the average roadway ownership for Chester County municipalities.

Functional Classification

Roadways can function in different manners, serving varying traffic volumes, trip lengths and purposes, and accommodating varying traffic speeds. The roadway functional classification system is a method of categorizing roadways by their planned purpose to accommodate varying volumes and types (vehicular, pedestrian, and bicyclist) of traffic. Functional classes, as defined by the Chester County Planning Commission, are depicted in Figure 6-1.

The relationship between access and mobility is a key aspect of roadway classification. Accessibility refers to the ease of entering or exiting a roadway from adjacent properties. Mobility refers to the ability of the road to move traffic. They have an inverse relationship - the more efficiently a road can move traffic, the less efficiently it provides access to adjacent properties, and vice versa.

Roadway functional classification and access/mobility are useful in establishing roadway design standards, access management strategies, and to prioritize improvements. Map 6-1 (Appendix A) depicts the roadway functional classification of Penn Township roadways, which include local roads (such as Lewis Road), major collectors (State Road and Route 896), minor arterials (Baltimore Pike and the southern portion of Route 796), and the expressway (Route 1).

Traffic Volumes

Map 6-1 also depicts the range of average daily traffic volume (ADT) on Penn Township's major roadways based on 2007 data. Route 1 carries the highest volume of traffic, with 22,300 ADT west of the Jennersville interchange and 30,500 ADT to the east. The volume difference between these two sections indicates the high volume of traffic being served by the Jennersville interchange. The section of Route 796 between Baltimore Pike and Route 1 carries the next highest volume of traffic (11,100 ADT), as it gathers traffic from Baltimore Pike and Route 796. Baltimore Pike (6,100 – 8,600 ADT) and the southern portion of Route 796 (8,100 – 9,300 ADT) carry similar volumes of traffic. Route 896, the northern portion of Route 796, and State Road each carry less than 5,000 ADT. These volumes of traffic are generally consistent with the functional classifications of the roadways.

Roadway Characteristics

Related to functional classification and traffic volumes, in this chapter roadway characteristics – or the roadway context – refer to the features that define the roadway for users. These include lane width, parking lanes, shoulder width, bike lanes, median, number of travel lanes, buffer, posted speed, operating speed, access density, clear zones, sight distance, horizontal and vertical curvature, roadside development, physical traffic calming measures, and other features. It is important that these features are consistent in the type of experience they are creating for users, in order to encourage the appropriate speeds of auto and truck traffic

Figure 6-1: Functional Classification



Source: Chester County Planning Commission



Large volumes of traffic cross through the Route 796/Baltimore Pike intersection.

and improve safety for all users. The Smart Transportation Guidebook defines desired operating speed as the speed of traffic that “best reflects the function of the roadway and the surrounding land use context” (PennDOT and NJDOT, 2008). Identification of the desired operating speed should be made as part of an assessment of roadway and roadside features.

Areas in Penn Township where traffic speeds are currently too fast for the surrounding land use include Baltimore Pike, Route 896, and Route 796. Speeds are also excessive on Corby Road, State Road, and Kelton Road. In addition to the consideration of roadway characteristics to evaluate and improve safety on existing roads, these characteristics should be carefully assessed in the design and construction of any new roads. Context sensitive design provides a safer experience for users and minimizes the need for future retrofitting. Properly assessing road characteristics and context also ensures that the overall network has the appropriate level of connectivity, and is serving users efficiently and safely.

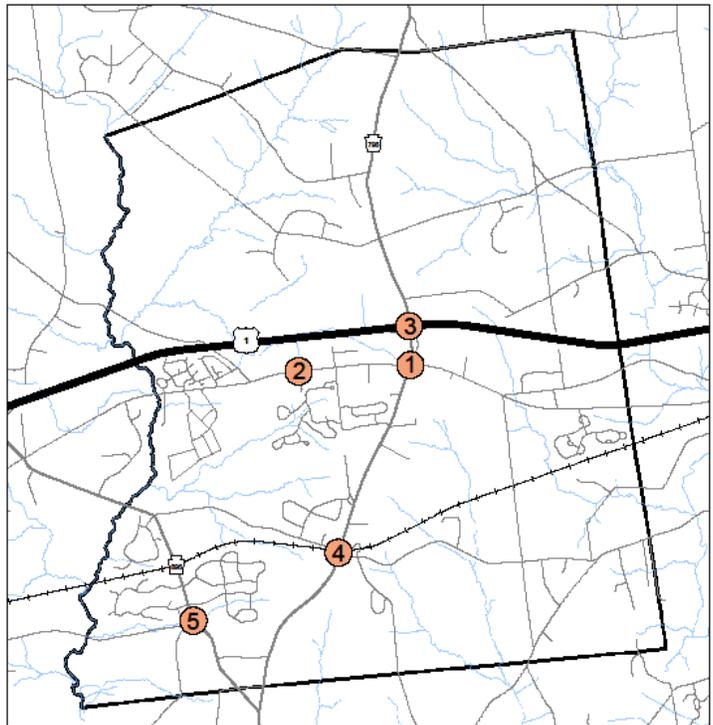
Crash Data

Crash data is collected by PennDOT and distributed to Chester County Planning Commission (CCPC) for planning and analysis purposes. According to PennDOT a “reportable crash is one in which an injury or a fatality occurs or at least one of the vehicles involved requires towing from the scene.” This definition does not include every accident, but provides data that is both consistent and reliable. Information on specific crashes is not available, but analysis does provide insight into where there might be particular areas that should be evaluated for improvements. Figure 6-2 depicts the top five priority locations for safety improvements based on an analysis of the crash data.

Condition and Maintenance

Several roadways in Penn Township have conditions such as sharp bends, poor intersection alignments, and limited sight distances that affect traffic safety. Other features, such as steep adjacent terrain, steep grades, and roadside vegetation contribute to the rural and aesthetic nature of the Township, but can also pose safety issues on roads with higher volumes of traffic. As development continues in the Township, access to roadways will continue to be a concern, as too many access points can impact safety and the effectiveness of the roadway network. Some safety and efficiency issues have been addressed in recent years with road widening, intersection improvements, and the addition of turning lanes. Examples of recent improvements include the Kelton Road relocation of a utility pole and shoulder improvements, should improvements at Ewing Road and Route 796, and alignment improvements at the Kelton/State roads intersection.

Figure 6-2: Priority Locations for Safety Improvements



Source: PennDOT 2007 – 2009; Chester County Planning Commission

Penn Township has a seven year road maintenance plan in place for Township roads, which ensures that all roadways are maintained on a regular basis, in addition to repairs conducted on as as-needed basis.

Bridges

Another important issue for roadways in regard to condition and maintenance is bridges. For safety reasons, bridges can be posted with weight restrictions or completely closed to traffic. Currently, three bridges in Penn Township are posted with weight restrictions, and there is one closed bridge – Sunnyside Road over East Penn Railroad. PennDOT also designates bridges as structurally deficient or functionally obsolete when necessary, and assigns sufficiency ratings to track the conditions of bridges. Map 6-2 (Appendix A) identifies bridges in Penn Township that fall under at least one of these categories.

Structurally deficient bridges have had deterioration of one or more of the main components. Currently more than 5,000 bridges in Pennsylvania are considered structurally deficient. As noted in Map 6-2, five bridges in Penn Township are in this category. Functionally obsolete refers to bridges of an older design or with structural features different from newer bridges. While these features may not be consistent with current design or construction practices, the identification is not an indication of a bridge’s structural integrity. Seven bridges in Penn Township are in this category.

Sufficiency ratings are based on the structure’s adequacy and safety (based on inspection), serviceability and functional obsolescence (based on ability to meet current traffic conditions), and how essential the bridge is for public use. The sufficiency rating determines a structure’s eligibility for funding for rehabilitation or replacement. Currently funding is not available for those bridges with a sufficiency rating from 80 to 100. Those with a rating from 50 to 79 are eligible for rehabilitation or refurbishment funding, and those with a rating less than 50 are eligible for funding for structure replacement. As noted in Map 6-2, four bridges have a sufficiency rating less than 50 and four have a rating between 50 and 79. It is important to note that many bridges across Pennsylvania have sufficiency ratings that make them eligible for funding, and being eligible does not ensure that funds will be available in the near future.

Route 896 Corridor Plan

Route 896 connects Route 30 in Lancaster County to I-95 in New Castle County, Delaware. Within Chester County, it provides access to Route 1. Municipalities within Chester County formed a task force in 2003 to discuss concerns and interests related to Route 896 and determine a coordinated long-term approach to meeting the needs of the route’s users and surrounding communities. Penn Township collaborated with Franklin Township, New London Township, and Upper Oxford Township on the Route 896 Corridor Plan. The plan, completed in 2006, identified a series of implementation actions to promote safety and the long-term viability of the corridor. Actions related to Penn Township included geometric improvements to the roadway, enforcement, intersection improvements, and other items. Several improvements have been achieved, including turning lanes at the intersection of Corby Road and Route 896, and general roadway improvements in the areas of new access points (such as Ovations and Elkview residential



Quimby Bridge, which carries Pusey Mill Road over Big Elk Creek, is one of several bridges in Penn Township with condition issues. Quimby Bridge is listed on the FY11 TIP.



The at-grade crossing of East Penn Railroad and Route 896.

communities). An important safety issue remaining on Route 896 in Penn Township is the Hutchinson Road/Route 896 intersection, which is currently skewed and limits sight distance for vehicles attempting to turn onto Route 896 from Hutchinson Road.

Bus

Bus service in Penn Township is provided by SCCOOT, which provides the only public transportation connection between southern Chester County and SEPTA, and enables residents of southern Chester County to access jobs and services along the Baltimore Pike Corridor and within West Chester. The SCCOOT bus service connects Oxford to West Chester with stops in Jennersville, West Grove, Kennett Square and Longwood Gardens (see Figure 6-3). The service runs Monday through Saturday. SCCOOT is a service of the Transportation Management Association of Chester County (TMACC), and is a partnership with the Southern Chester County Organization on Transportation (SCCOOT), a joint committee of the Southern Chester County Chamber of Commerce and the Oxford Area Chamber of Commerce. Stops in Penn Township include the Shoppes at Jenner’s Village, Luther House, and Jennersville Regional Hospital, as well as stops along Baltimore Pike at Jenner’s Pond Drive, the YMCA, and the Oxford Village Mobile Home Park. There are currently between five and ten stops a day, dependent on the day of the week and specific location. A “ridecheck” conducted by TMACC in 2010 identified the Shoppes at Jenner’s Village as the stop in Penn Township with the most riders, and that approximately 75 percent of the riders were using the bus for their work commute. Figure 6-3 indicates ridership by stop along the entire route.



Currently the SCCOOT bus is financially supported with federal and state funds through the Job Access and Reverse Commute (JARC) Grant Program, County funds, and funds from Lincoln University. JARC is a competitive grant program which helps fund transportation services that facilitate access to jobs for lower income persons as well as reverse commute trips for the general public. JARC grant funding is considered an unstable funding source, subject to review every two years.



SCCOOT has several stops in Penn Township, linking the Township with West Chester and other communities along Route 1.

Figure 6-3: SCCOOT Bus Route and Ridership 2010



Source: Chester County Planning Commission

Rover is a reservation based, countywide transportation service partially funded by the Pennsylvania State Lottery and the Commissioners of Chester County. The service operates on weekdays and on a limited basis on weekends. The services focuses on senior citizens, medical assistance card holders, and persons with disabilities, and fares for those riders are partially subsidized. Service to the general public is full fare and based on availability. The service is currently operating more than 70 shuttles daily throughout Chester County.

Rail

A short line freight railroad crosses the southern portion of Penn Township. The line is operated by East Penn Railroad (part of Regional Rail LLC), which operates roughly one hundred miles of railroad in southeastern Pennsylvania and Delaware. To the west, the line extends to Herr’s in West Nottingham Township. To the east, the line extends to Chadds Ford, and from there to Wilmington, Delaware and connections with national rail systems. East Penn Railroad is in the process of expanding their operations. The rail line is a unique facility that creates economic development opportunities along the corridor, and may attract businesses interested in utilizing the effectiveness of the rail line to send and receive materials or products.

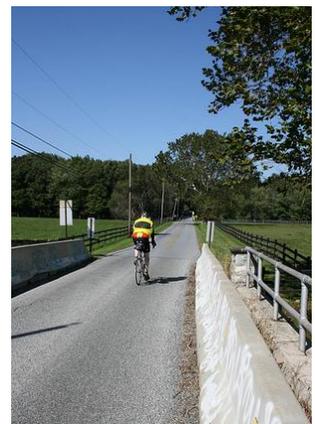
Pedestrian and Bicycle Circulation

Penn Township has a limited pedestrian and bicycle circulation system. The few sections of existing sidewalk in the Township are scattered in residential neighborhoods and commercial areas, and designed for internal use rather than connecting to neighboring uses and a wider network. Given the increasing density of development in the Jennersville area, and the mix of uses, the area would be well served by construction of additional sidewalk. Currently the Township has design plans for sidewalk between Lewis Road and Jenner’s Pond Road. Construction of sidewalks in this area will be an important step in improving the sidewalk network and pedestrian safety, and help link existing sections of sidewalk in this area.



Sidewalks that link multiple areas and uses increase the likelihood that they will be used by the community.

There are no dedicated bike lanes in the Township. The Chester County Planning Commission has identified the functional classification of certain roadways in terms of use by bicyclists, as shown on Map 6-1. The mapping illustrates the ability levels or functions that each route on the network serves for bicyclists. No roads in Penn Township are designed for beginner recreation use. Several roadways are designated for intermediate recreation (routes intended for riders with some experience in sharing the road with traffic) and commuter use (primary routes for through-travelers, serving riders with greater expertise). Route 896 is identified for advanced use (routes intended for the seasoned riders who are comfortable traveling on narrow shoulders or roads with higher traffic volumes and/or higher speed motorized vehicles). These classifications are guidance on current use, and do not assess where it might be most appropriate to locate a dedicated bike lane in the future.



Bicyclists currently make use of area roadways for travel.

There are currently no trails in Penn Township that can be used for commuting purposes. There is a trail within the Township Park, but it does not link to any other trails. For more discussion on trails, please see Chapter 8, Parks, Recreation, and Open Space Inventory and Plan.

Commuting Patterns

With the SCCOOT bus route limited to the Route 1 corridor, and no other form of public transportation, auto dependence is high among Township residents, and the roadway system is of critical importance. Figure 6-4, based on limited surveying through the American Community Survey conducted by the U.S. Census Bureau, indicates what mode of transportation workers use in their daily commute. Penn Township residents are more dependent on their autos than Chester County overall. No one reported using public transportation to commute to work.

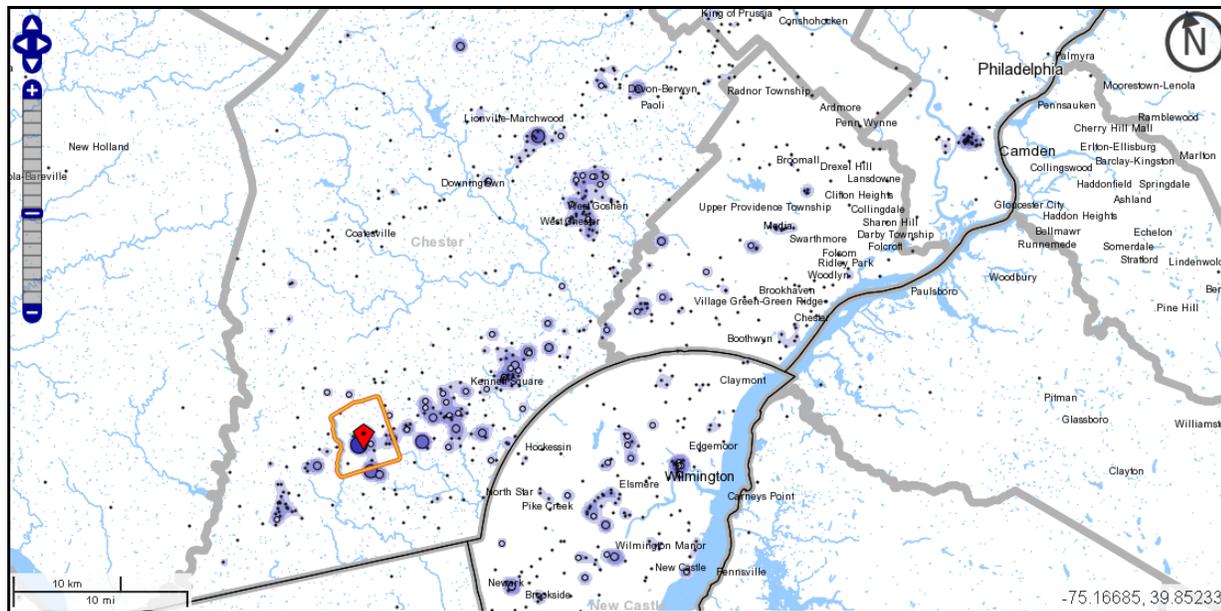
Figure 6-4: Means of Transportation to Work – Percent of Residents

Means	Penn Township	Chester County
Car, Truck, or Van Alone	85.8	81.1
Car, Truck, or Van by Carpool	6.3	7.7
Public Transportation	0	2.6
Walked	1.2	2.3
Worked at Home	6.1	5.2
Other	0.6	1.1

Source: US Census Bureau, American Community Survey 2005 – 2009

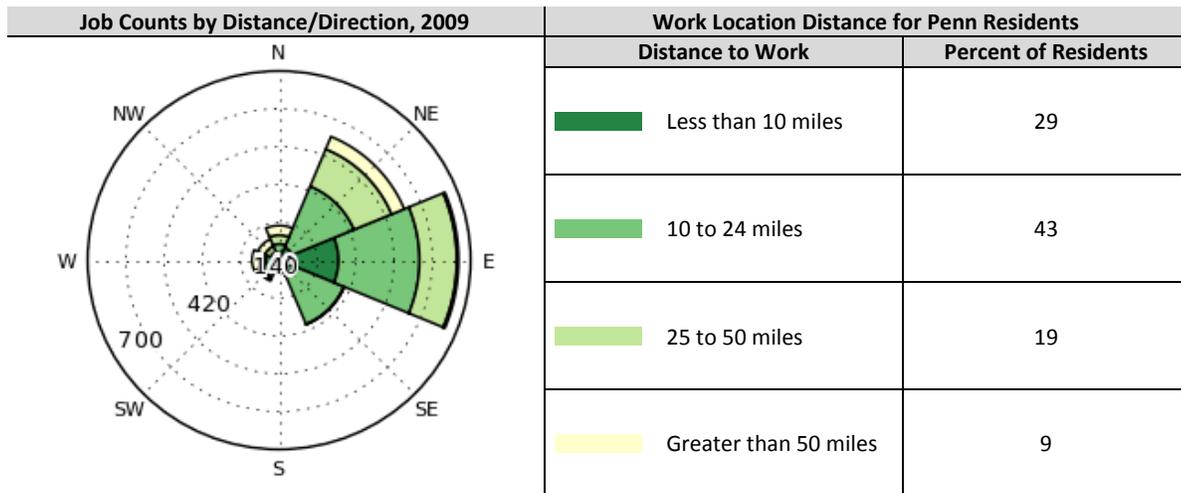
While there has been a significant increase in commercial and industrial development in Penn Township over the past decade, the Township had previously developed primarily as a residential community, with residents commuting to other locations for their employment. Figure 6-5 depicts the work locations for Penn Township residents, with many being employed in the Route 1 corridor, Route 202 corridor, and Delaware. Figure 6-6 depicts a simplified version of travel direction for work, and also provides an indication of how far residents are traveling for work. Many Penn residents (43 percent) travel between 10 and 24 miles to work.

Figure 6-5: Work Locations of Penn Township Residents 2009



Source: US Census Bureau, Center for Economic Studies, 2009 via On The Map, Cornell Institute for Social and Economic Research

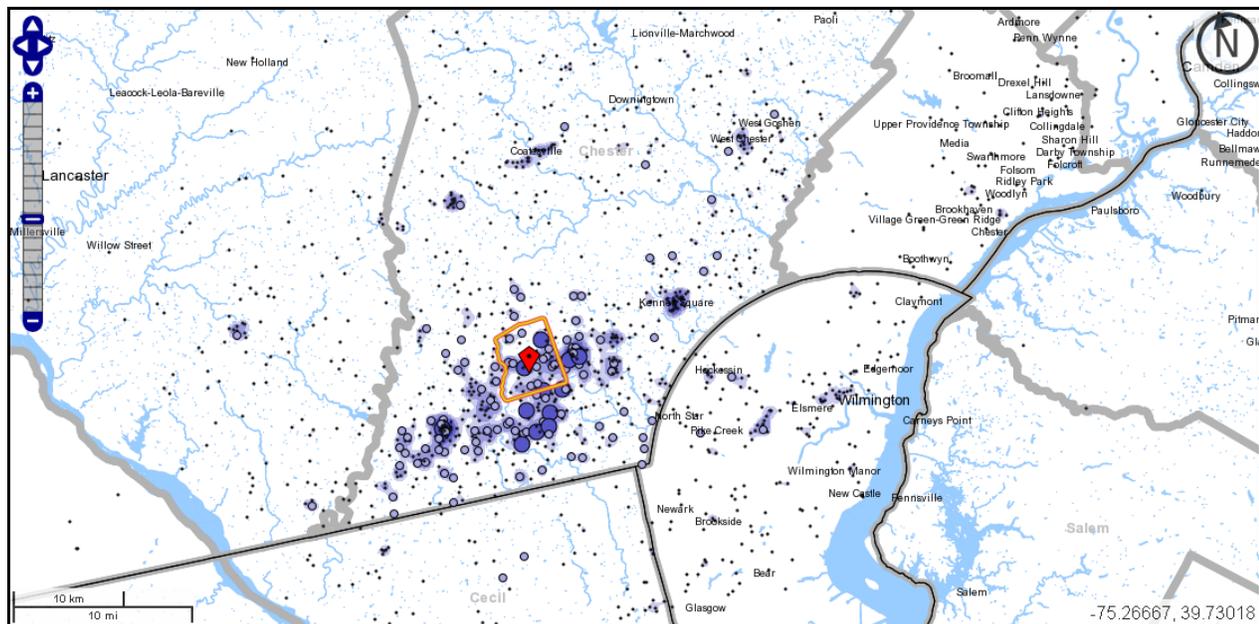
Figure 6-6: Employment Distance/Direction for Penn Residents 2009



Source: US Census Bureau, Center for Economic Studies, 2009 via On The Map, Cornell Institute for Social and Economic Research

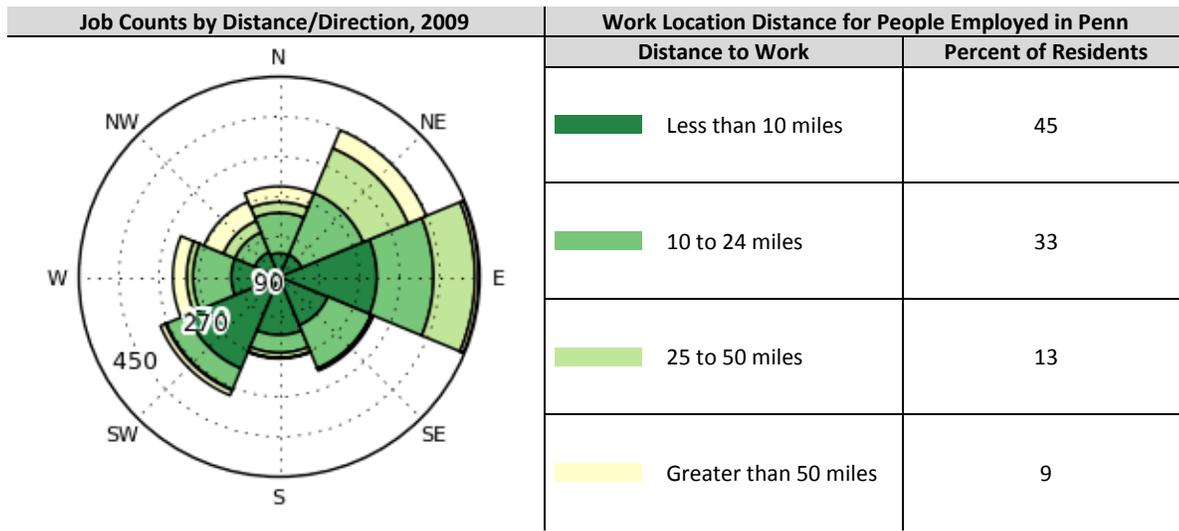
Penn Township is becoming more of an employment center. Figure 6-7 illustrates the residential location of those who work in Penn Township. Figure 6-8 depicts a simplified version of travel direction for work, and also provides an indication of how far those employed within Penn Township are traveling for work. Forty-five percent of those employed within Penn Township are traveling less than ten miles to work.

Figure 6-7: Residential Location for People Employed in Penn Township 2009



Source: US Census Bureau, Center for Economic Studies, 2009 via On The Map, Cornell Institute for Social and Economic Research

Figure 6-8: Employment Distance/Direction for People Employed in Penn Township 2009



Source: US Census Bureau, Center for Economic Studies, 2009 via On The Map, Cornell Institute for Social and Economic Research.

Penn Township residents travel more to the east and northeast for their employment, while those who work in Penn Township are more diversified with their direction of travel to Penn, with significant numbers of people traveling from the west and southwest, as well as from the east and northeast. These figures illustrate the importance of the entire roadway network in Penn Township for employment purposes.

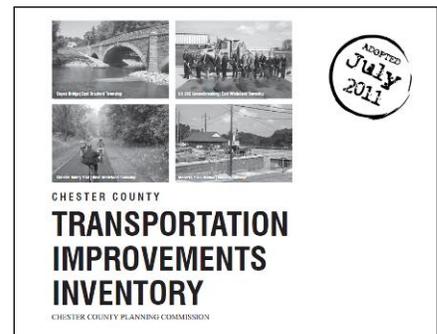
Parking

Parking is generally not an issue within the Township. However, from a more regional view, the Route 1 corridor is lacking in formal, designated park and ride lots for public use. The closest formal park and ride lot on Route 1 is the Route 1/Route 472 interchange to the south. A park and ride lot has been discussed in regard to Route 896 as part of previous studies, but a specific location has never been identified and seems unlikely to be located in Penn Township.

Identified Transportation Needs

The CCPC Transportation Improvements Inventory (TII) is a single inventory of identified transportation needs submitted by all municipalities to the CCPC. The TII is updated every two years, most recently in 2011. Inclusion in the TII is the first step for a project to become listed on the Delaware Valley Regional Planning Commission (DVRPC) Transportation Improvements Program (TIP), and encourages municipalities to plan for and prioritize their transportation needs.

The TIP is the regionally agreed upon list of priority transportation projects, as required by federal law. The TIP must list all projects that intend to use federal funds, along with all non-federally funded projects that are regionally significant. Other state funded capital projects are also included. The projects include bicycle, pedestrian, freight related, and innovative air quality projects, as well as the more traditional highway and public transit projects. The TIP is approved by the Pennsylvania legislature



and Federal Highway Administration every other year, and was most recently adopted in 2011 (FY11 TIP), with an update anticipated in 2013.

The 11 projects in the 2011 TII for Penn Township are listed in Figure 6-9. Of those, only one is listed on the FY11 TIP: replacement of the Pusey Mill Road bridge over Big Elk Creek (Quimby Bridge). The Pusey Mill Road bridge over Big Elk Creek has the lowest sufficiency rating of any bridge in Penn Township, and has been designated as both structurally deficient and functionally obsolete (see Map 6-2). Replacement of the Pusey Mill Road bridge is scheduled for 2014. No Penn Township Route 896 corridor improvements are listed in the FY11 TIP, however there are improvements further south in the corridor (within New London, Franklin, and London Britain Townships) identified on the FY11 TIP.

Funding outside of federal and state sources is important in achieving improvements to the transportation network. Penn Township is funding the replacement of the Sunnyside Road bridge over the East Penn Railroad (a township owned bridge), with construction currently underway (2012). The Township recently also jointly funded the Route 796/Pennocks Bridge Road traffic signal with the Avon Grove School District and Chester County Technical College High School, which have added traffic volume to this intersection.

All other TII projects await consideration for funding through future TIPs or other means, such as Township funding or agreements with developers. There is intense competition for transportation funding in the DVRPC region as well as nationally, which reflects the overall inadequacy of transportation funding at the local, state, and national levels. This trend is expected to continue. In Chester County alone, 464 transportation projects are listed on the 2011 TII and are competing for funding.

Figure 6-9: TII and TIP Projects In Penn Township 2011

Project #	Project Name	Description
MCF 12	PA 896 Hess Mill to Chambers Rock	Safety Improvements
MCN 4	US 1: Maryland line to Schoolhouse Road	Reconstruction/Interchanges
PTC 7	Octoraro Passenger Rail	New Passenger Rail Service
FRR 1	Octoraro Rail Line Rehabilitation	Track and Tie Replacement/Bridges
CB 3*	Pusey Mill Road over Big Elk (Quimby)	Replacement or Rehabilitation
CB 16	Elkview Road over Big Elk	Rehabilitation
CB 46	Pusey Mill Road over Big Elk Creek	Replacement or Rehabilitation
MB 3	Sunnyside Road over Octoraro Rail	Replacement
RW 14	PA 796: Old Baltimore Pike to Corby Road	Widening/Add Turn Lanes
INT 83	PA 796 at Corby Road	Safety Improvements
INT 99	PA 796 at Pennocks Bridge Road	Install Traffic Signal

*On the FY11 TIP; MCF: Major Corridor Projects, Funded or Partially Funded; MCN: Major Corridor Projects, Not Funded; PTC: Public Transportation Corridors; FRR: Freight Railroads; CB: County Bridge; MB: Municipal Bridge; RW: Roadway, Reconstruction / Widening; INT: Intersection.

Identification of transportation improvements is an on-going process. Land uses change and create changes in traffic volumes and circulation patterns, priorities change, and improvements are achieved. New needs for the Township include intersection improvements at Route 796 and Baltimore Pike, intersection improvements at southbound Route 1 and Route 796, replacement of the Ewing Road culvert over a tributary of the White Clay Creek, intersection and roadway improvements at Route 896 and Hutchinson Road, and traffic calming and pedestrian safety improvements along

Baltimore Pike. Also, with the replacement of the Sunnyside Road bridge over the rail line (anticipated in 2012) and subsequent re-opening of Sunnyside Road as a through road, additional traffic may be generated at the Sunnyside Road/Paschall Mill Road/Baltimore Pike intersection. This location will need to be monitored to determine if intersection improvements are necessary in the future.

Traffic volumes have continued to increase, and while improvements have been made to the Route 796/Baltimore Pike intersection, additional turn lanes are still needed. The intersection at the southbound Route 1 exit and Route 796 also has high traffic volumes that back traffic up on the exit ramps at peak times, an unsafe situation that requires installation of a traffic signal. The Ewing Road crossing of a tributary to White Clay Creek is by a culvert which allows only one lane of traffic to pass. Given its location in a curve and resulting poor sight distance, the one-lane culvert should be replaced to allow two lanes of traffic to pass.

A broader issue for the Township to address is traffic calming and pedestrian safety along Baltimore Pike. The area between Big Elk Creek and Jennersville is an increasingly congested area with a mobile home park, hospital, YMCA, Township Park, retirement communities, and commercial uses. The SCCOOT bus has several stops within this area. Each of these uses generates pedestrians, and could be better served by increased pedestrian use, if safety improvements could be made. Improvements such as sidewalks through the entire corridor on both the north and south sides of Baltimore Pike and pedestrian crossings at key intersections, along with general traffic calming measures, would significantly improve safety and lessen dependence on auto use in this increasingly dense, mixed use area.



Traffic flow at the southbound Route 1 exit onto Route 796 is problematic at peak volumes, particularly the left turn.



Only portions of the Baltimore Pike corridor now have sidewalk. Traffic calming and a full network of sidewalks and associated crosswalks would better serve pedestrians.



Interrelationships among Transportation Modes

The transportation network, including all modes of travel and facilities discussed in this Chapter, needs to be looked at in a comprehensive and interrelated manner for the network to function efficiently and safety. It is important to research and address each mode and facility on an individual basis, but also to recognize their interrelationships. An individual focus on each transportation mode, with an overall awareness of their interrelationships, will increase effectiveness, create opportunities, and improve safety in meeting the needs of the Township.

Planning Implications

Maximizing interrelationships and coordination between all modes of travel to achieve an appropriate balance that serves all residents is essential to municipal transportation planning. Key transportation related issues facing Penn Township are:

Roadways and Bridges

In addition to specific improvements needed on Township roadways and bridges, issues of access management and traffic calming are of concern, particularly along roadways such as Baltimore Pike and Routes 796 and 896. Safety for all modes of transportation should be a top priority in moving ahead with access management and traffic calming improvements.

Pedestrian and Bicycle Circulation

The increasingly dense, mixed use area around Jennersville would be well served by improved pedestrian and bicycle circulation options, thereby expanding choices and lessening dependence on autos.

Public Transportation

While limited to an extent due to a lower density population, continuing development in the Township and the presence of the Route 1 corridor make this an opportune time for the Township to be encouraging increased bus ridership and carpooling.

Baltimore Pike Vision

Clearly articulating a vision for uses and circulation on and along Baltimore Pike would provide a basis for future planning, grant seeking efforts, design, and construction. A vital economic corridor for the Township, diversifying transportation options and improving safety will help ensure that it continues as such. Improved pedestrian and bicycle circulation options, increased public transportation amenities and service, and traffic calming should play a key role in this vision.

Recommendations

The recommendations below focus on how best to maintain and enhance the transportation and circulation systems in Penn Township and best implement the related goal and objectives (as discussed in Chapter 2). These recommendations were developed in consideration of existing infrastructure and the current and anticipated demands placed on that infrastructure. Transportation systems are essential to meeting a community's basic needs and in attracting and keeping businesses and residents. The goal regarding transportation and circulation systems is to:

Promote a safe, effective, and diversified circulation system that addresses current and future needs in coordination with land use planning.

Systemwide

6-1 Support completion of projects identified on the TII, and continue to submit identified transportation improvement priorities to the CCPC for inclusion on the TII.

Map 6-3 (Appendix A) and Figure 6-9 identify projects currently on the TII. Also depicted on Map 6-3 are additional transportation needs that have been identified, but not yet included on the TII. Figure 6-10 describes these needs, which are also discussed under Identified Transportation Needs (page 6-10 and 6-11). Penn Township should continue to coordinate with CCPC to ensure that the TII accurately represents the Township’s transportation improvement priorities.

Figure 6-10: Transportation Needs In Penn Township*

Location	Description
Rt 796/Baltimore Pike	Intersection Improvements, Turning Lanes
Baltimore Pike (western Township line to Sunnyside/Paschall Mill Roads)	Safety Improvements, Traffic Calming, Pedestrian Improvements, Access Management
Southbound Rt 1/Rt 796	Intersection Improvements
Rt 896/Hutchinson Rd	Intersection and Roadway Improvements to Improve Sight Distance and Roadway Geometry
Ewing Road/Tributary to White Clay Creek	Culvert Replacement, Widening
Rt 796 and Rt 896 Intersections with Corby, Ledum Run, and Ewing Roads	Intersection Improvements

*These are needs in addition to those already identified on the CCPC TII.

6-2 Seek out funding from traditional and non-traditional sources for transportation projects.

Given that transportation needs far outweigh available funds, it is imperative that the Township remain proactive in advocating for its projects, and diligent in seeking out funding from all available sources. In addition to the traditional federal and state sources, funding alternatives include developer required improvements through land development and transportation grants. Also, local advancement of projects with preliminary planning or engineering work can advance projects while seeking additional funds for final engineering and construction. Coordination with CCPC and other appropriate agencies to advance priorities is critical.

The DVRPC has published a comprehensive list of funding and implementation tools in their 2009 *Municipal Resource Guide*, and also maintains a webpage that is updated regularly with newly announced grant and program opportunities (<http://www.dvrpc.org/Funding>).

6-3 Ensure that context sensitive design is supported and enabled through the Township’s regulatory documents and that the Township coordinates with PennDOT to develop context sensitive roadway and bridge improvements.

The context of the roadway is equally if not more important than its functional classification. The *Smart Transportation Guidebook* (PennDOT and NJDOT, 2008) provides a wealth of information that may be applied to roadways and bridges regardless of ownership, with a focus on appropriate local context. Evaluating the context is important to moving forward with the appropriate design improvements for the community.

6-4 Coordinate with East Penn Railroad regarding public safety along the rail corridor.

If East Penn Railroad continues to increase their operations, the safety along the rail corridor may become an issue. The Route 896 crossing is at-grade, while the Sunnyside Road and Route 796 crossings are grade separated. Safety at the Route 896 crossing and along the corridor itself is a concern. The Township should maintain an awareness of the railroad’s operations and communicate any concerns about the need for safety improvements. The Township should also monitor the potential need for safety improvements on Route 896 and buffers for development adjacent to the rail corridor.

6-5 Coordinate with East Penn Railroad regarding the railroad’s operations and potential to serve businesses within the Township.

The rail line that East Penn Railroad currently operates previously had two operational stations in Penn Township (Kelton and Elkview). There are currently no operational stations in Penn Township. The rail line is an opportunity for development or redevelopment of commercial and/or industrial uses near the rail corridor, particularly at Kelton, given its proximity to existing commercial and industrial uses.

Roadways and Bridges

6-6 Undertake a traffic calming study.

A traffic calming study should be undertaken to investigate what measures would improve pedestrian safety and slow traffic along the Baltimore Pike corridor, particularly from the western Township line through to the Sunnyside Road/Paschall Mill intersection with Baltimore Pike. Such a study would provide opportunities for public input, allow for coordination with stakeholders, create concepts that would serve all transportation modes, and resolve specific issues. A comprehensive study would also increase the potential for funding of identified improvements. Traffic calming measures can include the placement of raised crosswalks, signs, speed humps, center and edge striping, reflectors, bump outs, textured pavement, lighting, or painted text. A potential funding source for such a study would be DVRPC’s Transportation and Community Development Initiative (TCDI), as areas of Penn Township are currently identified as eligible.

6-7 Review and revise ordinances to permit the Township to require traffic calming measures in association with subdivision and land development when warranted.

The Township's ordinances should specifically include language that addresses the installation of traffic calming measures when land development or a subdivision creates a need for such measures. See PennDOT's *Pennsylvania's Traffic Calming Handbook*, Publication 383 for more information.

6-8 Implement gateway improvements to calm traffic and provide for aesthetic and visual cues at entranceways to the Township.

As part of, or in coordination with the traffic calming study discussed above, the Township should investigate gateway treatments along Baltimore Pike, and potentially Route 796. Gateways influence a driver's perception, making them more aware that they are entering an area with variables such as bus stops, traffic signals, intersections, and most importantly, pedestrian traffic. Gateways frequently include a sign in addition to traffic calming features such as a center island, speed table, pavement texture, rumble strips, plantings, or other aesthetic features. Gateways should convey a sense of community at entry points through a common theme and signage with similar text and design.

6-9 Monitor and identify necessary maintenance and improvements to bridges within the Township.

While there is only one Township-owned bridge (Sunnyside Road over the rail line), the condition of all bridges can have a significant impact on the businesses and residents of Penn Township. The Township should make a proactive effort to ensure these facilities are adequately maintained, rehabilitated, or replaced as necessary. Additionally, as improvements occur, consideration should be given to whether or not the bridges should include facilities for pedestrians and bicycles, such as sidewalks or a wider shoulder. Of particular concern are those bridges with a sufficiency rating less than 50, as well as those identified as being structurally deficient (see Map 6-2).

6-10 Continue to support the design and construction of a vehicular loop system around the village of Jennersville.

Currently, there are two means of by-passing the intersection of Baltimore Pike and Route 796. The first is the Shoppes at Jenners Pond on the southwest corner of the intersection and the second is the multi-purpose development on the southeast corner, neither of which is constructed to facilitate substantial through traffic. Penn Township should continue to consider additional means of facilitating traffic flow around this intersection, particularly north of the intersection. General locations for future roadways could be placed on an Official Map. Facilitating the construction of the loop roads in conjunction with future development proposals in and around the intersection may be possible. Provisions for bike lanes or adequate shoulders for bicycles should be considered in any design.

6-11 Continue to ensure that maintenance of local roads is addressed on a continuing basis in the annual budget and capital improvements plan.

The Township's current road maintenance program should be continued. This is an ongoing commitment on the part of the Township.

6-12 Conduct routine maintenance and re-timing of traffic signals, particularly as new signals are installed.

Poorly timed traffic signals can lead to unnecessary congestion. Regularly checking and updating the timing of traffic signals is a low-cost, high-return improvement to reduce congestion. A closed loop system, which synchronizes controller time clocks within the system of traffic signals, optimizes signal function to promote traffic flow and reduce existing and future congestion issues. As more traffic signals are installed in the Township, particularly around Jennersville, the installation of a closed loop system should be considered and potential funding sources identified.

6-13 Update Township access management regulations to prevent future development from creating detrimental access issues, increasing congestion, or creating safety problems.

Access management is the control of access points (driveways) onto a roadway to promote traffic flow, improve safety of pedestrians and motorists, and improve aesthetics by managing the location, quantity, type, and design of access points. The Township should update their access management regulations, and ensure that all basic regulations are included. Minimum standards should include the following: general spacing between intersections, minimum distance between access points, parking lot separation and setbacks from cartways, and curb/buffer requirements. Access management standards may also include the following:

- Siting of access points dependent on road classification, function, and context
- Requiring interconnections between parking areas
- Defined access points
- Clear pavement markings
- Turn lanes
- Medians

For more information, see PennDOT's *Access Management Model Ordinances for Pennsylvania Municipalities Handbook*, Publication 574.

6-14 Coordinate with PennDOT regarding highway occupancy permits (HOPs) to plan for access points on state roads.

The Township should inform and coordinate with PennDOT concerning access management plans and proposals so that the Township's interests are properly considered in the design of access points. Municipalities may adopt and apply more stringent access management requirements than those required by PennDOT for both state and local roads. When municipalities adopt updated access management regulations through local ordinances, it becomes even more important to communicate with PennDOT concerning these local requirements. Penn Township already requires access permits for local roads similar to those

required for state roads. Consideration should be given as to whether the Township should adopt more stringent access management requirements for state roads, and if the requirements for local roads are adequate.

6-15 Undertake periodic reviews of the Zoning Ordinance, Subdivision and Land Development Ordinance, and other regulations to ensure that standards regarding roadways, sidewalks, and trails are current.

Technical standards are always evolving, particularly in regard to sidewalks, bikeways, and trails, and guidelines for smart transportation and context sensitive design are also still developing. Periodic reviews of regulations will best position the Township to appropriately implement these features as land use changes and developments are proposed. As one example, roadway designations and design criteria are evolving, and focusing more on the context of the roadway and the impact that should have on design criteria. The Township should consider changes to its roadway design criteria within the SLDO to more closely mirror PennDOT and Chester County Planning Commission classifications and design criteria.

6-16 Continue to coordinate with surrounding municipalities on regional transportation issues, particularly in regard to Route 896.

Advancing transportation improvement projects requires the support of all affected municipalities. Penn Township should continue to participate in activities related to the Route 896 Task Force and Corridor Plan. Regular coordination will ensure that Penn Township and other municipalities along the corridor are moving together for future improvements.

6-17 Consider adoption of an Official Map to delineate the desired locations of new roadways and pedestrian and bicycle facilities and to ensure that the future transportation network is consistent with the Township's vision.

An Official Map serves a valuable function for a municipality, providing options without requiring an immediate commitment for acquisition or improvement on the part of the municipality. They are particularly useful to identify potential transportation features. Roadways (for example, a loop road around the Baltimore Pike/Route 796 intersection as previously discussed), trails, facilities, parks, and other public lands and infrastructure are all items that may be placed on an Official Map.

An Official Map provides notification to property owners and land developers about the location of potential future public improvements based on analysis and planning. By identifying improvements on the Official Map, the municipality is provided a one-year time period in which to acquire (or ease) the mapped area once the property owner has provided written notification to the municipality of the intent to subdivide or build on the mapped lands.

In cases where the municipality expects public improvements to be dedicated by the developer to the municipality, the Official Map is equally useful because it establishes the desired pattern of the improvement, for example the extension and continuation of the street system. Enabled under the Pennsylvania Municipalities Planning Code, the Official Map and an accompanying Ordinance (which provides the explanation of the map and its purpose) is adopted by the municipal governing

body. Additional information on the process of developing and adopting an Official Map is available from the CCPC's *Planning Bulletin #48 – The Official Map* (1994), and PennDOT Publication 703, *The Official Map: A Handbook for Preserving and Providing Public Lands and Facilities* (June 2011).

6-18 Investigate if there are options available to restore more north/south transportation connections within the Township.

Construction of the Route 1 bypass eliminated some north/south transportation connections within the Township, including Lewis Road and Woodcrest Road. Lewis Road is also broken into disconnected sections to the south of Baltimore Pike. Limited north/south connections forces the remaining roadways to carry heavier volumes of traffic, rather than dispersing traffic across a larger network. The replacement of the Sunnyside Road Bridge over the rail line, which has been closed for an extended period of time, will re-open that option to north/south travel through the Township. The Township should look for opportunities to improve north/south travel as possible.

Pedestrian and Bicycle Circulation

6-19 Continue efforts to expand sidewalks within the Jennersville village area and along Baltimore Pike, and require sidewalks in new developments within this area.

Sidewalks in the Township are limited. For much of the Township this is not an issue, as the low-intensity of uses does not encourage pedestrian movement. However, in the Jennersville village area and along Baltimore Pike, where an increasingly mixed use, dense pattern of development has and continues to take place, a complete network of sidewalks with crosswalks as necessary would increase options in the transportation network and serve to improve pedestrian safety. The Township should continue efforts, such as those underway between Lewis Road and Jenners Pond Drive, to provide sidewalks to facilitate safe pedestrian circulation and promote non-automotive transportation.

See Chapter 8, Parks, Recreation, and Open Space for recommendations regarding trails.

Public Transportation

6-20 Continue to support the continuation and expansion of SCCOOT bus service in the area.

SCCOOT provides a critical public transit connection to jobs and services along Baltimore Pike and into West Chester. Dedicated and reliable funding resources are needed to continue providing the bus service in the future, as the JARC grant funding is unstable and subject to review every two years. Penn Township should play an active role in supporting continuing bus service in the Township, and ensure

that area stakeholders (including businesses along Baltimore Pike) are aware of the importance and funding needs of the SCCOOT bus service.

6-21 Support the construction of bus shelters for the SCCOOT bus service along Baltimore Pike.

Improving amenities along a bus route is one way to increase ridership along existing service lines. Bus shelters are a relatively inexpensive amenity that improve conditions for riders and serve as a constant advertisement of bus service to potential riders.

Parking

6-22 Advocate for the development of a park and ride area near the Route 1 interchange.

The Route 1 interchange is an ideal location for a park and ride. This facility could be developed adjacent to other uses to make the best use of the parking area at all times. Once developed, appropriate signage to identify the park and ride lot and advertising (via the Township newsletter, website, and other outlets) is needed to make the public aware of its availability and encourage its use.

6-23 Review ordinances for parking standards and amend as necessary to ensure parking requirements remain both appropriate and flexible.

Guidelines from national organizations or widely used publications have been used as definitive standards for parking regulations, frequently resulting in more parking than necessary for a particular use. Parking standards should be specifically tailored to local conditions and allow for flexibility. Shared parking, where a public or private parking area is used jointly by two or more uses (such as an office and a place of worship), should be permitted when appropriate and has been used within Penn Township. Reserve, or overflow, parking should be permitted in appropriate locations, and was permitted at the Dansko facility. The Township should remain open to flexibility with parking requirements. Inflexible and overstated parking standards lead to higher construction costs, underutilized facilities, excessive impervious coverage, and unnecessary stormwater runoff.

Links

Chester County Planning Commission – Transportation Services and the TII
www.chesco.org/planning/transportation

DVRPC TIP
www.dvrpc.org/tip/

DVRPC Municipal Resource Guide and Funding Opportunities

www.dvrpc.org/Funding

Smart Transportation Guidebook

www.smart-transportation.com/guidebook.html

Rover

www.krapfscaches.com/rover/

SCCOOT

www.tmac.org/transit-schedules/scOOT/

East Penn Railroad

www.eastpennrr.com/

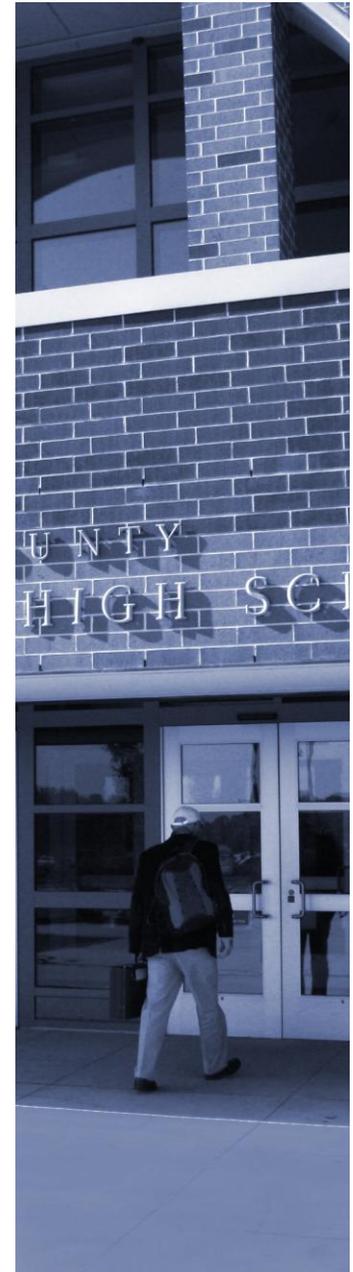
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COMMUNITY FACILITIES AND SERVICES INVENTORY AND PLAN

Introduction

This chapter provides an inventory of the community services and facilities that serve Penn Township residents. These include Township-operated facilities and services as well as those provided by other agencies, organizations, authorities, and institutions to address needs within Penn Township. Map 7-1 (Appendix A) depicts the facilities located within the Township. Community facilities and services addressed in this chapter include:

- Inventory
 - Township Administration
 - Sewage Facilities
 - Water Supply
 - Stormwater Management
 - Solid Waste Collection and Disposal
 - Emergency Services (including police, fire, and ambulance)
 - Libraries
 - Post Offices
 - Education
 - Health Care
 - Human Services
- Planning Implications
- Recommendations



Inventory

Township Administration

Administration and Facilities

The Penn Township administrative building is located at 260 Lewis Road in Jennersville. A 2005 addition to the building is the Community Room, which is available for resident and non-resident use for a fee. The approximately 3,500 square foot room can accommodate 100 people. The space provides a kitchen and restrooms, and is ADA compliant.

Township government is established under the Pennsylvania Second Class Township Code. The Penn Township Board of Supervisors, which consists of five members, serves as the governing body with the authority to hire township staff and appoint representatives to the various commissions and committees. In 2012, township staff consisted of a Township manager, secretary, treasurer, codes and zoning officer, roadmaster, emergency management coordinator, sewer system staff, and parks department staff. Volunteer services are provided by the Planning Commission, Zoning Hearing Board, Recreation Committee, Uniform Construction Code (UCC) Board of Appeals, and additional boards, councils, commissions, and committees established by the Board of Supervisors. These volunteer groups are discussed in greater detail in the Volunteer Groups/Citizen Participation section.



Penn Township Township Building and Community Center

Consultants

Professional consultants are utilized by Penn Township for a variety of purposes. For example, the Township contracts for the services of the township engineer. In addition, the Township and Zoning Hearing Board, in compliance with the Municipalities Planning Code (MPC), Act 247, as amended, each retain a solicitor to provide legal counsel. The Township also hires consultants on an as needed basis to assist with planning and ordinance work and other special studies.

Volunteer Groups/Citizen Participation

Support and involvement from residents are essential to effective and efficient municipal operation. Many Penn Township residents are actively involved in community efforts. Citizen participation allows the Township to make use of local knowledge, ensures that Penn Township is responsive to residents and businesses, and reduces administrative costs. The following is a list of currently active Township volunteer and citizen participation groups, with the number of members noted:

- Planning Commission (5)

- Zoning Hearing Board (3 plus 1 alternate)
- UCC Board of Appeals (3 plus 2 alternates)
- Recreation Committee (13)
- Historical Commission (7)
- Emergency Management Coordination (1)
- Recycling Committee (2)
- Newsletter/Website (1)

Public Outreach

Public outreach is essential to inform residents and business interests of Township activities, thereby providing them an opportunity to voice opinions, volunteer, and participate in the Township’s future direction. Penn Township publishes an annual newsletter to inform residents on various programs and issues such as recycling and emergency management. Public information meetings are utilized to provide residents an opportunity to offer input. The Township website provides contact information for Township officials, and provides for the dissemination of information on activities and programs such as recycling, recreation, land development, and emergency management. Public outreach connects residents and businesses to the township administration (such as staff, boards, and commissions), and is a critical function of effective governing.

Finance and Budgeting

With the growth of the tax base in Penn Township in recent years, the Township has been able to keep up with expenditures without imposing tax increases. The Township is proactive in seeking out grants, and has received grant funding in recent years to purchase equipment and develop a master site plan for park lands. The Township also participates in the Southern Chester County Co-op, an organization of municipalities that purchases materials for all members to take advantage of better pricing on materials such as road salt. The Township does not have a capital improvements plan in place at this time. The Penn Township Public Sewer System has an independent budget, and is financed by its users, rather than through the Township’s general fund. Revenue streams for the Township include property taxes, real estate transfer taxes, earned income taxes, and sources such as cell tower rental, cable franchising, and fees associated with code enforcement. Expenditures include staff salaries, consultant fees, contributions to fire and ambulance service, and costs associated with road and bridge construction and maintenance.

Sewage Facilities

Sewage facilities in the Township consist of a mix of the following types of systems:

- Individual on-lot systems;
- Community system serving Oxford Village Mobile Home Park; and
- A public system operated by Penn Township.

North of Route 1, individual on-lot systems are the only sewage disposal in place at this time. Oxford Village Mobile Home Park is served by its own privately owned and operated community system, which is a stream discharge system to the East Branch of



The Penn Township Spring 2012 newsletter.

the Big Elk Creek. The capacity of this system is approximately 30,000 gallons per day and serves approximately 217 units.

South of Route 1 and north of the railroad line that bisects the Township, the area is increasingly served by the Penn Township public sewer system. Commercial and institutional facilities served by the Penn Township system include the Jennersville Regional Hospital, Shoppes of Jenner's Village, and Southern Chester County YMCA; communities served include Luther House, Penn Ridge, and Jenner's Pond. There are a limited number of properties south of the railroad line that are served by the Township's public sewer (Elk Creek Farm and Ovations communities along Route 896, and the Chester County Technical College High School along Route 796). Individual on-lot systems serve the remainder of this area.

The Township currently owns, operates, and maintains a mechanical treatment system with land based reclamation provided by Rapid Infiltration Beds and beneficial reuse of treated effluent by the Conard-Pyle Company to irrigate its nursery. The existing treatment plant has a capacity of 600,000 gallons of effluent per day. The infiltration beds are permitted at 40,000 gallons per day and the beneficial reuse at Conard-Pyle at 350,000 gallons per day. The ponds located to the northwest of the Route 796/Route 1 interchange are part of the Conard-Pyle Company system. The collection and conveyance system has seven pump stations. The Township currently owns 400 acres that could be used for land application when the need arises. The treatment plant and the Conard-Pyle disposal system both have excess capacity at this time.

There are limited areas where the existing on-lot systems are experiencing failures, which threatens water quality and public health. The village of Kelton is of concern due to small lot sizes and the Penn View Drive/Paschall Mill Road area is of concern due to inadequate soils.

Sewage Facilities Planning

Sewage facilities planning in Pennsylvania is governed by the Act 537 Sewage Facilities Plan. A primary purpose of the plan is to determine how sewage facilities can best be provided to meet anticipated future land use needs. The plan can also be used to establish the most preferred methods of sewage treatment for new development. Penn Township's current Act 537 Plan, which is still under review by PADEP (2012), calls for expansion of the Township public sewer system as necessary to serve properties located between Route 1 and the railroad line, particularly non-residential uses and residential uses experiencing on-lot septic system failures. The Act 537 Plan also anticipates the need for the Oxford Village Mobile Home Park to be served by public sewer in time, likely after 2019.

If development of the Open Space-Institutional District (located in the northeast portion of the Township) occurs, the Act 537 Plan notes a preference for a land application community system to serve the area. Land-based alternatives, as indicated in the Act 537 plan, are preferred to promote the recharge of groundwater and protect stream and groundwater quality. The Act 537 plan promotes the continued use of on-lot septic systems north of Route 1 (with the exception of the Open Space-Institutional District), and south of the railroad line with limited exceptions (primarily along Route 896 and Route 796, where public sewer is currently available). The extension of public sewer across Route 1, to the northern half of the Township, is not desirable due to its implications for land use and the construction cost of crossing Route 1.

Ensuring that sewage facilities planning is coordinated and consistent with local and regional planning policies is important in implementing future land use goals. In particular, the extension of public sewers into areas targeted for preservation should be avoided. The provision of larger public facilities should be considered where it is the most cost effective approach to meeting sewage facilities needs, and only with coordination between all public bodies and decision making authorities, and where it is consistent with long range land use planning. Finally, groundwater recharge, rather than the export of water out of the area, and the correction of existing failing systems are primary concerns. This is especially critical with the designation of the Elk Creek watershed as a High Quality watershed by PADEP.

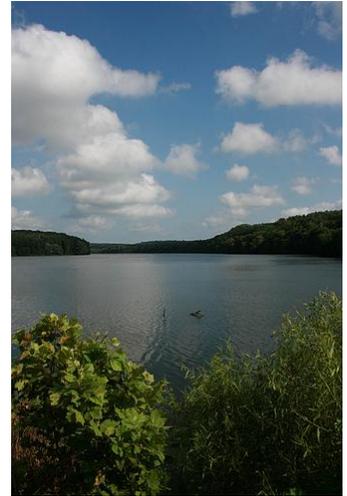
Water Supply

Route 1 increasingly serves as a division for the Township regarding water sources. The majority of the area south of Route 1 and west of Route 796 is served by public water, and portions of the area south of Route 1 and east of Route 796 are served by public water. (See Map 7-1 in Appendix A.) The Oxford Village Mobile Home Park on Baltimore Pike is served by multiple wells on-site. The majority of the public water however, is provided by the Chester Water Authority (CWA). The CWA draws from the Octoraro Creek Reservoir and Susquehanna River, and transports this water through Chester County to the City of Chester, in Delaware County. The CWA provides water service to customers in Chester County, including London Grove, Pennsbury, Kennett, East Nottingham, and Lower Oxford townships. There is additional capacity within the CWA system at this time.

The CWA system includes a water main that extends north of Route 1, along Route 796, but there are no connections within Penn Township north of Route 1. North of Route 1, and those limited areas south of Route 1 not served by public water, the source of water is private wells. These private wells are owned and maintained by individual property owners. The Chester County Health Department permits and enforces water quality and quantity standards for new wells. Individual wells are not subject to any monitoring requirements however, and individual owners are responsible for monitoring their water quality. Daycare facilities and other transient community well systems must comply with state drinking water regulations.

Stormwater Management

Stormwater - excessive runoff from rain events or snow melt - is a leading cause of water pollution. Degradation of both surface and groundwater can occur as a result of stormwater runoff that carries oil, grease, pesticides, fertilizers, sediment, and trash that is picked up by the stormwater. Stormwater management - the safe and effective collection, control, infiltration, and treatment of the stormwater that flows directly into streams after a rain event or snow melt - minimizes intermittent flooding, reduces erosion and sedimentation of streams, and reduces the contamination of groundwater, surface water, the natural ecosystem, and drinking water sources. Because of the importance of stormwater management in watershed protection and planning, one of



Octoraro Reservoir, a critical source for public water.



the seven major goals of the Chester County Water Resources Plan, *Watersheds* (2002)¹ is to “reduce stormwater runoff and flooding.” Stormwater management is addressed by three major pieces of legislation:

- Pennsylvania Stormwater Management Act (Act 167 of 1978);
- Pennsylvania Erosion and Sedimentation Control Act, Chapter 102; and
- NPDES Phase II regulations, specifically MS4.

Act 167 assigns responsibility for addressing stormwater to the municipal level, in order to control runoff and reduce soil erosion. The emphasis in many stormwater management regulations throughout Chester County is on a more environmentally sensitive design that uses natural site features and characteristics rather than the use of man-made structures. The *Pennsylvania Handbook of Best Management Practices for Developing Areas* (2006) is the key reference guide for design techniques, and includes a sample ordinance. *Watersheds* (2002) also provides a sample ordinance for municipal use.

The Pennsylvania Erosion and Sedimentation Control Act, Chapter 102, establishes the basic planning and implementation requirements to be followed for any land disturbing activity. Chapter 102 establishes the threshold requirements for notifying the Pennsylvania Department of Environmental Protection (PADEP) of land disturbing activity, and in some cases the permitting requirement through PADEP.

Penn Township is considered a “municipal separate storm sewer system” (MS4) by the Environmental Protection Agency (EPA) and therefore must comply with the National Pollutant Discharge Elimination System (NPDES) MS4 permit program. The NPDES MS4 program is administered by PADEP in Pennsylvania. Penn Township has obtained the required MS4 permit for discharge of stormwater to Waters of the Commonwealth and must implement several activities under that permit, as follows:

- Provide public education and outreach activities regarding stormwater;
- Provide public participation and involvement opportunities regarding stormwater management program development and implementation;
- Develop and implement a plan to detect and eliminate illicit discharges to the storm sewer system;
- Develop, implement, and enforce an erosion and sediment control program for construction activities that disturb one or more acres of land;
- Develop, implement, and enforce a program to address discharges of post-construction storm water runoff from new development and redevelopment areas; and
- Develop and implement a program with the goal of preventing or reducing pollutant runoff from municipal operations.

Penn Township has undertaken activities as required by the MS4 permit, including identification of all stormwater system inlets and outfalls, inspection of all outfalls, and requiring that new construction map all new inlets and outfalls. Public education has been undertaken using the Township website, newsletter, and kiosk at the park.

Penn Township is a headwaters area, draining to the White Clay Creek, Brandywine Creek, and Elk Creek. Because of this, the activities within



Public education regarding stormwater can take many forms, including reminders stenciled onto stormwater inlets.

¹ *Watersheds: An Integrated Water Resources Plan for Chester County, PA and its Watersheds*, Chester County Water Resources Authority, September 2002.

Penn Township impact the water quality of surface waters for many downstream municipalities. Penn Township has recently adopted amendments to their stormwater regulations that are aimed at bringing the Township up to date with respect to federal and state stormwater regulations. Penn Township's stormwater regulations are included within the Subdivision and Land Development Ordinance (SLDO). As part of their updates, the Township has also drafted a Stormwater Manual. The SLDO currently requires the planning and installation of erosion and stormwater management control devices and provides standards to limit site disturbance and development in areas of steep slopes and floodplains, as well as standards limiting the placement of impervious surface on development sites.

Solid Waste Collection and Disposal

Solid Waste

Penn Township is a member of the Southeastern Chester County Refuse Authority (SECCRA), which is comprised of the ten original members (which includes Penn Township) and 14 associate members. Original member municipalities participate in all services as well as set the policy and operational decisions for the Authority, while associate members are extended all services but do not participate in policy or operational decisions. SECCRA operates a community landfill in London Grove Township, and owns a total of 300 acres at this site, of which 80 acres are in landfill operations, 49 acres are disposal area, and 95 acres are potential disposal area.



SECCRA plans to continue service for the long-term, and anticipates that land currently owned can accommodate three expansions of the landfill and provide capacity for its member organizations until approximately 2050. The SECCRA facility does not accept waste from outside of its membership. Of note is SECCRA's generation of energy through methane gas recovery, which creates a new revenue stream for SECCRA and captures a previously lost energy source. Solid waste hauling is handled by private refuse haulers that contract directly with residents for solid waste removal; Penn Township is not directly involved in the transportation of solid waste.

Recycling

In addition to handling disposal of solid waste, SECCRA facilitates recycling by collecting recyclable materials at its site, including car batteries, appliances, electronics, and clothing, along with the more traditional paper, plastic, glass, and aluminum, for shipment to a materials recovery facility for further processing. By removing recyclables from the waste stream, SECCRA lengthens the lifespan of their landfill. Act 101, the Pennsylvania Municipal Waste Planning, Recycling, and Reduction Act of 1998, required that any municipality with a density of 300 persons per square mile and a population of 5,000 or more provide for mandatory curbside recycling. Act 101 also mandates composting of yard waste and established the Recycling Fund, which provides grants to local governments to help implement recycling programs. Based on the 2010 U.S. Census data, Penn Township has exceeded both the density and population minimums, and therefore curbside recycling is mandatory.

Recycling in Penn Township is provided by the private haulers who contract directly with residents for solid waste removal, and the Township recently opened the Penn Township Recycling Center to further facilitate recycling. The Township recycling facility is located at Dansko's site on Federal Road, and is open 24 hours a day. Residents who do not have curbside recycling are encouraged to take their recyclables to the Penn Township Recycling Center. The Township promotes recycling and composting through their website and newsletter.



Open 24 hours a day, the Penn Township Recycling Center offers a convenient alternative for Township residents.

Emergency Services

Police

Penn Township relies on the Pennsylvania State Police for police protection. The regional State Police barracks is located in the Avondale Barracks in London Grove Township, less than five miles from Jennersville. The Avondale Barracks serves 21 townships and four boroughs in an area of approximately 250 square miles. Police response times are considered to be adequate at this time. To address potential issues with the increasing level of commercial development, Penn Township enacted an ordinance that requires dusk to dawn security for any operation open past midnight. Regarding both commercial and residential development, there is an increasing problem with false alarms.

Fire

Primary fire protection is provided by the West Grove Fire Company, which is a volunteer fire department. The Company currently serves 68 square miles of first due responsibility, including all of Penn Township. The West Grove Fire Company has responded to more than 500 fire calls each year since 2006. Through September of 2010, there were 115 fire runs in Penn Township for the year, which were a significant portion of the district runs for 2010 (440 total). West Grove Fire Company operates two stations: Station 22 (West Grove Borough) and Station 12 (Route 896/State Road in New London Township). Both stations provide response in Penn Township. The West Grove Fire Company is supported financially by community and municipal contributions. Primary backup coverage is provided by the Avondale Fire Department, located two miles east of West Grove's Station 22.

The Chester Water Authority provides fire hydrants along the path of its 48-inch main transmission line and on all distribution lines. Hydrants in Penn are installed at the cost of the developer, and developers are required to provide funds for five years of maintenance. Otherwise, water supplies for fire fighting are provided by local streams and ponds, or by tanker trucks.



Fire hydrants are the most reliable water source for fire response needs.

Ambulance

The West Grove Fire Company provides basic life support ambulance service for a district of 88 square miles, including all of Penn Township. In recent years, the Ambulance Division has responded to more than 1,500 calls annually. Through

September of 2010, the Ambulance Division had 555 responses in Penn Township for the year, which were a significant portion of the district runs for 2010 (1,306 total).

Ambulance units are maintained at both Station 12 and Station 22, and are staffed daily by career staff from 6 am to 6 pm, and by volunteers from 6 pm to 6 am. All ambulance unit responders are PA certified Emergency Medical Technicians (EMTs) that are licensed by the Department of Health. The Ambulance Division is supported financially by community and municipal contributions, as well as patient revenues.

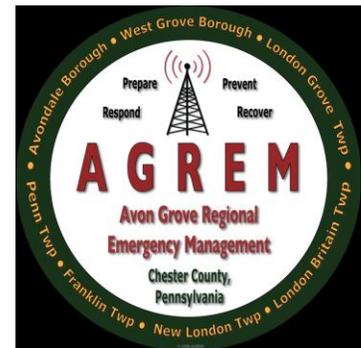
Advanced life support response for Penn Township is provided by Southern Chester County Emergency Management Service (SCCEMS)/Medic 94. The Medic 94 station is located at the Jennersville Regional Hospital. The service was established in 1983 specifically to improve advanced life support response in southern Chester County. Medic 94 currently provides first response for 18 municipalities.

Emergency Management

Outside of the traditional emergency response provided by police, fire, and ambulance providers, every municipality has a responsibility to its residents to prepare for a variety of emergency situations. Emergency management is the process of planning in advance for appropriate responses in the event of a major incident such as a tornado, snowstorm, flooding, major accident, or terror activity. Preparation of a Basic Emergency Operations Plan (EOP), and annual updates to that plan, is one step municipalities are required to take to identify potential hazards and plan an appropriate response. Current records of the Chester County Department of Emergency Services indicate the most recent Penn Township EOP update was in May 2003. A critically important part of the EOP is an annual update, to ensure that current Township elected officials and staff are accounted for within the plan and made aware of its existence and contents. Periodic training for any Township officials or staff that are assigned responsibilities within the EOP is required to ensure that they are able to work in a coordinated manner with other emergency management officials and agencies.

Penn Township has signed onto the current Chester County Hazard Mitigation Plan, which is updated periodically. The Township has appointed an Emergency Management Coordinator, and has publicized the Special Needs Registry, a coordinated effort at the County level to better identify those who are most at risk during a disaster because they are unable to receive, understand, or act upon emergency protective orders. Anyone that might require extra help in an evacuation or other disaster situation is encouraged to register in order to aid emergency response and planning.

Penn Township is a member of Avon Grove Regional Emergency Management (AGREM), a nonprofit organization providing support to the boroughs of Avondale and West Grove and the townships of Franklin, London Britain, London Grove, New London and Penn. The organization conducts training and readiness drills to prepare the organization, its members, and other emergency services organizations for response to unexpected events, including terrorism and natural disasters.



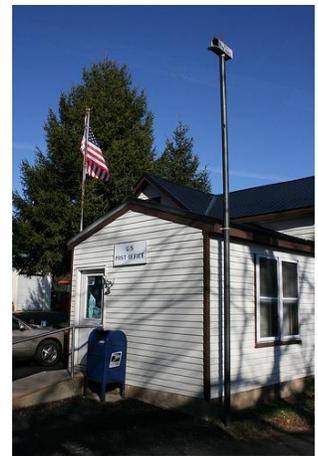
Libraries

There are currently no public libraries located within Penn Township. There is a library at the Penn London Elementary School for use by students. The nearest available libraries are located at Lincoln University in Lower Oxford Township and the Avon Grove Library located in the West Grove Borough municipal building . The Avon Grove Library is part of the Chester County Library System, and is open Monday through Saturday. This library has a total of 34,000 volumes, and has access to approximately 185,000 volumes throughout the County Library System. The Library’s main focus is on children’s and popular materials, with several programs geared toward younger children throughout the year. Funding for the Library comes primarily from the County and State, with additional support from local municipalities, including Penn Township, and private donations.

The Langston Hughes Memorial Library at Lincoln University re-opened in the fall of 2011 following a four year renovation, and contains approximately 185,000 volumes. While not affiliated with the Chester County Library System, community residents are eligible to use many of the services at the library, including obtaining a library card, borrowing materials, and participation in library programs. Computer access and reference services are limited by priority to University students, and Interlibrary Loan services are not accessible to community (non-student) patrons. The library provides for basic borrowing services, plus internet access. These services are currently provided free of charge.

Post Offices

Penn Township is served by multiple post office locations. The Kelton Post Office (19346) is located in Penn Township at 203 Corby Road. There are also post office locations in Lincoln University (19352) and West Grove Borough (19390), both of which can be reached by car from Jennersville in less than ten minutes. The West Grove location offers extended hours Monday through Friday (7 am to 5 pm), and is open through the lunch hour. The Township has discussed with the U.S. Postal Service relocating the Kelton Post Office to a more central location within the Township in the past, but the Postal Service has not been supportive of the idea.



Kelton Post Office

Education

Avon Grove School District

Penn Township is in the Avon Grove School District, which also includes the boroughs of West Grove and Avondale, and London Grove, Franklin, London Britain, and New London townships. In 2002, the school district opened a new school, the Avon Grove Intermediate School, and closed two elementary schools. Each school now serves certain grades levels, not geographic areas within the district. The shift in school facilities resulted in the following breakdown by grade:

Grades K-2	Penn London Elementary School
Grades 3-6	Avon Grove Intermediate School
Grades 7-8	Fred S. Engle Middle School
Grades 9-12	Avon Grove High School

The individual facilities are discussed below.

Avon Grove High School

The high school, located in London Grove Township on a 67-acre site shared with the middle school, can accommodate up to 1,750 students in 82 classrooms. The enrollment for the 2009-2010 school year was 1,825 for grades nine through twelve (4.0 percent above capacity), and the school currently uses a number of trailers as classrooms to accommodate students.

Fred S. Engle Middle School

The middle school houses grades seven and eight in forty classrooms with a design capacity of 950 students. Enrollment for 2009-2010 was 917, which represents 96 percent of capacity.

Avon Grove Intermediate School

The 2002-2003 school year marked the opening of this school, which houses grades three through six for the entire school district. The school has 72 classrooms split across four main wings of the building, one for each grade. This school is located adjacent to the Penn London Elementary School. The 2009-2010 enrollment was 1,648 students and the current capacity is 1,827.

Penn London Elementary School

Penn London is situated on a 106-acre tract it shares with the administrative offices and the Avon Grove Intermediate School. This property is split by the Township boundary, with forty-two acres located in Penn Township and the remaining sixty-four acres in New London Township. The school is designed for 1,216 students in kindergarten through second grades. The school’s 2009-2010 student population was 1,055 students, up from 874 in 2000-2001. The shift in enrollment in 2002-2003 reduced the school’s grades to kindergarten through second grades, but added all students in those grades from the former Kemblesville and Avon Grove elementary schools.

In addition to the daily education needs, the Penn London Elementary School provides for after-school programs for students, including sports, crafts, foreign languages, cooking and other activities. In addition, the school district provides space for Scout troop meetings, and child care, before school care, and after school care, for the Southern Chester County YMCA.



Penn London Elementary School

Avon Grove School District Enrollment

The student enrollment of the Avon Grove School District grew at a fairly consistent rate between 2004 and 2007 (see Figure 7-1). Beginning with school year 2007-2008, the student population began to level off and has remained at essentially the same level through 2010.

Figure 7-1: School Enrollments 2004 to 2010

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Enrollment	4,988	5,205	5,382	5,442	5,400	5,445
Percent Increase	+2.8%	+4.4%	+3.4%	+1.1%	-0.8%	+0.8%

Source: Updated Analysis of Demographics and Community Growth Patterns and Projections of Public School Enrollments in the Avon Grove School District 2009-2010, Pennsylvania Economy League.

The Avon Grove School District, looking to plan for future growth, commissioned the Pennsylvania Economy League to prepare an ‘Analysis of Demographics and Community Growth Patterns and Projections of Public School Enrollments’ for the District. The study considered housing and related activity, birth and migration patterns, and school enrollment trends to create enrollment projections through 2017-2018. The study’s projections indicate that school enrollment in the district is expected to rise steadily through 2014, then slow from school year 2012-2013 until school year 2017-2018. The slowed pupil population growth projection is related in large part to the dramatic decline in permits issued for construction of new residential units during recent years and the decline in the number and size of proposed and approved subdivisions. Penn London Elementary is the only school that is not expected to be above capacity by 2011. Figure 7-2 indicates the school enrollment in 2009-2010 for the schools in the district as compared with their design capacity. As shown below, the Avon Grove High School was already over capacity for academic year 2009-2010.

Figure 7-2: School Enrollment and Design Capacity

	2009-2010 Enrollment	Design Capacity	Percent of Capacity
Elementary School	1,055	1,216	87%
Intermediate School	1,648	1,827	90%
Middle School	917	950	96%
High School	1,825	1,750	104%
Total	5,445	5,743	95%

Source: Updated Analysis of Demographics and Community Growth Patterns and Projections of Public School Enrollments in the Avon Grove School District, 2009-2010, Pennsylvania Economy League.

Future growth in the district should be carefully monitored to best anticipate the need for additional facilities. Trends in family size, the decreasing number of new students per household, and migrations of either families with children, or older families and single persons without children, will be significant factors in these projections.

The number of school age students per household has fallen in the district since 2000, which may be a reflection of the numerous new active adult (55+) and other age-restricted communities developed in Penn Township in that time period. Countywide, the number of students per housing unit has remained relatively steady between 1980

and 2000. The 2010 Census is expected to show little change in the countywide number (see Figure 7-3).

Figure 7-3: School Students per Occupied Housing Unit

	1980	1990	2000	2009
Avon Grove	0.64	0.52	0.62	.53
Chester County Average	0.51	0.38	0.54	.50

Source: Chester County Planning Commission, Planning Bulletin #52, Trends and Relationships between Occupied Housing Units and School Enrollment, 1996; U.S. Census 2000; Updated Analysis of Demographics and Community Growth Patterns and Projections of Public School Enrollments in the Avon Grove School District, 2009-2010, Pennsylvania Economy League.

Avon Grove Charter School

Located in London Grove Township, the Avon Grove Charter School is a public, college-preparatory charter school for grades 1-12. The school opened in 2002 and had an enrollment of 1,400 students in the 2009-2010 academic year (including 534 students who live in the Avon Grove District). Kindergarten is provided in the Kemblesville Early Learning Center, in Franklin Township. In addition to the academic program, the school offers extracurricular activities (many conducted by outside entities) including YMCA sports, Everyday Artists, Young Rembrandts, Girls on the Run, and Science Explorers.

Chester County Technical College High School

Opened in the fall of 2008, the Chester County Technical College High School is a hybrid school that is a collaborative effort of the Chester County Intermediate Unit and Delaware County Community College. The 125,000 square foot school offers career and technical programs for high school students, including horticultural studies, childcare, culinary arts, automotive and engine technology, and home construction programs. Delaware County Community College offers associate degree programs to college students at the same location. The school offers dual enrollment classes for high school students, enabling a student to graduate from high school with up to 16 college credits. The school is located on Pennocks Bridge Road, and can serve up to 600 students with its half-day specialized curriculum.



Chester County Technical College High School

Health Care

Health care has become a major component of the Penn Township economy, with significant growth in recent years, and a variety of health care facilities are available to residents of Penn Township and the surrounding areas. Jennersville Regional Hospital, the only major regional hospital facility, is located on Baltimore Pike in the Township. This facility includes 59 licensed beds, and provides medical and surgical care, intensive care, a coronary care unit, home health care services, and addiction recovery counseling and care. The hospital is also the location of the advanced life support ambulance service, Medic 94. There are no other major health care facilities in the southern Chester County region. There are numerous medical offices located in the Jennersville area, many of which are affiliated with the hospital, providing a variety of services.

Due in part to the increased residential development of retirement and active-adult communities, there has been a consistent growth in the number of facilities geared toward the residential and health needs of the senior citizen population. The residents of the retirement and active-adult communities will likely, over time, require higher levels of assistance and care. The Preston Residence at Jenner's Pond is the only facility in the Township that offers residential skilled nursing care, and provides 34 Medicare licensed beds for skilled nursing services for short term or long term care.

Additional nursing home facilities are available in London Grove Township and also in the Borough of Oxford. Chatham Acres in London Grove has facilities for the intermediate care of 121 persons, including physical and speech therapies and social services. Oxford Health Center, located in Oxford Borough on the grounds of Ware Presbyterian Village, is a not for profit organization that currently provides facilities for 137 skilled nursing care patients and provides speech, physical and occupational therapies as well as a social activities program.

The Health and Welfare Foundation of Southern Chester County conducted numerous focus group meetings in 2006 that focused on identifying the needs of low-income and disadvantaged populations in southern Chester County. The West Grove/Avondale area was the subject of three of the meetings. The overwhelming consensus of participants in the West Grove community leaders' focus group was that vast majority of unmet health care and social service needs in the region were concentrated in the Latino community. Difficulty accessing health care, due to lack of transportation and financial resources, and the language barrier, was common. The nearest health clinic serving low-income or uninsured residents is Project Salud at La Comunidad Hispana in Kennett Square. The nearest medical clinic that provides services to low income residents of the community is Project Salud, a service provided by La Comunidad Hispana in Kennett Square.



*Jennersville Regional
Hospital*

Human Services

According to the demographic analysis found in Chapter 3, approximately 4.8 percent of Penn Township residents are living at or below the federal poverty level, which is lower than the countywide rate of 6.2 percent. These figures are from the American Community Survey, 2005 – 2009 averages, and reflect a slight increase in poverty across the county since 2000 and a decrease in Penn Township since 2000. The 2008 economic recession and development trends in Penn are likely the triggers in these changes. The Oxford Neighborhood Services Center, which serves the southwestern Chester County region, reported that from 2008 to 2009, requests for food assistance increased by 40 percent.

Residents at or below the poverty level may require, at one time or another, assistance with basic needs, including housing, clothing, utilities, and/or food assistance. Other low and moderate-income households that are above the poverty level may still be struggling to make ends meet. Chester County, however, is fortunate to have a network of non-profit human services providers committed to serving the needs of disadvantaged populations. Residents of Penn Township have access to numerous agencies and programs located in the southern Chester County region. They include:

Senior Circle

Affiliated with Jennersville Regional Hospital, Senior Circle is a local chapter of a nonprofit organization committed to enriching the lives of adults age 50 and over. An annual membership offers a selection of discounts, activities and events, exercise and wellness classes, a chapter newsletter and national publication subscription, in-hospital privileges, and reciprocal privileges, among others.

The Bridge Food Pantry and Clothes Closet

Located at 240 State Road in London Grove Township, the Bridge Food Pantry and Clothing Closet is located on the property of the Avon Grove Church of the Nazarene. It is housed in a trailer behind the main church building. Clothing is available to anyone in need. Food assistance is limited to residents of the Avon Grove School District. This ministry helps meet physical needs, and offers a place for emotional and spiritual encouragement.

Catholic Social Services (CSS)

Located in the Borough of West Grove, CSS provides counseling and case management services in addition to emergency food assistance, baby items, and home visits. The West Grove bi-lingual and bi-cultural staff works closely with other agencies in the community to advocate on behalf of clients. CSS also maintains lists of housing and employment opportunities.

Oxford Neighborhood Services Center (ONSC)

The Oxford Neighborhood Services Center, located on South Third Street in the Borough of Oxford, is a private non-profit agency that assists people to achieve health and stability in their lives. The agency offers information and referral services, case management, operates an emergency food cupboard and thrift store, and offers numerous types of emergency assistance to individuals and families. Approximately 40 percent of the clients served at ONSC are Spanish-speaking and require interpreter or translation assistance.

Oxford Area Senior Center (OASC)

Located on East Locust Street in Oxford Borough, OASC provides services and resources to senior citizens including a daily meal, congregate activities, recreational, nutritional, and developmental programs as well as information and referral services, all to support the OASC's mission to enhance the seniors' quality of life.

Adopt a Friend

In support of those who are "aging in place," the Oxford Area Senior Center and the Neighborhood Services Center have partnered to implement the Adopt a Friend program which makes volunteers available to aging, disabled, or other isolated people within the community. Program volunteers make home visits to assist with tasks of daily living, provide transportation for shopping and medical appointments, and provide companionship for program members. The demand for these services greatly exceeds the number of available volunteers.

Kennett Area Senior Center

Located on South Walnut Street in the Borough of Kennett Square, the Kennett Area Senior Center serves older residents of southern Chester County. The Center provides daytime, evening, and occasional week-end programs and services including educational programs, fitness and wellness, recreational programs, and outreach to the homebound elderly.

Planning Implications

Township Administration

As a developing Township, Penn Township has grown in staffing and facilities in recent years. The Township should continue to involve residents, use consultants when appropriate, and carefully consider expenditures in order to continue efficient and effective service to its residents.

Sewage Facilities Planning

With its most recent update to the Act 537 Plan, Penn Township has established the framework of extending public sewer to those properties located south of Route 1 with an identified need. The northern portion of the Township is to remain reliant on on-lot systems, with the exception of the Open Space-Institutional District, which may require a community system if it is developed with an institutional use. Consistent with the Act 537 Plan, the extension of public sewer into areas targeted for preservation should be avoided. The provision of public sewer facilities should be considered where it is the most cost-effective approach to meeting sewage facilities needs, and only with coordination between all public bodies and decision-making authorities.

Water Facilities

The dependence of the northern portion of Penn Township on groundwater for domestic water supplies means that emphasis must be placed on protecting this resource. Groundwater protection measures should be incorporated into land use ordinances. The extension of public water lines into areas where open space preservation is a goal should be avoided, as this can tend to encourage higher intensity uses at inappropriate locations. However, it is expected that public water may be further extended in the area south of Route 1.

Stormwater Management

As a MS4 community, Penn Township needs to ensure it is meeting the requirements of the MS4 permit. Additionally, to protect water quality both within the Township and downstream, the Township should ensure that stormwater management regulations and subdivision and land development regulations are up to date.

Solid Waste Disposal

Penn Township is well served by its membership in SECCRA. Due to population growth, the Township is now required to meet the mandates of Act 101.

Emergency Services

The Township is well served by the State Police Barracks in Avondale at this time. However, as development continues, it may be necessary to explore options to ensure adequate coverage. Fire and ambulance service are adequate at this time. Penn Township should continue to support local fire and ambulance companies to ensure they have the resources necessary to protect public health and safety.

Libraries

The Avon Grove Library in West Grove Borough offers valuable services to the community, and depends upon local funding support in order to provide resources and programs to residents of the region.

Post Office

The Kelton Post Office is located within the Township, with others nearby. Penn Township would prefer a more central location for the Kelton facility.

Schools

To best anticipate the need for new facilities, Penn Township should monitor future growth in the Avon Grove School District. Plans for future expansion of either Avon Grove Intermediate School or Penn London Elementary School must consider access to adjacent roadways, coordinating further development in the area, and minimizing conflicts. Future population growth, as it relates to family size, the in-migration of families with children, and the decreasing number of new students per household are critical for long-term planning. Coordination between the townships and boroughs of the District, and the School District administration, in monitoring birth data and in tracking new residents and new developments would go a long way towards better planning for future school facilities.

Health Care

The median age in Penn Township has been increasing, primarily due to the recent and continuing development of age-restricted communities. The aging of the population has an impact on the need for services that support seniors. There is typically an increased need for health care services in particular. The possibility of future expansion of the Jennersville Regional Hospital and the possible future development of assisted-living and/or nursing care facilities should be considered as part of the future land use scenario to be developed for this plan.

Human Services

Addressing the needs of low-income households is critical to the stability and sustainability of the community. Human services agencies, both governmental and non-profit, offer programs to assist disadvantaged populations. The majority of service providers within the region are located outside of the Township. This planning effort should consider how Penn Township can support the expansion of services into the Township to adequately serve the population.

Recommendations

The recommendations below detail how Penn Township can improve the provision of community facilities and services, particularly noting opportunities for coordination and communication with other organizations. Given that most community facilities and services are not within the direct control of Penn Township, coordinating with, supporting, and encouraging other entities is a significant part of ensuring that community facilities and services are meeting the needs of residents. Priorities for the implementation of these recommendations are established in Chapter 12, Implementation Measures. Implementation of the recommendations identified below will help Penn Township achieve its community facilities and services goal to:

Provide community facilities and services, within the constraints of available fiscal resources, which are commensurate with current and future needs of the community.

Township Administration

7-1. Create a capital improvements plan (CIP) to address long-term maintenance and improvements to Township facilities.

The recent growth of the Township and its associated facilities require that the Township begin to consider implementing a capital improvements plan that would address the growing list of Township facilities in a comprehensive and fiscally responsible manner.

7-2. Continue to use professional consultants when appropriate to bring expertise and experience to the Township without the financial commitment of additional staff.

Use of consultants can provide necessary assistance to municipalities, and when properly managed, can be a wise use of limited financial resources. Penn Township should continue to use consultants when in the best interest of the Township.

7-3. Establish a volunteer recognition program to acknowledge those residents and businesses that significantly contribute to the Township and to promote volunteerism.

Acknowledging volunteers, via an annual luncheon, awards program, or mention on the Township website and newsletter, is a simple way the Township can thank volunteers for their time and promote volunteerism within the community.

7-4. Continue to seek grants and explore other sources of revenue to address specific facility or service needs.

Penn Township has a history of seeking grants and other non-tax sources of revenue, and this practice should continue. While tax revenue is critical to the basic activities of the Township, procurement of other revenue sources can ease the

burden on Township residents, and allow the Township to be proactive in offering new and expanded facilities and services to its residents and businesses.

- 7-5. Ensure that public outreach is timely and comprehensive by regularly updating the Township website, publishing the Township newsletter on a regular basis, and using other media outlets as necessary.**

To be effective, public outreach needs to reach all residents and businesses and convey current information. The Township website should continue to be updated on a regular basis, and the newsletter should be published on a regular basis to reach those residents that do not have internet access. The Township office is an additional means of public outreach, particularly given its location adjacent to the park; notices at the park kiosk can reach a segment of the public that might otherwise be left out.

Sewage Facilities

- 7-6. Regularly update the Act 537 Plan in order to consider population growth while maintaining consistency with the Comprehensive Plan, its Future Land Use Plan, and those regulatory tools that work to implement the Comprehensive Plan.**

As the Act 537 Plan for Penn Township is updated over time, it should maintain consistency with the Future Land Use Plan of the Township regarding land use planning goals. In particular, extensions of public sewer lines into areas targeted for preservation should be avoided. Updates to the Act 537 Plan should also maintain logical and consistent service areas. The Land Use Plan chapter of this Comprehensive Plan can provide guidance concerning where concentrated development is considered most appropriate and where public sewer services should be either avoided or provided. Additionally, the regulatory tools of the Township, particularly the Zoning Ordinance and Subdivision and Land Development Ordinance, should be reviewed to ensure that they support the Future Land Use Plan and appropriate provision of sewage disposal facilities.

- 7-7. Continue to encourage and mandate management and maintenance of on-lot and community sewage facilities to protect water quality and increase the lifespan of these systems.**

A concern for the Township is the proper maintenance of private sewage systems – both community and individual on-lot. Municipal management programs for community systems are currently required by PADEP. A municipal management program, such as requiring pumping and inspection of system components on a regular basis, is strongly recommended by the Chester County Health Department and Chester County Planning Commission for all municipalities with individual on-lot sewage systems. Penn Township passed Ordinance No. 2009-01, which regulates the use, maintenance, and inspection of on-lot systems, including a requirement to pump the initial treatment unit every three years at a minimum. In addition to enforcing this ordinance, Penn Township should make materials on good practices for maintaining on-lot systems (available from the Chester County Health Department) available at the Township office, and discuss proper maintenance in the Township newsletter and via links on the Township website.

- 7-8. Maintain a focus on innovative wastewater treatment and disposal systems to reduce impacts on natural resources and watershed water balances.**

An important environmental policy to promote in sewage facilities planning is the use of sewage facilities that promote groundwater recharge as opposed to those that export water out of Penn Township, both for the Township public system and for community systems. Where community systems are proposed, the use of spray irrigation or land application is considered preferable to a stream discharge package treatment plant. Penn Township should continue to maintain an emphasis on the recharge of groundwater in their Act 537 Plan and with their sewage disposal facilities.

Water Supply

The issue of ground and surface water protection is covered extensively in Chapter Four, Natural Resources Inventory and Plan. The following recommendations focus on drinking water.

- 7-9. Encourage the routine testing of on-lot wells used as a source of drinking water and educate the public on protecting the water quality of these wells.**

Utilizing public outreach methods currently in place, the Township should educate residents on the importance of understanding and protecting water quality.

- 7-10. Maintain consistency between provision of water supply and the Comprehensive Plan, its Future Land Use Plan, and those regulatory tools used to carry out the Comprehensive Plan.**

As with sewage facilities, the extension of public water lines into areas where open space preservation is a goal should be avoided so as not to encourage higher intensity uses in inappropriate places. This may be a more difficult goal to achieve as there is already a major water line owned by Chester Water Authority running along Route 796. Penn Township should discourage use of public water north of Route 1 within its borders, and establish a dialogue with Chester Water Authority regarding provision of public water within the Township.

Stormwater Management

- 7-11. Ensure that stormwater management ordinances mandate proper design, construction, and maintenance of stormwater management infrastructure, and amend as necessary to keep current with emerging technologies and practices.**

Stormwater management is an evolving field, and the Township will need to periodically review its regulatory controls to ensure that they are meeting the requirements of the MS4 program, the needs of the Township, and other state and federal requirements, as well as advocating for current best practices. New development should be held to the most current standards to ensure prevention and minimization of stormwater runoff. The *County-wide Act 167 Stormwater Management Plan for Chester County, PA* is now available at www.chesco.org/water.

7-12. Provide public education and information about cost-effective and reasonable maintenance practices to owners and operators of stormwater management facilities and the general public.

There are multiple sources for information regarding stormwater runoff and maintenance of stormwater facilities, such as the Chester County Water Resources Authority or PADEP, or websites such as www.stormwaterpa.org. Penn Township can deliver this information to its residents and businesses through the various public outreach tools available to the Township. This could include informational packets available at the Township office and links on the Township website regarding rain barrels, rain gardens, dangers of pesticides and herbicides in runoff, or similar issues.

7-13. Track NPDES Phase II and MS4 requirements to ensure that the Township is in compliance with the regulations, to include: regular inspection of inlets and outfalls; updates to mapping of stormwater infrastructure as necessary; opportunities for the public to participate in stormwater management program development and implementation; and development of a plan to reduce runoff from municipal properties and operations.

Penn Township is required by PADEP to fulfill the requirements of the MS4 permit. These permit requirements may change with time, and many requirements of the permit are of an on-going nature. The Township needs a continuous focus on the different requirements of the program, which range in nature from maintenance issues such as inspecting inlets and outfalls to detect illicit discharges, to development of plans to prevent or reduce runoff from municipal operations.

Solid Waste Collection and Disposal

7-14. Update regulatory ordinances to require curbside recycling by all private haulers that operate within Penn Township, and continue to promote recycling by residents and businesses with outreach, education, and provision of convenient drop-off locations.

Penn Township now meets the minimum population and density criteria set by Act 101, which mandates the provision of curbside recycling. Most private haulers now provide curbside recycling service, but to ensure compliance with Act 101, Penn Township should update its solid waste ordinance to require mandatory curbside recycling. In addition, the Township should continue to promote recycling and composting through existing public outreach tools and continued operation of the Penn Township Recycling Facility. The Township should also remain aware of innovations, such as the ability to recycle additional materials, or improve efficiencies in drop-off, storage, and hauling. By maintaining consistency with state requirements and being proactive with recycling, the Township will be better situated to take advantage of state and federal programs that may be available in the coming years.

- 7-15. Support the continued use of the SECCRA landfill as an essential element in the Township’s solid waste management program, and support SECCRA’s commitment to recycling and alternative energy generation as critical components of extending the landfill’s lifespan.**

SECCRA has fulfilled the solid waste disposal needs of its member municipalities for many years, and will continue to do so with proper management. Encouraging recycling with public education, mandated curbside pickup by private haulers, provision of convenient drop-off locations, and the availability at SECCRA to recycle non-traditional items, will ensure that the landfill continues to serve its member municipalities. Additionally, the generation of energy through methane gas recovery at SECCRA captures a previously lost energy source, which will likely only increase in importance over time. Other innovative techniques for producing energy from landfills could potentially be developed in time. As a founding member of SECCRA, Penn Township has the opportunity to support such efforts and encourage innovative practices by SECCRA.

Emergency Services

Overall Emergency Management

- 7-16. Update the Basic Emergency Operations Plan (EOP) on an annual basis in coordination with the Chester County Department of Emergency Services, and participate in updates to the Chester County Hazard Mitigation Plan.**

EOPs need to be updated on an annual basis to ensure effective and efficient operations in the case of a disaster. The Township’s Emergency Management Coordinator should lead this effort in full coordination with Chester County Department of Emergency Services and AGREM. Current Records of the Chester County Department of Emergency Services indicate the most recent Township EOP update was in May 2003. The Township has signed onto the current Chester County Hazard Mitigation Plan, which is updated periodically. The Township needs to remain aware of its responsibilities in regard to both plans.

- 7-17. Continue to disseminate information to residents and businesses on prevention and preparedness such as use of fire alarms, proper display of house numbers, escape plans, 911 protocols, and the Special Needs Registry.**

Use of public outreach tools to share emergency management and emergency services information can benefit residents, businesses, and the emergency responders that serve the Township. For example, while the International Building Code (ICC) requires appropriate display of the street address for all new construction, public outreach can focus on encouraging existing structures to display their address in a consistent manner. Additionally, commercial and industrial development can be encouraged to display the address at all entrances, including areas used for loading, employee entrance, etc. Information such as this should be available on a continuous basis on the Township website and periodically featured in the Township newsletter and other outlets.

The Township has already publicized the existence of the Special Needs Registry, but should continue to periodically discuss this resource through a variety of public outreach outlets to maintain it as an effective tool of emergency management. Provision of services to those most in need during times of an emergency is a critical government function, and the Township can best serve its residents by identifying in advance those most in need. Information and brochures on the Special Needs Registry and other prevention and preparedness issues can be obtained by contacting the Chester County Department of Emergency Services.

7-18. Encourage and support volunteer emergency services providers to seek grant funding from the state and federal levels and alternative sources, and seek funding at the municipal level as appropriate.

As Penn Township has made good use of grant funding, its emergency services providers should be encouraged and supported to do the same within their available funding programs to maintain and upgrade their facilities and equipment. Additionally, the Township should remain aware of grant opportunities and low-interest loans that are directed only to municipalities for the benefit of emergency response. Agencies such as the Department of Homeland Security, Southeastern Pennsylvania Regional Task Force, Pennsylvania Department of Agriculture, Pennsylvania Department of Community and Economic Development, and the Pennsylvania Office of the State Fire Commissioner may at times offer grants or low-interest loans related to emergency response. The Pennsylvania Fire and Emergency Services Institute (www.pfesi.org) is a useful resource to investigate emergency services grants and loans from a variety of organizations.

7-19. Continue record-sharing coordination between the Township and local emergency services providers to provide information on new development and redevelopment in the Township.

Seeking the comment of local EMS providers on proposed subdivisions is beneficial to all parties, and can allow for review of details such as roadways widths and turning radii with respect to emergency equipment. Any changes to the transportation system should be coordinated with emergency responders for their input; for example, new traffic signals or upgrades to existing signals should always provide for preemption for emergency response vehicles. Additionally, the provision of information concerning proposed and approved subdivision and land developments (such as location maps with the number and type of dwellings) to the fire and ambulance providers on a regular basis assists them in providing better coverage and service to Penn Township and its residents.

7-20. Continue participation in the Avon Grove Regional Emergency Management (AGREM) and Southern Chester County Co-op for their benefits related to emergency management and response.

Participation in the Southern Chester County Co-op and AGREM are cost-effective and efficient ways to ensure that the Township has the necessary training, expertise, and equipment available if an emergency should arise.

7-21. Identify potential hazard mitigation projects.

Mitigation is the process of preventing disaster based on known, high-risk hazards that have caused damage and destruction in the past. Having a prepared list of potential mitigation projects, such as a bridge replacement for a site that currently causes upstream flooding, will position the Township better for when competitive grant funding becomes available.

7-22. Ensure emergency service providers have the appropriate training.

In this context, emergency service providers include not only fire, police, and ambulance responders, but also elected officials and staff for the Township that are assigned duties under the EOP. Personnel that have responsibilities in the EOP, including the Emergency Management Coordinator, need the appropriate National Incident Management System (NIMS) training as defined by the U.S. Department of Homeland Security. This training can be obtained through the Chester County Department of Emergency Services, and some training can be taken as an online course. Appropriate training for responders is a requirement of certain grants, so compliance with training requirements can have financial implications.

7-23. Adopt an ordinance ensuring minimum acceptable in-building radio coverage for emergency communications.

Radio communications are essential for emergency services. While single family residential structures typically do not interfere with radio communications, larger structures can. The Township should adopt an ordinance that covers multi-family residential housing and commercial, industrial, and institutional facilities to ensure that new construction is designed and built to ensure radio coverage. The Chester County Department of Emergency Services has a model ordinance for municipal use regarding in-building radio coverage.

Police

7-24. Monitor state police staffing levels and response times to ensure that adequate protection is provided.

Penn should continue to monitor State Police staffing and response time. If issues with response times arise, Penn should communicate their concerns to the Avondale barracks, State Police headquarters, and elected officials to ensure the appropriate level of staffing at the Avondale Barracks and adequate response times over a 24 hour basis. If response times are inadequate over a continuous period of time, Penn may need to investigate options, such as a cooperative effort with other municipalities.

7-25. Consider adopting a False Alarm Ordinance

False alarms reduce the efficiency of the emergency service providers by committing manpower and equipment unnecessarily. Penn should consider adopting a false alarm ordinance that penalizes offenders for unnecessary disruption of police and fire coverage, to minimize false alarms. Current state legislation (PA Crimes Code 7511, Control of Alarm Devices and Automatic Dialing

Devices) calls for fines for those persons causing more than three false alarms within twelve consecutive months, and Penn Township could adopt a similar local ordinance. A portion of fees from such an ordinance could be dedicated to funding emergency service providers. Upper Uwchlan Township has such an ordinance in place.

Fire and Ambulance

7-26. Monitor fire and ambulance staffing levels, response times, and the number of calls within Penn Township to ensure that adequate protection is provided.

Fire protection is provided by West Grove Fire Company as the primary responder and Avondale Fire Company as the backup. Ambulance service is provided by Medic 94 for advanced life support and West Grove Fire Company for basic life support. Understanding the number of fire and ambulance calls that Penn Township residents and businesses place annually, and the response times provided, is a critical first step in ensuring that these services are adequately protecting the Township's residents and businesses. Regular communication with these service providers can assist both the Township and the providers in ensuring adequate service.

7-27. Determine equitable funding for fire and ambulance services and budget appropriately on an annual basis.

West Grove Fire Company is primarily staffed by volunteers for fire service and a mix of volunteers and paid staff for ambulance service. Avondale Fire Company operates in a similar fashion, while Medic 94 is a fully paid staff operation. These types of arrangements are very cost-effective and efficient service for the municipalities served. However, the necessary facilities, equipment, and paid staff require funding, and Penn Township should provide funding on an annual basis in proportion to the services its residents require to ensure the health and safety of residents. Pennsylvania law requires that municipalities ensure that "fire and emergency medical services are provided within...including the appropriate financial and administrative assistance for those services" (1933, P.L.103, No.69, § 1553).

7-28. Support local fire companies by publicizing the benefits and needs of volunteer fire and ambulance service.

The Township can use its existing public outreach methods to encourage its residents and businesses to support the local fire and ambulance service with volunteer service or financial assistance. Existing public outreach tools are low-cost methods by which Penn Township can promote the benefits these organizations provide the community and communicate the need to support them.

7-29. Consider adoption of the local option for residential sprinklers as part of the local building code.

Promoting the use of residential sprinklers can be required through an ordinance, or by providing incentives. West Whiteland Township has required automatic fire

sprinkler systems to be installed in all new residential construction since 1989. Incentives can be directed to homeowners or developers.

7-30. Encourage local fire company participation in the Pennsylvania Fire Incident Reporting System (PennFIRS).

PennFIRS is intended to assist the state’s fire departments in managing the flow of their reports to the United States Fire Administration’s National Fire Data Center, and can also be used for reviewing and analyzing Pennsylvania’s fire situation. The information available through PennFIRS can be an important resource for agencies and organizations that participate in the system. Additionally, some state and federal grant or loan programs require participation in PennFIRS.

7-31. Appoint a Fire Marshal.

Municipalities are required to specifically appoint a local Fire Marshal. While this position can be filled by a member of the local fire company, it is not a requirement.

Libraries

7-32. Determine equitable funding for the Avon Grove Library and budget appropriately on an annual basis.

Individual municipalities choose whether or not to provide funding to their local library. The library system has a formula to determine what each municipality’s appropriate portion is, based on multiple factors, including population and use. However, the individual municipality chooses whether to contribute the recommended level of funding, or a higher or lower level. Penn Township should maintain contact with Avon Grove Library to remain up to date regarding the recommended level of funding and review annual contributions to the library as part of the annual budget process.

7-33. Publicize within the local community the need to support (with funding and time) the Avon Grove Library and the services it provides the community.

In addition to funding from local municipalities, public libraries within Chester County rely on support from residents and businesses within their communities, both financial and volunteer. Providing information on the services provided by the library, and the need for the community to support those services, on the Township website and in newsletter articles is one way for the Township to support the Avon Grove Library.

Post Office

7-34. Continue communication with the Kelton Post Office about the possibility of relocating the Post Office building to the Township owned property on Lewis Road.

Although it appears unlikely to occur in the near future, the community would benefit from a Post Office location more centrally located in the Township. Penn

Township should continue communication with the Kelton Post Office regarding this desire.

Education

7-35. Communicate on a regular basis with the Avon Grove School District regarding proposed and approved development plans that may impact student enrollment levels, after-school use of school facilities for community and recreational purposes, and future expansion plans of the district.

As a whole, the Avon Grove School District is at 95 percent capacity, with the high school currently overcapacity. However, as noted previously, student population growth has slowed in recent years and a study prepared for the district indicated a slowing of student population growth from school year 2012-2013 until school year 2017-2018. The slowed growth projection is related in large part to the dramatic decline in permits issued for construction of new residential units and in the number and size of proposed and approved subdivisions in recent years.

Tracking of student population numbers and the potential impact on expansion plans of the district within Penn Township is clearly necessary on the part of the Township, particularly given that the district currently owns approximately 154 acres within the Township. While there are no current plans, there has been discussion of construction of two facilities on this property. In turn, sharing information with the district regarding proposed and approved residential development will help the district best understand the future needs within Penn Township.

In addition, communication regarding after-school use of district facilities, particularly Penn London Elementary School, is appropriate, given its location within Penn Township and its use for after-school programs for students, such as Scout troop meetings and before- and after-school child care for the Southern Chester County YMCA. An open dialogue between the Township and the school district should be maintained through regular meetings to discuss all of these issues.

Compliance with new amendments to the MPC (House Bill No. 823, amending sections 508.1 and 711) is also necessary. This legislation requires municipalities to provide monthly notices to school districts regarding any residential development approved in the preceding month. These notices shall include the location of the development, number and types of units, and expected construction schedule.

7-36. Continue to communicate on a regular basis with Chester County Technical College High School.

A recent addition to the Township, coordination should be maintained with this facility on a regular basis to address any issues that arise, such as stormwater management, parking, sewage, traffic, utilities, security, or future expansion.

Health Care

7-37. Continue to support the Jennersville Regional Hospital and local medical providers serving the residents of Penn Township and the region.

The Health Care Industry is a major component of the Penn Township economy and has grown significantly in recent years. Age-restricted development in the township, such as Jenner's Pond and Luther House, benefit from a location that is convenient to the Jennersville Regional Hospital medical campus and associated services offered in the area. Support of these providers could include assisting them with navigating the Township's regulatory controls.

7-38. Support efforts to expand assisted living and skilled nursing facilities and services within the Township, and the region, to meet the continuing care needs of an aging population.

The median age of residents in Penn Township has been increasing with the ongoing development of retirement and active-adult communities, and the residents of these communities will likely, over time, require higher levels of assistance and care. The Preston Residence at Jenner's Pond is the only facility in the Township that offers residential skilled nursing care. The Township should consider supporting expansion of this facility, as appropriate, or development of additional quality skilled nursing facilities to address the need for services as that need arises.

7-39. Assist Spanish-speaking residents in accessing services provided by Project Salud, a primary health care facility located in Kennett Square, or other regional health care clinic with bilingual staff and services.

As noted previously, the Health and Welfare Foundation of Southern Chester County conducted focus group meetings to identify the needs of low-income and disadvantaged populations in southern Chester County. The overwhelming consensus of the West Grove focus group was that the vast majority of unmet health care and social service needs in the region were concentrated in the Latino community due to difficulty accessing health care. Issues included lack of transportation, limited financial resources, and the language barrier. The nearest health clinic serving low-income or uninsured residents is Project Salud at La Comunidad Hispana in Kennett Square. The Township could provide materials in English and Spanish at the Township office and via other public outreach methods to refer residents to available health care services.

Human Services

7-40. Support the programs and make referrals to organizations where services and activities are available for senior citizens in the southern part of the County, such as the Senior Circle, Oxford Area Senior Center, and Kennett Area Senior Center.

The Senior Circle program operated through Jennersville Hospital provides opportunities for seniors to participate in activities and be part of the greater community. Not all seniors, however, will take advantage of the opportunity. Some

seniors may live alone and can become isolated. The Township could consider partnering with the Kennett Area and Oxford Area Senior Centers to provide outreach to homebound or disabled seniors.

7-41. Provide information and referral materials through the Township office, website, and other outreach methods for residents with basic needs assistance.

The 2008-2009 economic downturn has placed an increased number of people in need of assistance with basic needs, which in turn increases demands on the human services system to assist residents with food, clothing, and utilities/heating costs. Some Penn Township residents are among those experiencing a need for assistance. The Township can assist its residents in need by offering information about the locations of food banks and other services at the Township office and website.

7-42. Publicize public transportation services available within the Township, and promote enhancement and expansion of public transportation services, to assist senior citizens and disadvantaged populations with access to jobs and supportive services.

Rover and SCCOOT provide public transportation within Penn Township. Rover provides transportation for seniors and the disabled at discounted fares, and general ridership at full fare. The SCCOOT bus route includes regular stops at Luther House, Jennersville Regional Hospital, and the Shoppes at Jenner's Village. Seniors, people with disabilities, and the Latino population are populations that tend to be more isolated and marginalized, and may need specific outreach in order to access services such as public transportation.

Links

Penn Township

www.penntownship.us/

Watersheds

<http://dsf.chesco.org/water/cwp/view.asp?a=3&q=610690>

Stormwater Information

www.stormwaterpa.org

Chester County Water Resources Authority

www.chesco.org/water

SECCRA

<http://seccra.org/>

Chester County Department of Emergency Services

www.chesco.org/des

West Grove Fire Company

www.wgfc.org/

Southern Chester County Emergency Medical Services/Medic 94

www.sccems.org/

AGREM

<http://agrem.org/>

Avon Grove Library

www.avongrovelibrary.org/

Avon Grove School District

www.avongrove.org/

Avon Grove Charter School

www.agcharter.org/

Chester County Technical College High School

www.cciu.org/Domain/199

Jennersville Regional Hospital

www.jennersville.com

La Comunidad Hispana – Project Salud

www.lacomunidadhispana.org/

Oxford Neighborhood Services Center

<http://oxfordnsc.org/>

Oxford Area Senior Center

www.oxfordseniors.org/

Kennett Area Senior Center

www.kennettseniorcenter.org/

Catholic Social Services – West Grove

www.catholicsocialservicesphilly.org/contact.php

PARKS, RECREATION, AND OPEN SPACE INVENTORY AND PLAN

Introduction

Parks, recreation, and open space provide significant and tangible economic and quality-of-life benefits at the local level. Long recognized as a way to protect important natural resources and preserve agricultural lands, parks and open space are increasingly recognized for other community benefits. These include their value for recreation and corresponding impacts on health, as well as their value in creating a space for a community to gather. This chapter provides an inventory of park, recreation, and open space resources and plan recommendations.

This chapter addresses the following topics:

- Inventory
 - Terminology
 - Parks and Recreation
 - Existing Conditions
 - Evaluation of Needs
 - Open Space
 - Existing Conditions
 - Needs Evaluation
 - Trail, Path, and Pedestrian Networks
 - Existing Conditions
 - Needs Evaluation
 - Recreation Programming and Administration
 - Existing Conditions
 - Needs Evaluation
- Planning Implications
- Recommendations



Inventory

Terminology

Recreation and open space planning use a number of terms that need to be defined in order for a municipality to set policies that can be implemented through ordinances and regulations. The key terms are:

- **Recreation and Recreation Facilities**

Recreation can be generally defined as an activity that provides therapeutic restoration of one’s mind or body. Recreation facilities can refer to any public- or privately-owned property used for recreation, including indoor or outdoor activities. Recreation facilities can range from sport fields and nature preserves to indoor pools and gyms. A recreation facility can even be a paved downtown plaza or a municipal parking lot used as seating for an outdoor summer movie.

- **Park**

There is no established set of characteristics that a property must have in order to be called a park. In general, a park is an outdoor facility established to provide the public with opportunities for recreation. A park can be a wildlife preserve, a historic site, a quarter-acre tot-lot, or the 3,472 square miles of Yellowstone National Park. In Chester County some properties set aside as natural areas are called “parks,” even though they do not provide public recreation.

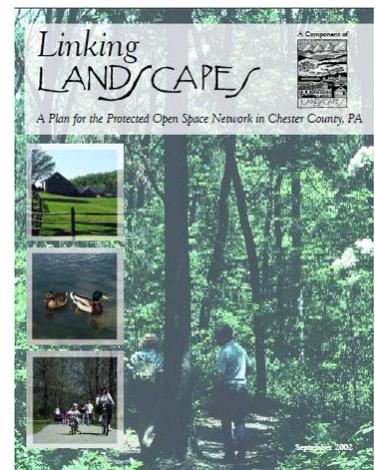
Linking Landscapes: A Plan for the Protected Open Space Network in Chester County, PA (Chester County Planning Commission, 2002) defines a park as any outdoor property with few if any structures that is: 1) owned in-fee or permanently eased for recreation by a government agency, 2) is open to the general public, 3) is specifically managed to provide public recreation, and 4) has public recreation as its primary use. This definition stresses that parks are acquired, designed, and managed to be public recreation facilities.

- **Passive and Active Recreation**

Parks are typically identified based on the type of recreation which they provide, which in general terms can be described as active or passive recreation. *Linking Landscapes* includes the following definitions for passive and active recreation:

- **Active Recreation** includes recreation activities that are usually rigorously athletic, not quiet, and have a noticeable impact on the surrounding environment. These may include individual or team sports, large picnics, children’s playgrounds, and recreational events with a high density of people. Parks that provide active recreation commonly include tennis, volleyball and basketball courts; swing sets, playgrounds, and tot-lots; or fields for team sports such as football, soccer, and baseball/softball. Active recreation parks can be quite small, as in the case of a tot-lot, or they can cover multiple acres, as in the case of a sports field complex.

Historically, active recreation parks in Chester County have been purchased and managed by municipal governments, and municipal parks currently provide the



Linking Landscapes provides a vision for multi-municipal open space planning on a countywide basis.

majority of public active recreation opportunities within the County. This situation is likely to continue. County or state facilities are primarily designed for passive recreation and may require a further distance to travel. Some sports fields are owned by sports leagues or schools, which may be closed to the public.

- **Passive Recreation** includes recreation activities that are usually quiet and not rigorously athletic, and have a low impact on the surrounding environment. These activities may include walking, hiking, fishing, bird watching, and quiet picnicking. Parks that provide passive recreation may include trails, public gardens or memorial parks, open areas, and picnic areas. Passive recreation parks in suburban or rural settings tend to be larger than active recreation facilities and may have natural or scenic significance, containing a stream, woodland, or historically significant resource.

The same recreational activity may be regarded as passive in one situation, but active in another, depending on the scale of the activity or the size of the park. For example, most people would classify a pair of hikers or a small picnic of four people as being passive recreation, while a hiking group of 50 energetic teenagers or a large family reunion picnic would be called active recreation. Similarly, a group of mountain bikers or horseback riders in a 5,000 acre wilderness preserve might have little impact and be called passive recreation, while the same group in a 50 acre park might be called active recreation.

Simply put, there are some activities that cannot be clearly categorized as being exclusively active or passive recreation. It is up to each municipality to define what constitutes active and passive recreation, and include these definitions in regulations and ordinances. In this way, parks can be designated as active recreation facilities, passive recreation facilities or both. In some instances parts of one park can be designated for active use, while other parts can be set aside for passive recreation. What is most important is to make these designations clear to park users.

- **Trails, Paths, and Routes**

A trail is a kind of recreation facility. However, there is no universally recognized definition for trail and in common conversation the term is often used interchangeably with path or route. In this chapter, trails, paths, and routes will be discussed using definitions developed by the Chester County Planning Commission in *Linking Landscapes* and based on terminology used by the Pennsylvania Department of Conservation and Natural Resources (DCNR).

- A **trail** is an off-road facility with a permanent alignment that is open to the general public and that is designed, constructed, and maintained as part of a public park system, and used for a variety of non-motorized forms of travel including walking, hiking, bicycling, cross-country skiing, or horseback riding.
- A **path** is a specific type of trail that has been designed, constructed, maintained, and used primarily for one form of travel. Thus a bike path is an off-road facility that has been designed to be used primarily by bicyclists. Although paths are designed to be used by only one mode of travel, they are usually used by other types of users. Limiting the use of a path to one type of user is difficult to enforce, and so path managers commonly must rely on voluntary compliance by the users.
- A **route** is a facility that utilizes the shoulders of paved streets or the motor vehicle travel lanes of roads with low traffic volumes. In general, bicycle routes extend along streets or rights-of-way owned by the Pennsylvania Department of Transportation (PennDOT). Roadside routes are sometimes used to link

together trail segments that cannot be linked by an off-road corridor, and so should be considered in any trail network project.

- **Open Space**

As with trails, there is no single accepted definition for “open space” in either the planning or the legal profession. To prevent confusion, it is important to be clear what type of open space is being referred to in the discussion of municipal and regional open space planning. Open space can be defined very broadly as any land that is not covered by buildings or pavement. For the purposes of this Plan, open space is primarily discussed in terms of being either protected or unprotected open space. Economic benefits of open space include the maintenance of property values and the ability to attract both employers and employees. In Chester County, open space is closely linked to the vitality of the agricultural and equine industry. Tourism, such as taking a scenic drive, visiting historic sites, or bicycling, is another important element of the county economy that depends on open space.



In Penn Township, a significant portion of the protected open space is under the control of homeowners associations and is associated with recent development.

- **Greenway**

A linear corridor of open space, usually established along streams, ridges or abandoned rail lines, which is used for recreation or resource preservation or restoration. A greenway can vary in width and length, and should link destinations such as downtowns, historic districts, parks or nature preserves.

Parks and Recreation

Existing Conditions

Types of Ownership

Park and recreation facilities fall under the following three general categories of ownership:

- **Public**

Public parks or recreational facilities are owned and maintained by governments in order to provide recreation opportunities to the general public. The governmental body may impose access limitations that are related to the health, safety and welfare of the public, such as closing the park at dusk or requiring permits for large group activities.

- **Limited-public Access**

Most limited-public access recreation facilities are owned and maintained by schools and other institutions. They are commonly used by the public for informal recreation, but the facility owner maintains the option to limit or ban public use. Limited-public access facilities also include fields that provide playing fields and practice areas for organized leagues.

- **Private**

Private parks and recreational facilities are privately owned properties such as golf courses and arboretums. Public access is usually granted by permission of the owner, and may be limited to paying members. These facilities may be non-profit or commercial facilities.

Public Parks within Penn Township

As Figure 8-1 shows, Penn Township has two municipally-owned and managed recreational parks, one of which is still under development.

Figure 8-1: Public Parks and Recreation Facilities within Penn Township

Park or Recreation Features	Penn Township Community Park	Municipal Open Space (Under Development)
Size	10.6 acres	91.5 acres
Active Recreation Facilities	Playgrounds, Courts, Paths, Gazebos	No
Passive Recreation Facilities	Fields	Yes
User Support Amenities	Parking, Restrooms	No
Level of Maintenance	High	Low
Ease of Access by Pedestrians	Low	Medium

Map 8-1 (Appendix A) illustrates that the Township’s two parks are clustered near each other and are located near some of the more densely developed parts of the Township. The Jennersville YCMA is located north of the existing park, across Baltimore Pike. There are no existing or proposed recreation facilities in the northern or eastern part of the Township.

Parks and Recreation Facilities used by Penn Township Residents

Residents in Penn Township have access to a number of publicly owned community and regional parks that are located within 10 miles, including Goddard Park in London Grove Township. Penn residents also use Nichol Park in London Britain Township. Both parks permit dogs, which are not permitted at the Penn Township Community Park. These facilities and others (see Figure 8-2) can generally be reached by a 10 to 30 minute drive.



The Community Park has several features for visitors to enjoy, including a playground, gazebos, and trails. The Community Park has been heavily used since its development.

Figure 8-2: Recreational Facilities Used by Penn Township Residents

Facility Name/Location	Recreation Amenities
Public Recreation Facilities	
Goddard Park, London Grove Township	Township park with trails and playground
Nichol Park, London Britain Township	Township park with trails, playground, courts, and fields
White Clay Creek Bi-State Preserve, London Britain Township	1,350 acre state park operated facility with trails, picnic areas, and historic buildings
Fair Hill State Natural Resource Management Area, Cecil County, MD	5,600 acre state preserve with trails, campsites, and equestrian facilities
Nottingham County Park	625 acre County Park facility with trails and picnic areas
State Forest District 17	578 acre State managed lands with trails
Limited Public Access Recreation Facilities	
Jennersville YMCA	Non-profit fitness center, with exercise equipment, indoor courts, pre-school facilities, and indoor and outdoor pools
Penn London Elementary School	48.6 acre public school campus with sports fields
Avon Grove Intermediate School	57.6 acre public school campus with sports fields

Evaluation of Needs

Land Use and Demographic Trends

For most of its history, Penn Township has been a rural agricultural community where traditional outdoor physical activity was part of everyday life. However, recent decades have witnessed a rise in sedentary activities such as working at a computer or playing video games. Further, there has been a loss of open lands traditionally used for recreation. As a result, a growing number of residents now rely on dedicated recreation facilities for their recreation needs.

Demographics are also an important consideration in understanding recreation needs, particularly in Penn Township due to the presence of several age-restricted communities. The 45 to 64 age group represents almost 27 percent of the Township’s population, and the 65 and older age group represents almost 24 percent of the Township’s population. Penn Township’s median age is 45.3, in comparison to a median age of 38.6 for Chester County overall. (See Chapter 3 for additional detail on community demographics.) These characteristics indicate a need for recreation planning and programming to place a special emphasis on the elderly, while providing for all age groups.

Another demographic consideration for the Township is the change in the Hispanic population. Previously, large segments of the Hispanic population consisted of single males, while the current trend is towards married men with families. The 2010 Census revealed that Penn Township’s Hispanic population continues to grow at a significant pace, and at 8.1 percent is higher than the 6.5 percent for Chester County overall.

Understanding the demographics of the community can help ensure that the recreation needs and preferences of all age groups are taken into consideration. Direct communication with the public is also important. Recently there have been calls for a

dog park in the Township, and it has been considered as part of the master plan for the future park site. Residents of the age-restricted communities have noted a preference for horseshoe pits and bocce courts. In general, multi-purpose fields and paved courts have been popular because they can support a variety of activities.

Guidelines

There are several equally valid techniques that can be used to determine park needs within a community. The most current National Recreation and Park Association (NRPA) guidelines are from 1996. These guidelines refer to a service area which is a circle drawn around a park that represents the area in which most of the park’s users are likely to live. In general, small parks will attract users from a small service area, while larger parks with more facilities or unique features will attract users from a much larger radius. The NRPA classifies parks using a system similar to the one presented in Chester County’s *Linking Landscapes*, as shown in Figure 8-3.

Figure 8-3: Park Guidelines Comparison

Park Classification	NRPA’s Current Guidelines (1996)	<i>Linking Landscapes</i> (2002)
Mini-park	2,500 square feet to 1 acre, in a residential setting serving the surrounding 0.25 miles	0.01 to 0.49 acre, with 0.25-mile service area equal to 8-minute walk
Neighborhood Park	5 to 10 acres in size, serving the surrounding 0.25 to 0.50 miles	0.5 to 19.9 acres, with 0.5-mile service area equal to 15-minute walk
Community Park	30 to 50 acres in size, serving the surrounding 0.50 to 3.0 miles	20 to 399 acres, with 2.5-mile service area equal to 5-minute drive or 30-minute walk

In recent years, the NRPA has determined that promoting a strict classification of parks is not an effective tool for creating parks or addressing recreation needs. As a result, they propose that park classifications be used as general guidelines, not hard and fast standards. Most often, parkland is acquired on short notice when unique opportunities arise, such as through a developer’s donation. Therefore, municipalities should be flexible, and build a network of parks based on public desire and the municipality’s ability to fund and maintain the acquisition. More information can be found at the NRPA’s website: www.nrpa.org.

Needs within Penn Township

In the past, recreation planning in Chester County evaluated existing active recreation park facilities using NRPA guidelines to project future park needs. As noted previously, *Linking Landscapes* provides an updated philosophy and guidelines called the Chester County Recreational Park Standards, shown in Figure 8-4.

Figure 8-4 Chester County Recreational Park Standards

	Regional Park	Sub-regional Park	Community Park	Neighborhood Park	Mini Park
Service Radius	30 mi. (equal to a 60 min. drive)	7.5 mi. (equal to a 15 min. drive)	2.5 mi. (equal to a 5 min. drive or a 30 min. walk)	0.5 mi. (equal to a 15 min. walk)	0.25 mi. (equal to an 8 min. walk)
Minimum Acreage	20 ac. per 1,000 people	8.5 ac. per 1,000 people	3.0 to 6.0 ac. per 1,000 people	2.5 to 3.5 ac. per 1,000 people	0.25 ac. per 1,000 people
Maximum Population*	None	100,000	25,000	5,000	2,000
Size of Park	1,000 acres or more	400 acres to 999 acres	20 acres to 399 acres	0.5 acres to 19.9 acres	0.01 acre to 0.49 acres

Note: * Maximum Population is the largest recommended population for a given service area.

In 2002, *Linking Landscapes* applied the County standards to evaluate Penn Township’s projected recreation needs. This analysis determined that Penn Township, which in 2002 had 9.9 acres of recreational park, would need an additional 23.7 acres by the year 2025. This suggested that at a minimum, the Township should have an additional 20 to 25 acres of active recreational parkland, which the new 95 acre park will fulfill. However, the raw acreage of recreational land is not the only issue to consider when evaluating recreational needs. *Linking Landscapes* determined that Penn Township would need an additional neighborhood park (of 0.5 to 20 acres), but no mini parks of less than an acre.

Population is not used for determining how much passive recreation is needed in a community. Typically, passive parks focus on protecting or conserving a specific natural, historical, or locally significant landscape, regardless of population. Penn Township has prospered over the decades because its level, fertile soils were well suited for cropland. There are currently few areas that have not been plowed or developed, leaving no major forest lands or natural areas. As a result, future passive recreational facilities in the Township will likely focus on locally significant landscapes, such as stream corridors within the Big Elk Creek and White Clay Creek watersheds.

When planning to acquire property for sports fields or other outdoor recreation facilities, local officials and community leaders should be aware of the dimensional requirement for the facilities that they wish to accommodate. Figure 8-5 presents an overview of design standards for the most common sports and outdoor recreation facilities.

Figure 8-5: NRPA Suggested Outdoor Facility Development Standards (Sampling)

Activity	Size and Dimensions	Area Needed
Basketball, Youth	46’ – 50’ x 84’	2,400-3,036 sq. ft.
Basketball, HS	50’ x 84’	5,040-7,280 sq. ft.
Tennis	36’ x 78’ with 12 ft. clearance on both ends	Minimum of 7,200 sq. ft. single court area
Baseball, Official	Baselines - 90’, Pitching distance - 60.5’, Foul lines - min. 320’, Center field - 400’+	Minimum 3.0-3.85 ac.
Baseball, Little League	Baselines - 60’, Pitching distance - 46’, Foul lines - 200’, Center field - 200’ to 250’	Minimum 1.2 ac.
Football	160’ x 360’ with minimum 6’ clearance on all sides	Minimum 1.5 ac.
Soccer	195’ to 225’ x 330’ to 360’ with 10’ minimum clearance on all sides.	1.7 to 2.1 ac.
Golf- driving range	900’ x 690’ wide. Add 12’ width each add. tee	13.5 ac. for min. 25 tees
Quarter mile running track	Overall width - 276’, length - 600’, track width for 8 to 4 lanes is 32’	4.3 ac.
Softball	Baselines 60’, pitching distance 40’ (women) &45’ (men) , fast pitch field radius from plate 225’, slow pitch field radius from plate 250’ (women) & 275’ (men)	1.5 to 2.0 ac.
Multiple use court	120’ x 80’	9,840 sq. ft.
Golf, Par 3 (18 hole)	Average length varies – 600 – 2,700 yards	50 to 60 ac
Golf, 9-hole	Average length 2,250 yards	Minimum of 50 ac.
Golf, 18-hole	Average length 6,500 yards	Minimum 110 ac.
Swimming Pools, Teaching	Minimum 25 yards x 45’, even depth of 3-4 ft.	Varies, usually 1 to 2 ac.

Source: Park, Recreation, Open Space and Greenway Guidelines, NRPA, 1996.

Open Space

Existing Conditions

Map 8-1 presents the existing open space in Penn Township. Although this land is open and undeveloped, the school properties, YMCA property and drip irrigation fields could at some future date change uses and be further developed, because they are not permanently protected. Indeed, there are many examples in the region of schools, golf courses, and other open land that became developed, despite the objection of elected officials and surrounding neighbors.

The only way to rigorously ensure that open land will not be developed is to protect it with a conservation easement. A conservation easement is a type of deed restriction that involves a third party, usually a non-profit land trust or a government agency, which ensures that the property will not be developed by either the person selling the land (the first party) or the person buying the land (the second party.) As Map 8-1 shows, there is one property in Penn Township protected by a land trust easement.

Three farms in Penn Township are protected by agricultural conservation easements. These easements are administered by the Chester County Agricultural Lands Preservation Board (ALPB). The ALPB purchases development rights from farmers using state and County funding. These easements benefit the farmer by lowering the land's value, thus lowering the taxes that are based on that value. The community as a whole benefits from agricultural preservation because farmers maintain the land as open space in perpetuity. Most of the municipalities surrounding Penn Township have many farms protected by ALPB easements.



Lacking permanent protection, open space such as this agricultural setting can be quickly and permanently lost to development.

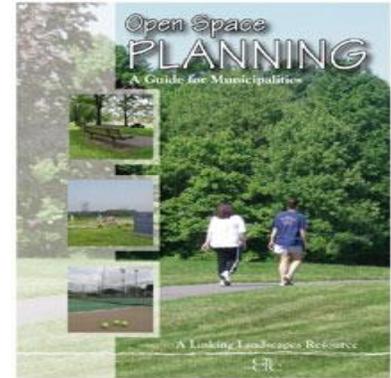
Needs Evaluation

Penn Township is well situated to protect hundred of acres of open space. Map 8-2 (Appendix A) depicts parcels of land that are currently protected open space, as well as lands within an Agricultural Security Area (ASA). Parcels can be enrolled in an ASA by the township if they are used for farming and meet other criteria. Farmers whose land is within an ASA are protected from nuisance lawsuits relating to odors or noises associated with regular farming activities. Although farms within an ASA are not protected from development, the ASA designation typically indicates that a parcel is open and well suited for protection. Map 8-2 also shows lands that are undeveloped (based on current tax assessment records) and measure 10 acres or more, which is typically the smallest acreage that can be protected by a conservation easement.

Map 8-2 shows that there are sizable clusters of open space in Penn Township north of Route 1 and along Big Elk Creek. In general, programs that fund the protection of open space prefer to provide funding for parcels that help to create or expand existing open space clusters. As a result, the open parcels in the southeast quadrant of Penn Township would be less competitive in terms of garnering funds.

Map 8-3 (Appendix A) shows the potential for open space clusters in Penn Township. This map indicates that there is a great potential to create a large, contiguous cluster of largely agricultural open space north of Route 1. This cluster would serve to link undeveloped lands in Upper Oxford Township with those in London Grove Township. There is also the potential to create an agricultural cluster along Penn Township’s southern border, although the school properties would break this cluster up to some degree.

As Map 8-3 also shows, the open lands to the south of Route 1 are not well suited for protection as conserved farmland, but their linear nature and close proximity to residential development make them well suited for protection as a recreational greenway. Furthermore, the eastern end of this greenway would come close to linking with a network of proposed and constructed trails that extend to West Grove Borough, and from there south all the way to White Clay Creek State Preserve.



Open Space Planning: A Guide for Municipalities is a Chester County Planning Commission publication that presents guidance on planning for open space as well as natural and cultural resources.

Trail, Path, and Pedestrian Networks

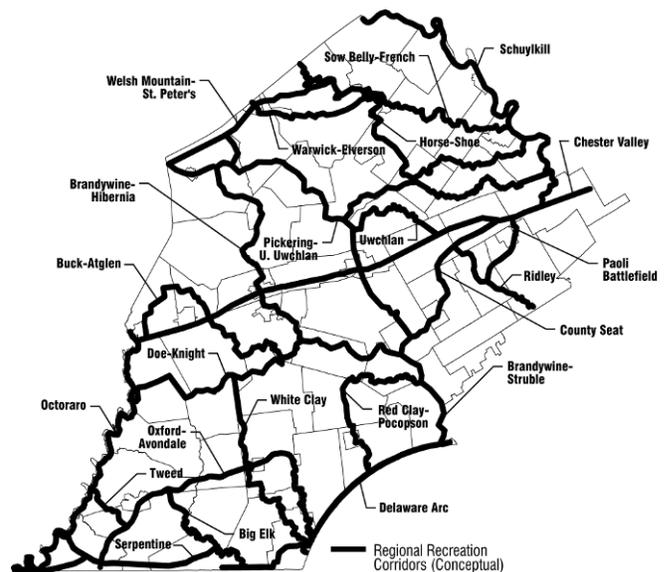
Existing Conditions

The only trails or paths in Penn Township are internal walking paths within the Community Park and the western end of the park currently under development. The Township Park and Recreation Board has discussed the establishment of a trail that would extend approximately four miles from the Township Park south to communities along Jennersville Road, and is actively working to extend the sidewalk network in the vicinity of the Township Park and YMCA facility.

Previous municipal comprehensive planning has indicated that trail corridors could be pursued along roadway corridors including Pusey Mill Road, Corby Road, Pennocks Bridge Road, Sunnyside Road, and Jenners Pond Road/Lewis Road. However, there have been no major initiatives to pursue trail design along these corridors. In 2002, *Linking Landscapes* designated the Oxford-Avondale Regional Recreation Corridor as a possible major trail corridor. As Figure 8-6 shows, this corridor passes through Penn Township, south of Route 1.

The Oxford-Avondale corridor, as shown in Figure 8-6, generally follows the alignment of the rail line that links Avondale Borough with Oxford Borough. This rail line is generally flat and, from a physical perspective, it is well-suited for conversion to a trail. However, the line is actively used, and may well remain viable over the long term. Additionally, the narrow right-of-way of this rail line makes it poorly-suited for rails-with-trails, in which a trail is constructed in a rail right-of-way. In the short term, there are no known plans for abandonment of the rail line, and a rail conversion is unlikely. Should that situation change, the benefits of conversion to a trail would be numerous, although the Township would need to coordinate with neighboring municipalities to pursue a trail conversion.

Figure 8-6: County Designated Regional Recreation



Needs Evaluation

Network Evaluation

In general, the “need” for a trail, is based on how well a trail could link a population center to a destination such as a park or downtown. In Penn Township there is the potential to link the residential developments in the southern portion of the Township to the Community Park, YMCA, and commercial uses that are clustered along Baltimore Pike and around Jennersville. Such a link would involve trails, paths within the developments, and perhaps sidewalks and a street crossing near the YMCA.

Map 8-3 depicts these alignment corridors. The Potential Trail Network presented on this map would pass through a potential recreational greenway discussed above under Open Space. Such a network should be designed with special consideration to the needs of elderly users. The potential recreational greenway includes five age restricted communities, which are identified on Map 8-3. These communities are Jenner’s Pond, Luther House, Ovations at Elk View, Village of Rose View, and the Villages at Penn Ridge.

Such a network could be expanded to include on-road bicycle routes. In 2001, the Chester County Planning Commission published a countywide map of the Recommended Bikeway Functional Classification Network, which identified roadways well-suited for bicycling and classified them as Beginner Recreation, Intermediate Recreation, Commuter Connector, and Advanced. The roadways designated as Beginner and Intermediate are the best suited for the majority of bicyclists. This map, which is now over ten years old, indicated that the roads that best accommodate bicyclist are Ewing Road, Woodview Road, Corby Road, Route 896, Pennocks Road, and Kelton Road.

Planning and Funding

Sections 303(a)(3), 401(a)(3), 503.3, 603(b)(2), and 604.(1) of the Pennsylvania Municipalities Planning Code (MPC) empower a municipality to address trail and path planning through its ordinances and regulations. Because bicycle and pedestrian planning is a relatively young field, municipal ordinances and regulations do not always include the kind of regulations that facilitate the construction of non-motorized trails and paths. One key trail planning concept that can be included in ordinances is that trails and paths in new developments should be constructed prior to the construction of the buildings. There also should be documentation setting forth which parties are responsible for the maintenance, security, and liability for trails and paths within developments or on public lands.

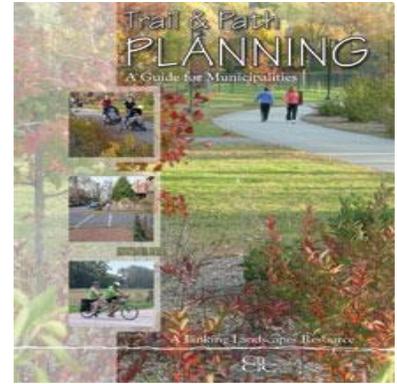
Public involvement is also an essential part of trail planning. Planners should allow surrounding landowners to comment on a proposed trail corridor before determining the alignment for the trail. These landowners might be residential neighbors, retail businesses, or corporations owning industrial parks. Addressing public concerns is of prime importance, especially concerns about crime and accidents. Local landowners can also be used to identify issues, such as areas that flood or locations that are already prone to vandalism. Trail planners and the public should be aware that, in order to function properly and safely, public trails and paths need to be 1) well-designed, 2) well-maintained; and 3) well-policed.



The trail in the Community Park is heavily used by residents and visitors, but lacks connections to other areas.

PennDOT's *Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits* (2009) address trails and pedestrian facilities. According to these guidelines, a developer who is required to complete a Transportation Impact Study "shall also describe how the proposed development was designed to accommodate pedestrians, bicycles and transit operations." This is an important policy development, and mandates that developers who complete a Transportation Impact Study address trail, paths, and other pedestrian facilities.

Permitting trails and paths to be a recipient of fee-in-lieu funding can be an important way to fund trails. Other funding can be used, such as the Safe Routes to School program administered by PennDOT, and other federal transportation enhancement funds address making schools more walkable. PennDOT projects commonly require that some sort of mitigation be undertaken for impacts caused by construction, which can include trails and sidewalks within roadway right-of-ways. If such mitigation steps occur, the funds are more likely to be spent on trail projects that have been identified in adopted planning documents.



Trail & Path Planning: A Guide for Municipalities is a Chester County Planning Commission resource that presents ways for municipalities to address trail and path planning in policies and regulations.

Recreation Programming and Administration

Existing Conditions

In the past, municipal recreation planning focused primarily on acquiring and constructing parks and recreation facilities. Overall coordination of recreational events or programming is necessary however, to ensure that there are recreation events that respond to the community's needs. Increasingly, local governments are now using civic events such as parades, concerts, and craft festivals as a way to improve their quality-of-life while helping the local economy by revitalizing downtowns and village centers. The following section addresses programming, maintenance, and funding topics.

Sports Leagues and Public School Athletics

Penn Township does not manage its own athletic programming and no municipal lands are currently used for organized sports activities. The Avon Grove School District includes a variety of sports facilities including gymnasiums, grass fields, tennis courts, and a synthetic turf field. These facilities are used for school-based activities. However, the school district sometimes uses Lincoln University facilities in nearby Lower Oxford Township, such as its pool, and vice versa.

Some Penn Township residents participate in the Avon Grove Area Little League, which offers baseball and softball for ages 5 to 18. The league has their own facility to the south of the Borough of West Grove, and also uses the fields of Avon Grove School District, including Penn London Elementary School in Penn Township. The league has 700 to 800 players ages five to 18. Its annual operating budget exceeds \$100,000.

The White Clay Soccer Club is a youth soccer program primarily used by residents of the Avon Grove School District. The club has 100 to 200 members ranging in age from eight to 16. Their practice fields are located in Nichol Park and Crossan Park, both in London Britain Township. The Avon Grove Wildcats Football League operates in the Avon Grove School District and includes 200 players and 100 cheerleaders ages five to 15.

YMCA

The Jennersville YMCA offers indoor recreational facilities and programming in Penn Township, and it provides most of the youth recreation activities for the Township. It has a gymnasium and pools, and offers activities for all ages. The YMCA also has courts for indoor sports such as basketball and volleyball, as well as multi-purpose outdoor fields. It offers fitness classes such as aerobics, yoga, and cycling. The Jennersville YMCA is part of the YMCA of the Brandywine Valley which serves Chester County. The Jennerville facility is approximately 25 years old and in good condition. It is heavily used and has been expanded multiple times, most recently to improve parking. The YMCA is planning to expand their summer camp program in Oxford Borough. Details on the YMCA facility and programs are available on their website: www.ymcabwv.org.



The Jennersville YMCA offers a variety of programs and activities, and has expanded multiple times to meet demand.

Community Events and Non-Sports Recreation

Community events, such as parades or downtown festivals, are an important form of recreation in most communities. Each September, Penn Township hosts a Community Day at the park that has drawn up to 2,500 visitors. Started in 2005, Community Day features food, entertainment, and displays sponsored by service organization such as the Jennersville Regional Hospital. The park is also used as the location for some outdoor events sponsored by the Jennersville YMCA, such as the staging area for a marathon run. The Township's Community Center, which is located adjacent to the Township Community Park, within the Township Building, can be rented by the public for use. Some of the age-restricted developments in Penn Township, which have their own activity programming, use the facility, as does the Avon Grove Rotary Club.

Traditional Recreation

Traditionally, hunting and fishing have been a common recreation activity. These activities have typically taken place on private properties with the permission of landowners. In general, the focus for both hunting and fishing includes the areas along the Big Elk Creek and West Branch White Clay Creek, while hunting also takes place on agricultural lands.

Municipal

Penn Township has no formal recreation programming or staffing, although a consultant coordinates scheduling for park events. Penn Township's 2010 recreation budget expenditures were approximately \$26,000. In 2010, revenues were approximately \$37,000, mostly generated through rental fee and donations.

The Township has a Parks and Recreation Board whose major focus has been the planning and construction of the Community Park and the development of the park to the south. They have also pursued establishing a trail extending approximately four miles from the park to communities along Jennersville Road. Penn Township completed an Open Space, Recreation and Environmental Resources Plan in 1993, but it is now largely out of date.

Needs Evaluation

Maintenance, Security, Safety, and Liability

Penn Township provides the same maintenance, security, safety, and liability for their recreational facilities as they do for all other municipal property. Penn Township has not developed specific guidelines for addressing security, safety, and liability on public recreational land. Such guidelines are commonly developed, either formally or informally, by a municipal parks and recreation board. As the Township grows in population it can be expected that park and recreation areas will require more coordination with security and emergency services. Ongoing issues are commonplace vandalism and ensuring that emergency vehicles can reach all parts of recreation facilities when emergency response is required.

An important consideration for the Township is Pennsylvania’s Recreation Use of Land and Water Act (RULWA) of 2003, which limits the legal liability of private landowners who make their land available to the public without charge for recreation, such as hiking, fishing, or mountain biking. The goal of this law is to make it easier for people to open their land for public recreation. Under RULWA, a land owner “owes no duty of care to keep the premises safe for entry or use by others for recreational purposes, or to give any warning of a dangerous condition, use, structure, or activity on such premises to persons entering for such purposes.” In general this law states that a land owner who does not charge an entrance fee and who maintains his or her land using safe, conventional management practices may not be held liable by someone who has an accident while using their land for recreation such as hiking.

Budget and Funding

The current level of funding and coordination has been sufficient to date, but further growth may require more coordination to improve the efficiency of how money is spent, and better realize revenue from rental fees and possibly even user fees. Although there is no immediate need to greatly increase funding for recreation, it can be expected that further growth will likely require significant ongoing capital improvement funding. Ideally such a Capital Improvements Program would:

- Be designed to fiscally plan for future parks and recreation facilities for the next five years.
- Be coordinated with the policies and planning efforts of other recreation providers, such as the Avon Grove School District, Avon Grove Area Little League, Avon Grove Recreation Association, and Jennersville YMCA.
- Accommodate the requirements of county, state, and federal grant programs.
- Include infrastructure-related costs such as land acquisition, playground equipment, and other structures and installations.
- Include the replacement and upgrade of recreation, sports, and playground equipment that is public property.

The creation of more park facilities will also increase opportunities for garnering revenue through rental fees or user fees. User fees should be based on a logical and practical rationale that is developed with community input. A user-fee



Fees for use of certain parks and recreation facilities can be an important revenue stream, but policies should be developed with public input and transparent to all potential users.

discount can be included for Township residents who participate in municipally-funded recreation programs, or who use municipal facilities. New developments can also generate fees or land donation through fee-in-lieu provisions. Updating fee-in lieu provisions at least every five years ensures that the fees generated are current with changing real estate values, and provide sufficient funding to cover the practical costs of recreation projects.

Planning Implications

Parks and Recreation

Penn Township has the opportunity to establish a network of recreational parks and trails that would link a number of residential developments south of Route 1 with municipal parkland, the YMCA, and potentially with West Grove Borough. Current plans by London Grove Township would link West Grove Borough with a trail network that would extend south along the White Clay Creek into White Clay Creek State Preserve. Parts of the London Gove Township trail network are already built.

There are major challenges to extending such a network into northern Penn Township, the most significant of which is Route 1. This multi-lane expressway has few road crossings in the Township, and those that exist would have to be improved to include a safe crossing for pedestrians and bicyclists. Because the northern half of the Township is less densely developed, it may be better suited as the location for establishing bicycle routes along low volume roadways. Ideally these bicycle routes could be used by northern residents to access the park facilities in the south.

Open Space

Relative to most townships in Chester County, Penn Township has a modest amount of protected open space. The greatest opportunities for protecting open space are in the north and far south of the Township. In these areas, open space could be protected by expanding existing clusters of protected farmland and forest located in surrounding municipalities. Such open space protection could be facilitated either by a non-profit land trust or the County Agricultural Land Preservation Board.

The protection of open space has become more complex in past years as a result of the economic downturn of 2008. State and other funding for open space protection has been reduced and will likely stay low until the economy as a whole recovers. However, the downturn of the real estate market has also resulted in lower overall land costs, so that the funding that is available can buy more acres. Overall, Penn Township will need to pursue innovative techniques and partnerships in order to protect open space while adapting to the new economy.

Trail, Path, and Pedestrian Network

In the past, trails were usually established within large park settings (such as Nottingham County Park), while sidewalks were built in downtowns or suburban neighborhoods. In recent decades there have been efforts to link trails, walking paths,

and sidewalks into one network that can join residential areas and downtowns to parks and recreation facilities. Penn Township is well suited to pursue such a network south of Route 1. Most recreation studies find that walking is the most popular of all recreation activities, and this is certainly true of the elderly. Given Penn Township's demographic characteristics, it is reasonable to assume that walking trails would be well used.

Trails can improve public health by helping reduce the national epidemic of adult and childhood obesity. As a result, many grant programs give funding preference to trail projects which link to parks and other important community destinations. The connection between public health and trails could be a major part of Penn Township's effort to create trails. The fact that the Township park and trail network could link to both the regional YMCA and the Jennersville Regional Hospital campus opens many opportunities for partnerships in designing, promoting, and funding trails.

Recreation Programming and Administration

In general, Penn Township is still in the early stages of conducting coordinated recreation planning. This provides a great opportunity to develop such planning without having to modify existing programming. However, there is an overall shortfall in terms of formal recreational coordination, which has worked sufficiently in the past, but may be stressed in the coming years. A coordinated approach to recreation planning could be effective in establishing policies and guidelines to address:

- Managing staff and decision-making through a chain of command.
- Ground and facilities maintenance, including risk assessments and scheduling inspections.
- Security and emergency response on public park and recreation property, or property with a recreation right-of-way.
- Grantwriting, marketing, public relations, and event planning.
- Setting rates and guidelines for renting facilities.
- Programming recreational activities and organizing volunteer and friends-of groups.
- Cooperative agreements with other public or private entities.
- Special event organizing, liability, and set-up/clean-up.

There are currently no major causes for concern regarding public safety and liability. However, growth projections suggest it might be prudent to establish formal guidelines regarding:

- Activities that may be restricted or limited, or require a permit or proof of liability insurance.
- Public access restrictions to facilities, such as no dusk till dawn use.
- Lighting recreational facilities in a way that balances energy use, safety concerns, and light pollution impacts to properties surrounding lighted recreational facilities.
- How recreation facilities will comply with the Americans with Disabilities Act, which may involve designating some - but not all - parts of natural or historic resource areas as locations that can accommodate the handicapped.

Recommendations

The recommendations below detail how Penn Township can protect and enhance the park, recreation, and open space resources that are a critical part of a community, with recommendations related to issues such as policies and coordination. Priorities for the implementation of these recommendations are established in Chapter 12, Implementation Measures. Implementation of the recommendations identified below will help Penn Township achieve its parks, recreation, and open space goal to:

Promote the establishment and maintenance of, and programming for, a network of park and recreation facilities, and permanently protect open space to provide public health, ecological, economic, and quality of life benefits.

Parks and Recreation

- 8-1. Consistently define terms such as active recreation, passive recreation, open space, trails, greenways, and different types of ownership in plans, ordinances, and other Township materials. Designate a variety of active and passive recreation parks and facilities.**

Consistency in the use of park, recreation, and open space terminology can clarify expectations among the public and Township officials. Amending municipal ordinances to define active and passive recreation would establish the Township's interpretation of these terms, which can vary from organization to organization. Additionally, designation of existing or proposed parks or recreation facilities as active or passive recreation, or both, would help clarify what activities the public can expect to occur.

- 8-2. Continue to provide active recreation facilities with a preference for those which can accommodate multiple uses.**

Such facilities could include fields that can accommodate multiple sports activities, or parks and recreation facilities that can serve as community gathering areas or the location for civic and community events, as currently done at the Penn Township Community Park.

- 8-3. Review and update as necessary formal recreation policies that address property issues and organizational structure.**

Critical items to consider as part of this recommendation include:

- Security and safety: The Township should seek the review and comment of emergency service providers regarding park and recreation facilities while still in the planning and design stages. To ensure emergency access and regular patrols can be accommodated. The Township should also coordinate with

emergency service providers on implemented changes to facilities that impact access by emergency vehicles.

- Liability and maintenance: Formal designation of responsibility and timing of maintenance and safety inspections of Township park and recreation facilities should take place, and be developed in such a way as to minimize liability and insurance cost. Additionally, the Township should identify activities that are restricted or limited, activities that require a permit or proof of liability insurance, and any public access restrictions to facilities (such as dawn to dusk use).

Other items to address as part of this recommendation include:

- Lighting recreational facilities in a way that balances energy use, safety concerns, and light pollution impact on surrounding properties
- Compliance with the Americans with Disabilities Act, which may involve designating some but not all parts of natural or historic resources area as locations that can accommodate the handicapped
- Identification of a chain of command
- Grant writing
- Ground and facilities maintenance
- Marketing, public relations, and event planning
- Setting rates and guidelines for renting facilities
- Hiring and managing recreation staff
- Programming recreational activities
- Organizing volunteer and “friends-of” groups
- Cooperative agreements with other public or private entities
- Special event organizing, liability, and set-up/clean-up

8-4. Establish and regularly update a park and recreation Capital Improvements Program (CIP) that focuses on funding land acquisition and the construction and maintenance of facilities in a way that will help leverage matching grants.

A park and recreation Capital Improvements Program should:

- Plan for future parks and recreation facilities for the next five years.
- Accommodate the requirements of county, state, and federal grant programs.
- Address land acquisition.
- Address the replacement, upgrade, and installation of recreation, sports, and playground equipment.

8-5. Establish a park and recreation endowment fund that can receive cash donations as gifts.

Such a fund could attract donations specific to park and recreation facilities and activities. A related step would be to create and maintain a gift catalog that identifies needed recreation equipment and structures that could be funded by a donation.

8-6. Continue to enforce fee-in-lieu ordinance provisions for park and recreation facilities that are current with real estate values.

Fee-in-lieu ordinances can be used to:

- Fund parks and recreational facilities, including the acquisition of land.
- Fund the construction of recreation infrastructure such as play equipment, structures or parking facilities.
- Fund projects on public land or parts of private land with publicly-owned recreation easements.

Fee-in-lieu provisions can be written to tie directly to real estate values, rather than including a specific fee. If a specific fee is used, it is best to use a fee schedule that is updated annually by resolution, as Penn Township currently does. Either method ensures that the fees are current with changing real estate values, and provide sufficient funding to cover the practical costs of recreation projects. Fee-in-lieu has typically been interpreted as being applicable to residential development, however a limited number of municipalities have chosen to apply it to non-residential development as well. There is no case law in Pennsylvania regarding this use, and should Penn Township wish to investigate fee-in-lieu for non-residential development it should be done in consultation with its solicitor.

8-7. Periodically review user fees at Township recreation facilities to ensure that they return funds to recreation facilities without discouraging users.

User fees should be based on a logical and practical rationale that is developed with community input.

8-8. Continue to develop the recreation portion of the Township website.

The website currently provides information on reserving portions of the Community Park and a local newspaper article. In the future, particularly with the development of the future park site, maps and programming information could be added.

8-9. Continue to offer special events to build awareness of parks as community centers.

Community Day is one such event, others may include parades or seasonal festivals. Township officials and staff should continue to periodically evaluate and report on the viability of events such as:

- Music performances and summer outdoor family film nights
- Parades, bike races, 5K runs, and charity walks
- Seasonal events such as the 4th of July, Christmas house tours and Easter egg hunts
- Farmers markets, artisans markets, outdoor restaurant festivals
- 4H farm shows, vintage car shows, and other show events

Open Space

- 8-10. Establish an open space effort to identify and prioritize methods and opportunities to protect open space.**
- 8-11. The Township should consider direct acquisition of land or conservation easements for preservation of open space.**
- 8-12. Support open space and agricultural preservation efforts by land preservation organizations, and cooperate with them to identify future preservation opportunities.**

This could include support of efforts to evaluate open space (both in the form of agricultural lands and those lands with critical natural or cultural resources), facilitating communication between landowners and land preservation organizations, and support of land or easement acquisition by land preservation organizations. Landowners may include individuals, institutions, homeowners associations, and utilities. Maintaining open communication with preservation organizations active in the area can help to facilitate preservation when opportunities arise. Additionally, it is important to advocate for, and when possible, require the proper monitoring of lands that are eased or owned in-fee by land trusts.

- 8-13. Continue to enforce fee-in-lieu ordinance provisions for open space, and consider broadening the language.**

Penn Township’s current fee-in-lieu ordinance provisions provide for the fees to be used for “park, open space, or recreation areas”. In the future, the Township may want to consider broadening the language to allow the fees to be used for efforts such as restoration projects on existing publicly owned open space. As noted in parks and recreation recommendations, the fee-in-lieu should continue to be established by a fee schedule that is updated annually by resolution.

- 8-14. Continue to promote the creation of large contiguous areas of homeowners association (HOA) open space.**

Ideally HOA open space should encompass natural features such as wetlands, woodlands, steep slopes or wide floodplains, to preserve these natural features in an intact state and prevent their fragmentation among multiple landowners. Located within a subdivision, HOA open space can also be used to create a natural buffer from surrounding land uses. In certain instances, protection of natural features may be best served by allowing open space to be located on a separate property away from the constructed development site, either in part or in whole. Creating open space in this manner requires ordinance provisions that permit it. Protection of the Big Elk Creek stream corridor is a priority for the Township, and a protected greenway consisting of HOA lands and preserved lands has begun to develop along Big Elk Creek.

8-15. Support the extension of a protected open space network into suburban and residential areas via greenways.

A contiguous area of open space is preserved not only through acquisition of large parcels, but also through preservation of smaller areas that preserve key features and/or act as connectors. The Township should advance a contiguous network of open space through dedication of land during the development process, Township acquisition, and the activities of land preservation organizations. Advancing this recommendation could also involve coordination with large landowners including but not limited to, homeowners associations, institutions, schools, industrial parks, utility companies and rail companies to determine if their rights-of-way can be managed to serve as greenways to link to existing protected open spaces.

8-16. Coordinate with agricultural landowners and other stakeholders to investigate options to protect agricultural open space, such as Purchase of Development Rights, encouragement of Secondary/Accessory Agricultural Businesses, encouraging enrollment in Agricultural Security Areas (ASA, Act 43) and the Clean and Green program (Act 319), and encouraging the activities of land preservation organizations.

The presence of active agricultural operations within the Township, the proximity of protected agricultural lands (particularly to the north and west of Penn Township), and the substantial amount of land currently enrolled in an ASA, (see Map 8-2) indicates that the agricultural community maintains a significant presence in Penn Township despite development pressure. Given these conditions, the Township should be proactive in working with its agricultural landowners and other stakeholders, such as land preservation organizations, to determine what methods to protect agricultural open space would be most effective.

Trail, Path, and Pedestrian Network

8-17. Plan and establish a recreational network of trails, paths, sidewalks and bicycle routes.

As generally depicted on Map 8-3, such a network should provide links between residential communities, commercial centers, and parks, as well as link to adjoining municipal networks in accordance with any regional recreation plans. Expansion of the sidewalk network around the Penn Township Community Park, YMCA, and commercial uses along Baltimore Pike would be a critical part of implementing this recommendation.

8-18. Update ordinances to include provisions that address the planning and funding of trails, paths, and bicycle routes through the land development process.

The implementation of this action could include updating ordinances to address:

- Establishment of multi-use paved trails that link residential areas, public schools, playgrounds, employment centers, and commercial areas.

- Construction of trails and paths in new developments prior to the construction of surrounding buildings.
- Identification of trails and paths as a recreation amenity eligible for fee-in-lieu funding.
- Documentation of what parties are responsible for the maintenance and security of trails and paths within developments or on public lands.
- Design and construction of public and private trails and paths in a manner that is safe and aesthetically pleasing, and which minimizes maintenance.

8-19. Consider the adoption of an Official Map.

This document would designate, among other things, potential trail corridors or areas that are a high priority for open space protection.

8-20. Pursue projects and grant funding to support pedestrian, bicycle, and motorist safety.

Potential funding sources include programs such as the Pennsylvania Community Transportation Initiative (PCTI), Transportation and Community Development Initiative (TCDI), or Congestion Mitigation and Air Quality Improvement Program (CMAQ). These are competitive funding programs, each with its own specific criteria, which generally support and encourage local transportation projects that exemplify smart transportation and encourage multi-modal transportation.

Recreation Programming and Administration

8-21. Continue to pursue opportunities to coordinate recreation programming initiatives with public, private, and institutional stakeholders.

Such stakeholders might include adult and youth athletic leagues, local school boards, health clubs and commercial gyms, age-restricted communities, adjacent municipalities, and trail, hiking, and equestrian advocacy groups. Because Penn Township has a modest population, in many instances it is most effective to participate in joint recreation programming efforts.

8-22. Support a balanced diversity of competitive sports and non-sports recreation programming to meet the various interests of the public.

Remaining aware of community demographics and public input is critical to meeting recreational needs. Given the significant senior population in the Township, non-sports recreation may play a prominent role in future recreation programming and initiatives. Coordination with age-restricted communities regarding the activities they offer, and those they are in need of, should be continued.

8-23. Support the continuation of responsible hunting, fishing, and outdoor recreation as a formally recognized form of public recreation.

Such an effort could include facilitating continued access to sport fishing areas and hunting grounds, including the establishment of access agreements between private landowners and hunting or fishing clubs. This effort could also include promoting hunting, fishing, and boating safety and education, and promotion of these activities through publicly sponsored events such as festivals or fishing clinics.

Links

Linking Landscapes

www.chesco.org/planning/cwp/view.asp?A=1676&Q=647076

Trail and Path Planning

www.chesco.org/planning/cwp/view.asp?a=1676&q=646859

Open Space Planning

www.chesco.org/planning/cwp/view.asp?a=1676&q=646845

Jennersville YMCA

www.ymcabwv.org/jennersville-y

NRPA

www.nrpa.org/

The Land Conservancy for Southern Chester County

www.tlcforscc.org/

Brandywine Conservancy

www.brandywineconservancy.org/

Pennsylvania Department of Agriculture – Bureau of Farmland Preservation

www.agriculture.state.pa.us

Chester County Open Space Preservation

www.chesco.org/openspace

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ENERGY ASSESSMENT AND PLAN

Introduction

This chapter presents an evaluation of energy conservation specific to Penn Township. Energy conservation has been a topic discussed in comprehensive planning for decades, but has only recently become a focus of municipal planning. This increased interest in energy conservation is largely the result of rising energy costs, growing concern over sustainability, and national security concerns related to dependence on foreign energy sources.

Discussion of energy conservation as part of a comprehensive plan process is permitted by PA Act 247, the Municipalities Planning Code (MPC), which was amended in 1983 to include Section 301.1 Energy Conservation Plan Element. The amendment set forth that, "...the comprehensive plan may include an energy conservation plan element which systematically analyzes the impact of each other component and element of the comprehensive plan on the present and future use of energy..."

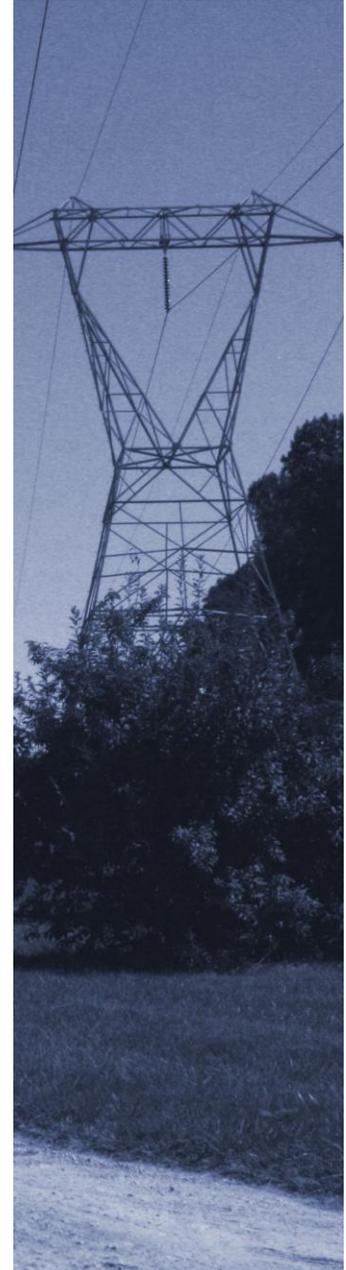
Key areas to consider:

- Reduction of demand and consumption
- Improvement of energy efficiency
- Recycle, reuse, and redevelop
- Alternative and renewable energy generation
- Reduction of unintentional barriers to energy conservation

Energy consumption relates to all forms of energy use and generation by individuals, the business community, and the public sector. Municipalities do not control energy use by others, but do control their own facilities and operations, can regulate and incentivize some activities by others, and influence others with policy, promotion, actions, and education.

Energy issues addressed in this chapter include:

- Inventory
 - Energy Demand and Consumption
 - Energy Generation
 - Development and Construction Standards
 - Green Infrastructure
 - Public Utilities and Energy
 - Current Energy Conservation Measures
- Planning Implications
- Recommendations



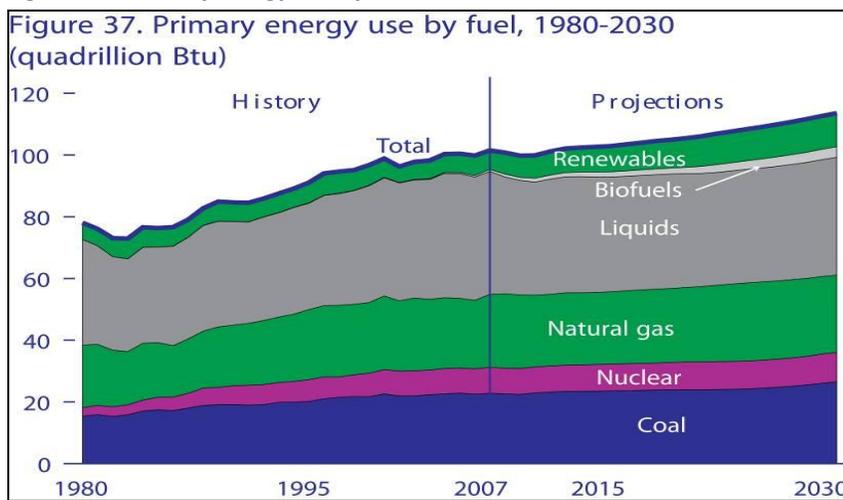
Inventory

Energy Demand and Consumption

There is no readily available information on the amount of energy consumed by Penn Township’s energy consumers, which include residents, businesses, nursery operations, institutions, and others. Figure 9-1 depicts the amount of energy consumed at the national level, which shows energy consumption is anticipated to rise in the coming decades with no major shift in the type of fuels consumed.

A reasonable assumption is that energy sources used within Penn Township are unlikely to be significantly different than the national trend as presented in Figure 9-1. However, new energy technologies are currently being investigated throughout the world, and an unforeseen new invention or a change in the global economy could change projections.

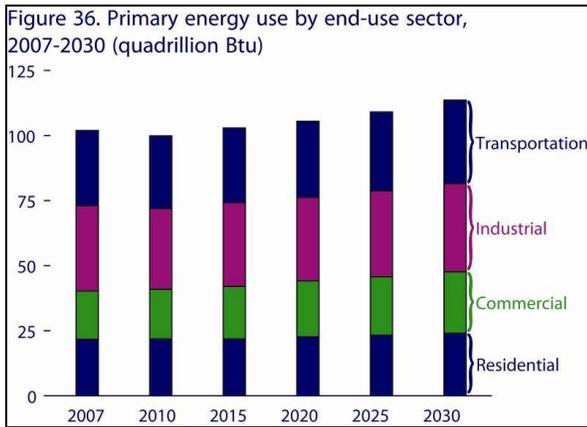
Figure 9-1: Primary Energy Use by Fuel 1980 - 2030



Source: U.S. Energy Information Administration, Annual Energy Outlook, 2009

Energy demand is the amount of energy required to make transportation, industrial uses, commercial uses, and residential uses function. The people, businesses, and other entities that use energy are jointly called the “end use sector.” Figure 9-2 shows energy consumption by end use sectors at the national level for the current period and projected out to 2030. This figure shows that no one sector is dominant, although transportation and industrial uses account for a large portion of energy consumption. Penn likely has a similar breakdown, with no one sector being overwhelmingly dominant.

Figure 9-2: Primary Energy Use by End Use Sector 2007 - 2030



Source: U.S. Energy Information Administration, Annual Energy Outlook, 2009

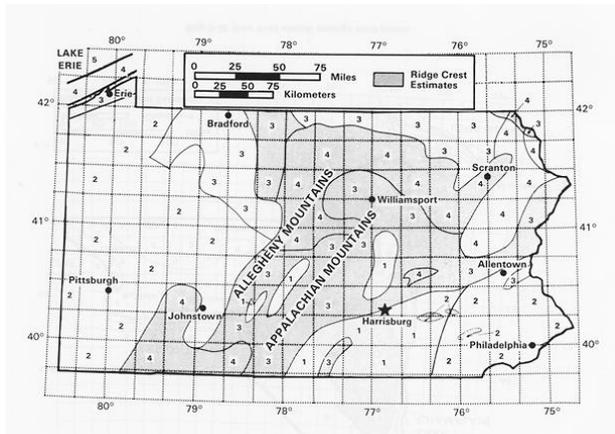
Energy Generation

Traditional energy generators include coal, nuclear, and hydroelectric, but alternative sources such as wind, solar, and geothermal are gaining in importance. These sources are increasingly important to be aware of at the local level due to the potential for on-site energy generation.

Wind Power

Chester County is not especially well suited for wind production, as shown on the wind map in Figure 9-3. Areas designated Class 3 and 4 are suitable for most wind turbine applications, while Class 2 areas (which include Penn Township) are marginal. Class 1 areas are generally not suitable. Wind power estimates apply to areas that are free of obstructions to the wind and to areas that are well exposed to the wind, such as open fields and hilltops.

Figure 9-3: Pennsylvania Annual Average Wind Power

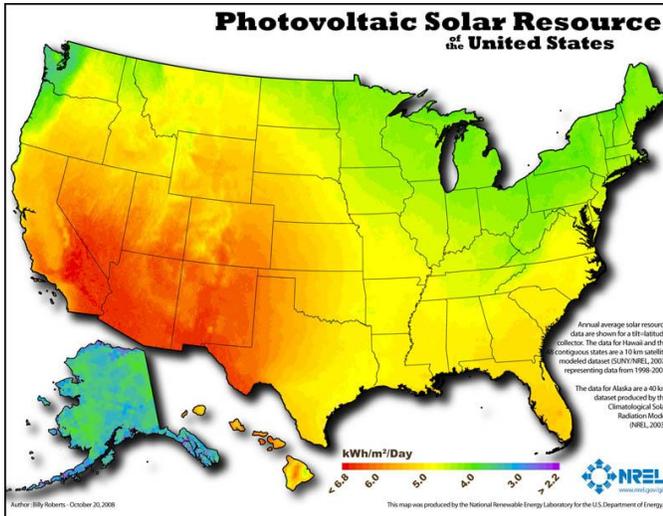


Source: Wind Energy Resource Atlas of the United States, U.S. Department of Energy, 1986

Solar Power

Chester County, and Penn Township, are somewhat well-suited for solar power generation in the form of photovoltaic panels, as would be used on rooftops. As Figure 9-4 shows, southeastern Pennsylvania lies in the mid-range regarding exposure to sunlight. In comparison, Germany, which is a leader in solar energy generation, has a lower photovoltaic rating than southeastern Pennsylvania.

Figure 9-4: Photovoltaic Solar Resource of the United States



Source: National Renewable Energy Laboratory, U.S. Department of Energy, 2008

Geothermal

According to the U.S. Department of Energy (DOE), almost all of the upper ten feet of Earth's surface maintains a nearly constant temperature of 50 to 60°F. A geothermal heat pump (GHP) system consists of pipes buried near the building, a heat exchanger, and ductwork into the building. In winter, heat from the relatively warmer ground goes through the heat exchanger into the building. In summer, hot air from the building is pulled through the heat exchanger into the relatively cooler ground. Heat removed during the summer can be used as no-cost energy to heat water.

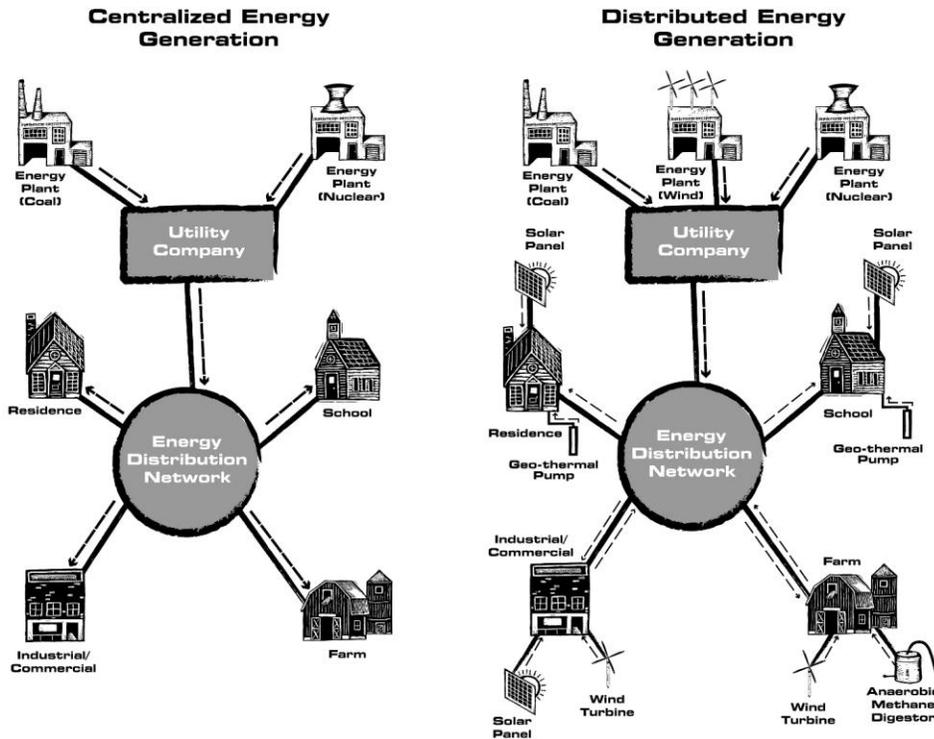
According to the U.S. Environmental Protection Agency (EPA), GHPs can reduce energy consumption and corresponding emissions up to 44 percent compared to air-source heat pumps and up to 72 percent compared to electric resistance heating with standard air-conditioning equipment. GHPs are in use in Chester County, and many larger scale uses have started using these systems, such as West Chester University. GHPs are also suitable for use in single-family residences.

Transitioning from Centralized to Distributed Energy Generation

In the coming years the United States - and therefore the Township - is expected to experience at least a partial transition from centralized to distributed, or decentralized, energy generation. Distributed energy generation refers to an energy network in which there are multiple large and small-scale energy generators, which could include wind turbines, solar panels, and conventional fossil fuels or nuclear power plants. Centralized

energy generation is currently the norm, and is characterized by large electric generating plants that are usually located at a distance from where the energy is consumed. Figure 9-5 depicts differences in the systems.

Figure 9-5: Centralized Versus Distributed Energy Generation



Source: Chester County Planning Commission

Development and Construction Standards

There are a number of new techniques that can be used to make development and buildings more energy efficient. Increased efficiency can be realized through site selection and design, the way a building is constructed, and the efficiency of the appliances and systems used for heating, ventilation, and air conditioning (HVAC). The standards which are commonly used to rate the efficiency of development, buildings, appliances and HVAC systems include:

- Energy Star was created in 1992 and is now an international standard for energy efficient consumer products such as computer products, kitchen appliances, buildings, and other products. Devices carrying the Energy Star logo typically reduce energy by 20 to 30 percent.
- Leadership in Energy and Environmental Design (LEED) Green Building Rating System was developed in 1998 by the U.S. Green Building Council to provide a suite of standards for environmentally sustainable construction. It has since become a nationwide standard.
- LEED for Neighborhood Development (LEED-ND) is an offshoot of LEED that focuses on how well a development's location and design integrate the principles of smart

growth, urbanism, and green building. The rating system focuses on the site selection, as well as the design and construction elements that bring buildings and infrastructure together into a neighborhood and relate the neighborhood to its landscape, local surroundings, and regional context. LEED-ND can serve as a guide in creating standards and incentives for residential site selection and neighborhood development.

Green Infrastructure

According to the U.S. EPA, green infrastructure encompasses an "interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to people and wildlife." Green infrastructure is an effective tool for reducing energy consumption because it is usually vegetation-based, and so does not require electricity to function. Examples of green infrastructure are presented in Figure 9-6.

Figure 9-6: Green Infrastructure and Energy Conservation

Type of Green Infrastructure	Energy Conservation Impact
Development and Construction Techniques	
Greyfield & Brownfield Redevelopment is the reuse of brownfields (abandoned or underused industrial or commercial properties with actual or perceived environmental contamination) or greyfields (empty or economically unviable malls or office centers).	Greyfield & Brownfield Redevelopment reduces the need for new infrastructure by locating development in developed areas. It also reduces transportation fuel consumption.
Infill Development and Redevelopment involves the re-use of vacant land and property within a built-up area for further construction or development, especially as part of neighborhood revitalization.	Infill Development and Redevelopment reduces the need for new infrastructure by locating development in developed areas. . It also reduces transportation fuel consumption.
Green Roofs are roofs covered with a layer of vegetation. They absorb rainwater, provide insulation, create wildlife habitat, and help lower urban air temperatures.	Green Roofs provide insulation thus retaining energy, and reduce runoff thus reducing the need for the construction of brick and mortar stormwater management facilities.
Transportation and Parking Facilities	
Permeable Pavements such as pervious concrete, asphalt, or pavers allow precipitation to percolate through to the soil below.	Permeable pavements reduce runoff thus reducing the need for the construction of brick and mortar storm water management facilities.
Green Parking techniques, such as alternative pavers in overflow parking areas, bioretention areas to treat stormwater, and shared parking, reduce impervious cover.	Green Parking reduces runoff thus reducing the need for the construction of brick and mortar storm water management facilities.
Green Streets refers to a street that uses vegetated facilities to manage stormwater runoff at its source.	Green Streets reduce the need for the construction of brick and mortar stormwater management facilities.
Land and Natural Resource Management	
Vegetated Swales are shallow channels with vegetation covering the slopes and bottom. They promote infiltration, reduce the velocity of runoff, and trap particulate pollutants such as suspended solids and trace metals.	Vegetated Swales reduce runoff and trap pollutants, thus reducing the need for the construction of brick and mortar storm water management and water purification facilities.
Shade Trees & Urban Forestry refers to the care and management of tree populations in developed settings to improve the urban environment.	Shade Trees & Urban Forestry can reduce heating and cooling costs to nearby buildings.
Riparian Buffers are vegetated areas next to waterways that protect them from nonpoint source pollution while providing bank stabilization and wildlife habitat.	Riparian Buffers reduce runoff and trap pollutants, thus reducing the need for the construction of brick and mortar stormwater management and water purification facilities.

Source: Chester County Planning Commission, 2009.

Low Impact Development (LID) is similar to Green Infrastructure, but it is used to describe land planning and engineering designs that manage stormwater runoff. LID emphasizes conservation and the use of on-site natural features to protect water quality and control runoff. This approach implements engineered small-scale hydrologic controls to replicate the pre-development hydrologic regime of watersheds through infiltrating, filtering, storing, evaporating, and detaining runoff close to its source. LID plays a role in energy conservation because it improves water quality without the operation of treatment plants.

Public Utilities and Energy

In 2007, public drinking water and wastewater facilities accounted for approximately three percent of total U.S. electricity use. These facilities can represent up to 35 percent of municipal government energy use. This finding was reported by the Consortium for Energy Efficiency, a nonprofit, organization composed of electric, gas and water utilities, research organizations, and state and regional energy offices that works in cooperation with the U.S. EPA and the U.S. DOE.

The high energy consumption by public utility plants is in part due to facilities such as wastewater treatment plant sludge blowers, which operate 24 hours. Penn Township operates its own wastewater collection, treatment, and disposal system. This plant uses approximately \$3,000 worth of electricity per month, and uses conventional technology that predates emerging energy saving techniques. As a result, the plant is well suited for a study to improve its energy efficiency. Public water within the Township is not controlled by Penn Township, and is provided by Chester Water Authority. The Township has identified within the Penn Township Zoning Ordinance that the public water service area should be limited to those areas south of Route 1.

Current Energy Conservation Measures

As with many municipalities, Penn Township has not addressed energy conservation in depth in its regulations, with no specific energy conservation regulations in either the Zoning Ordinance or Subdivision and Land Development Ordinance (SLDO).

According to the U.S. Environmental Protection Agency, recycling is a major tool for reducing energy consumption because it greatly reduces the energy intensive consumption that is required to harvest, extract or process raw materials. In 2005, recycling was conservatively projected to save 900 trillion BTUs, equal to the annual energy use of nine million households. Penn Township has been proactive with recycling efforts, and these are detailed in the Community Facilities and Services Chapter.

Planning Implications

Balanced Energy Conservation Strategy

With its mix of developed areas and open space, Penn Township has many opportunities to pursue energy conservation initiatives, although its mix of developed areas and open space makes implementation more challenging. The scattered nature of development in portions of the Township will discourage innovations such as establishment of alternative fuel stations, including plug-in stations, and limits the role that public transit can play in the foreseeable future. However, the increasingly dense development around Jennersville and to the south of Route 1 may provide opportunities for transit and alternative fuel stations in the future, and Township officials should remain aware of such opportunities. More short-term strategies, given the rate of development in the recent past, are to require and encourage more energy efficiency from new development and construction, and improve the mix use of uses and walkability around Jennersville, thereby reducing auto use. Older structures can be costly to retrofit for certain energy efficient measures, but their continued use allows new construction to be averted in certain instances. Overall, the strategy for pursuing energy conservation will need to employ a balance that can realistically optimize energy conservation rather than attempt to maximize it.

Energy Conservation through Township Initiatives

The Township can initiate certain energy conservation efforts on its own, such as updating ordinances, building codes, and other regulations to either promote or permit green infrastructure, alternative energy generation, and emerging technologies. Such efforts should also update those regulations already in place that may inadvertently limit the use of new energy conservation techniques. The Township can also serve in an educational role for its residents by using its facilities and equipment as demonstration projects showcasing new technologies, and by promoting the energy efficient and sustainable projects of others. Recycling and redevelopment are areas where the Township can play a leading role in improving efficiencies.

Green Infrastructure and Low Impact Development

The Township is well suited to benefit from energy conservation through the use of green infrastructure and low impact development. Encouraging the use of these design and infrastructure methods in new construction, and in retrofits of older facilities, can create a more sustainable infrastructure system for the future.

Recommendations

The recommendations below focus on how best to meet the energy goal and objectives (detailed in Chapter 2) based on current conditions in the Township. The Township's goal regarding energy is to:

Encourage energy conservation and the effective utilization of renewable energy resources to reduce energy costs and environmental impacts.

This chapter includes only those recommendations that are not specific to a resource area that is detailed in its own chapter. Several energy related recommendations have been integrated into discussion of specific resource areas, such as in Chapter 6, Transportation and Circulation Systems Inventory and Plan, Chapter 7, Community Facilities and Services, and Chapter 10, Existing Land Use Patterns and Future Land Use Plan. Those recommendations are not duplicated in this chapter.

Recycling, Reuse, and Redevelopment

9-1 Support programs that offer consumers opportunities to re-use materials that would otherwise be disposed.

Removing items from the waste stream to a landfill is beneficial to the landfill and to energy conservation. Aside from traditional recycling, donation or swapping of unwanted materials is another method of re-use that has gained more attention with the internet. Free-cycling is a growing technique where individuals post notices on free-cycling internet sites, offering to give away useful items that they no longer need, instead of disposing of these materials. Use of the Township newsletter and website to promote this type of recycling/re-use would further the effort to remove useful items from the waste stream and save energy in the process.

9-2 Promote the development of energy efficient schools, government offices, and other publicly funded buildings in existing developed areas.

As existing building infrastructure ages and needs replaced, or growth demands new facilities, the Township, school district, or other public partners can construct or restore buildings using new and more energy efficient techniques, and locate those facilities within existing developed areas. With an ongoing focus on energy conservation, state and federal grants may be available in the coming years for such projects.

9-3 Promote and appropriately regulate on-site energy generation such as solar, wind, geothermal, and other alternative technologies in all land uses.

On-site energy generation can be installed in land uses from residential to industrial, but it must be sensitive to surrounding land uses and to site conditions. For example, it may be appropriate to install modern solar panels in an industrial site, but not in a location visible from the public right-of-way in an historic residential district. Ordinances should address the various issues related to on-site energy generation to allow its use while protecting surrounding land uses. Emerging technologies are increasingly minimizing the impact to surrounding land uses from on-site energy generators, and regulatory controls need to remain current to best serve Township residents.

Government, Public, and Utility Infrastructure

- 9-4 Perform an energy audit to determine energy conservation measures that could be incorporated into Township buildings, vehicles and operations.**
- An audit is the first step in understanding where Township operations are currently underperforming. Based on the findings, the Township can prioritize improvements based on return on investment, funding availability, and the condition of the existing building, vehicle, etc.
- 9-5 Continue with the use of wastewater treatment and disposal technologies that reduce energy demands and recharge local groundwater.**
- As part of an overall energy audit, the wastewater treatment plant should be evaluated. The Township can study options for upgrading the efficiency of its wastewater treatment plant, with the goal of realizing monthly energy savings that over time will pay for the cost of the upgrade.
- 9-6 Support the upgrading of power infrastructure to promote more efficient energy conversion, storage, and transmission in order to meet anticipated electric consumption.**
- The increase in electronic devices and the potential development of plug-in hybrid or all-electric cars would likely require an increase in the amount of electricity transmitted and stored by utilities.
- 9-7 Encourage utility providers to improve energy efficiency in their operations.**
- As previously noted, the Township's role is limited to advocacy and education in certain instances, including outside utility providers. The Township can request that regional utilities and service providers cooperate with the Township's policies on energy conservation.

Education and Outreach

- 9-8 Support education efforts that encourage energy and resource saving practices at home, school, and the work place.**
- The Township should play an active roll in educating residents, institutions, and businesses regarding energy efficiency and promoting community programs to improve energy efficiency. The Township could educate at community events and through the Township newsletter, covering topics such as weatherizing your home, Energy Star information on appliances, drinking tap water rather than bottled water, and providing links to additional resources.
- 9-9 Support programs that allow residents to improve energy efficiency in their homes through weatherization, efficient climate control, and conservation of hot water.**
- Such a program might involve helping to coordinate the bulk purchase of efficient light bulbs, insulation or efficient faucet aerators for large numbers of residences,

thus reducing individual costs. The township newsletter could also serve as a tool for making residents aware of energy saving opportunities. In past years, electric companies have run programs which give rebates to households that replace older, less efficient appliances like refrigerators and air conditioners. State and federal tax benefits are also sometime available for such projects.

9-10 Support construction and development projects that implement energy conservation, including demonstration projects and programs.

The Township could encourage projects involving new construction, particularly those with a public use, to incorporate energy conservation features. The Dansko headquarters building is an example of not only how energy conservation can be incorporated in construction, but how it can be maintained over time and used as a public education tool.

Links

Energy Star

www.energystar.gov/

LEED

www.usgbc.org/DisplayPage.aspx?CategoryID=19

LEED-ND

www.usgbc.org/DisplayPage.aspx?CMSPageID=148

Chester County – Discover the Future

www.chescopagreen.org/

LID

www.lowimpactdevelopment.org/index.html

U.S. Energy Information Administration

www.eia.gov/

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EXISTING LAND USE PATTERNS AND FUTURE LAND USE PLAN

Introduction

The future land use plan provides the overall framework for guiding future land use and related policy decisions for the next twenty years. The basis for the plan recommendations is the existing land use information, the preferences of Township residents and officials, and related policy for other Comprehensive Plan elements. An overview of land use patterns and development trends in Penn Township provides an understanding of how development has occurred to date. An analysis of remaining developable lands is provided, as these are the areas where additional development could potentially occur and where land use policies and regulations will be of greatest importance in influencing the future character of the Township. The future land use plan and implementation recommendations are critical pieces in meeting future population growth needs while protecting resources and providing for appropriate community facilities and services.

This chapter addresses the following topics:

- Existing Land Use
 - Existing Land Use Patterns
 - Land Development Trends
 - Developable Lands
- Planning Implications
- Future Land Use Plan
 - Land Use Plan Categories
 - Accomodation of Future Growth
 - Consistency with Adjacent Land Use Plans
- Recommendations



Existing Land Use

Existing Land Use Patterns

The existing land use patterns in Penn Township are shown on Map 10-1 (Appendix A). This map is based on the existing tax assessment records of the Chester County Office of Tax Assessment, supplemented by field checks and review by the Comprehensive Plan update task force to confirm correct classification of uses according to the current use of property. The land use categories and their extent in 2011 are shown in Figure 10-1. The land use categories are based on categories developed by the Chester County Planning Commission in coordination with the Chester County Office of Tax Assessment and are discussed below under each category. The predominant land uses in Penn Township are agricultural and residential.

Figure 10-1: Land Use Distribution 2011

Land Use Category	Acres	Percent of Total
Agriculture	2609	42%
Single Family Residential	1411	23%
Industrial Agriculture	593	10%
Open Space/Parks and Recreation	344	6%
Transportation/Right of Way	290	5%
Vacant	282	5%
Institutional	203	3%
Utilities	85	1%
Mobile Home	82	1%
Commercial Services	80	1%
Two Family Residential	71	1%
Industrial	69	1%
Multifamily Residential	34	1%
Mixed Use	23	<1%
TOTAL ACRES	6,176	100%

Source: Chester County Office of Tax Assessment, 2011, Chester County Planning Commission, 2011.

Agricultural Uses

3,202 acres, 52% of the total Penn Township area

Agricultural use represents the largest land use in Penn Township and includes all lands devoted to crops, pastures, orchards, nurseries, mushroom farming, or other agricultural uses. Farmsteads and associated buildings are included in agricultural land use. To further define these uses, "Industrial Agriculture" was identified within the category, and includes those lands devoted to nursery operations and mushroom farming, as these are more intensive agricultural operations. Industrial Agriculture accounts for 593 acres (10 percent of all land area), while agricultural uses such as crops and pasture, "Agriculture," account for 2,609 acres (42 percent of all land area).

Overall, agricultural activity in the area has been steadily declining as a result of increasing costs, competition, and the pressure of development in the area. However, just over half of the Township currently remains in agricultural use, and agricultural lands are particularly dominant in the northern half of Penn Township. In the southern portion, agricultural lands are more fragmented by development – residential, institutional, and commercial.

Several agricultural properties are enrolled in Agricultural Security Areas or Acts 515 or 319 in the Township. Under the Agriculture Security Area program, farmers are protected from nuisance laws and other regulations that can hinder normal farming practices, but this program does not restrict use of the land nor preclude subdivision. Acts 515 and 319 allow farms to be taxed according to their current use rather than potential market value, thus reducing property tax burden for working farms, but do not preclude future development.

Permanent agricultural easements do restrict future subdivision of the land. In Penn Township, there are only five properties under permanent easement (see Maps 8-1 and 8-2 in Appendix A). One of these easements (covering 15.5 acres) is held by a private land trust, while the other four (covering 151.8 acres within Penn Township) are protected through agricultural easements administered by the Chester County Agricultural Lands Preservation Board (ALPB). This creates a total of 167.3 acres of permanently protected lands currently in agricultural uses in Penn Township, representing 2.7 percent of all Township lands and 5.2 percent of all lands currently in agricultural uses. Clearly there is significant potential for change in this land use, given the limited portion that is protected from future development.



Much of the agricultural land in Penn Township is related to nursery operations. While much of this acreage is enrolled in Agricultural Security Areas, most is not permanently protected from development.

Residential Uses

1,598 acres, 26% of the total Penn Township area

Residential uses include single family detached dwellings, two family dwellings, mobile homes, and multifamily dwellings (such as apartments and townhouses). Single family residential includes all detached units on separate lots (excluding all mobile homes, which are within their own category). Single family development is by far the most prevalent residential dwelling type in Penn Township by land area (23 percent of all land area, or 1,411 acres). Concentrations of single family residential development can be seen along the collector and minor roadways, with several newer cluster design developments (including Ovations at Elk Creek, Elk Creek Farms, London Brook Estates, and Villages at Penn Ridge) in the southern portion of the Township. The newer cluster developments are characterized by a smaller lot size (less than half an acre) with surrounding open space and are served by public sewer. Lot sizes for single family residences outside of the cluster developments typically range between one to two acres, with a few sporadic larger lots, and are typically served by on-lot septic systems.



Single family housing remains the dominant housing type in Penn Township, occupying 23 percent of all land area.

Two family residential includes attached units on shared or divided lots, including paired patio homes and duplexes. Two family dwellings are limited to a portion of Jenner’s Pond, a portion of Ovations at Elk Creek, and a minimal number of scattered sites, and occupy 71 acres (or one percent of all land area) within Penn Township. Mobile homes occupy 82 acres (one percent of all land area), and include the Oxford Village Mobile Home Park (224 lots that are typically all occupied) and scattered individual units throughout the Township. Multifamily residential can include townhouses, apartments, and group quarters. In Penn Township, this category consists primarily of apartments and occupies 34 acres (one percent of all land area). The apartments are located on a portion of Jenner’s Pond, at the Luther House, and on a minimal number of smaller lots. A very limited number of units within Rose View have been developed as quads, a form of multifamily housing.



Within the Rose View development a limited number of units have been developed as quads, a form of multifamily housing.

Commercial Services

80 acres, 1% of the total Penn Township area

Commercial Services includes retail, wholesale, personal and professional services, hotels, and motels. Commercial land uses in Penn Township are focused around Jennersville, and include the Shoppes at Jenner’s Village (with over 140,000 square feet of commercial space). Commercial uses are also scattered along Baltimore Pike and around the village of Kelton.

Institutional

203 acres, 3% of the total Penn Township area

Institutional uses include hospitals, government buildings, educational facilities, churches, and cemeteries. The majority of institutional uses in Penn Township is located along Old Baltimore Pike and Route 796, and includes Jennersville Regional Hospital, a portion of Jenner’s Pond (the assisted living complex), the Jennersville YMCA, the Delaware County Technical College High School, and the portion of the Avon Grove School District complex that extends into Penn Township.

Industrial

69 acres, 1% of the total Penn Township area

Industrial uses include areas devoted to fabrication and/or assembly of raw materials or components, and the associated uses involved in developing and distributing these products. Industrial uses in Penn Township are located along Old Baltimore Pike (off Commerce Boulevard and Federal Way) and along Route 796 (off Briar Drive).

Mixed Use

23 acres, <1% of the total Penn Township area

This category describes uses that have a residential and commercial component on the same property. Within Penn Township, this is typically a small scale home-based business conducted either within the dwelling or on the same property in an accessory building.



Jennersville Regional Hospital is a significant land use and economic presence in Penn Township.

Open Space/Parks and Recreation

344 acres, 6% of the total Penn Township area

The open space category represents specific deed-restricted lands dedicated for non-development open space as part of clustered residential developments, as well as public park and recreation areas. Public park and recreation areas include the Penn Township Park off Lewis Road and the proposed park located between Jenner's Pond and the Estates at London Brook. Deed-restricted open space is located primarily in the southwest portion of the Township, with a limited amount in the southeast portion (associated with the Villages at Penn Ridge).

Utilities

85 acres, 1% of the total Penn Township area

The utilities category includes power generation substations and major transmission lines, communications towers, wastewater treatment plants, and the rail line. In Penn Township this category includes the active East Penn Railroad and several PECO properties.

Transportation/Right of Way

290 acres, 5% of the total Penn Township area

Right of way and transportation includes areas deeded for or currently devoted to highway transportation.

Vacant

282 acres, 5% of the total Penn Township area

The vacant land use category includes areas that are not agricultural, not developed, or areas cleared or unused and not tied to any other uses. There are several parcels of various sizes categorized as vacant scattered throughout Penn Township. Some are existing lots of record awaiting development.



As development slowed in recent years, lots awaiting development became more obvious in the Township.

Land Development Trends

The number, type, and size of subdivisions and land developments proposed in Penn Township over the last ten years provide one measure to assess growth pressure. Figure 10-2 summarizes the subdivision and land development applications received for review by the Chester County Planning Commission between 2001 and 2010. While not every submitted plan is approved, or necessarily built if approved, these proposed plans provide insight into development trends in the Township during the last decade. The impact of the economic downturn that began in late 2007 is clearly evident, particularly in the number of lots or units for residential uses. No subdivision or land development applications for single family detached, attached, or multifamily residential uses were reviewed in 2009 or 2010, a dramatic decline from the 181 residential lots/units in 2001, 395 residential lots/units in 2002, and 334 residential lots/units in 2005. While year to

year variation is typically part of development, the period of 2008 to 2010 was an extended period of reduced development within Penn Township and all of Chester County, as well as nationally. The square footage of commercial, industrial, and institutional uses in applications was quite high in 2001 and from 2004 to 2006, and has since declined as well. The decline has not been as dramatic as that in residential development however.

Figure 10-2: Subdivision and Land Development Reviews 2001 - 2010

Year Reviewed	Single Family Detached	Attached and Multifamily	Total Residential Lots or Units	Agricultural Units or Lots	Commercial, Industrial, and Institutional		Total Lots or Units	Total Land Area (acres)	New roads (feet)
					Units	Square Feet			
2001	178	3	181	1	7	121,193	189	455	4,510
2002	395	0	395	4	1	28,000	400	580	16,216
2003	4	0	4	0	2	18,750	6	14	-
2004	5	76	81	0	11	270,481	92	133	1,468
2005	139	195	334	0	10	253,877	344	537	14,712
2006	46	0	46	2	4	184,047	52	345	5,081
2007	56	226	282	2	3	-	287	413	8,365
2008	45	0	45	3	1	11,067	49	132	3,684
2009	0	0	0	0	3	34,147	3	43	1,975
2010	0	0	0	3	5	17,176	8	325	-
Total	868	500	1368	15	47	938,738	1430	2978	56,011

Source: Chester County Planning Commission, 2011.

Developable Lands

The amount and location of potentially developable land¹ that remains in the Township is of particular importance for planning purposes. By determining which lands are developable, it is possible to determine the amount, type, and location of future growth that could occur in the Township and where and how land preservation and other planning efforts should be focused. Adjustments to land use and zoning policies can be made on the basis of this information. Map 10-2 (Appendix A) identifies developable lands by first eliminating lands that are naturally constrained, protected through easements, public, or conservation ownership, or are already developed. The remaining land includes those parcels that could potentially be developed in the future. Figure 10-3 provides a summary of the number of acres that are included in each of these four categories as well as the specific types of lands which comprise those categories.

¹ Developable lands are those lands that are not currently developed, not protected with easements, public, or conservation ownership, or those lands that are not constrained by natural features.

Figure 10-3: Constrained, Protected, Developed, and Developable Lands 2011

Land Use Category	Lands Included In Category	Acres in Category	Percent of Township
Natural Constraints	Steep slopes (>15%), 100 year floodplain, wetlands, streams, ponds, riparian buffers*, hydric and alluvial soils.	1,598	25.9%
Protected Lands (excluding natural constraints)	Parks, eased or partially eased parcels, HOA lands, other protected open space.	341	5.5%
Developed Lands	Existing development, street rights-of-way, and approved subdivisions.	1,642	26.6%
Developable Lands**	Remaining lands that are not constrained, protected, or already developed.	2,598	42.0%

Source: Chester County Planning Commission, September 2011.

*Consisting of Zones 1 and 2, as defined in Section 414.10 of the SLDO.

**For the purposes of this analysis, larger parcels with existing limited development (i.e., a parcel of 4 or more acres with a single house located on it) are considered potentially developable unless they are otherwise protected or constrained.

Based on the information in Figure 10-3, 31.4 percent of land in the Township is either protected or contains significant natural constraints and is, therefore, not available for development. Natural constraints are concentrated along the stream corridors in both the White Clay Creek and Big Elk Creek watersheds.

Protected lands include homeowners association (HOA) open space, properties under permanent easement, and township parkland. The majority of the protected lands in the southern portion of the Township are HOA lands or township parkland, ensuring some level of public access. Almost all of the protected lands in the northern portion of the Township are through easements and lack any public access. Approximately 26 percent of the land in the Township is already developed. Thus, developable lands account for approximately 42 percent of lands in the Township. Developable lands are scattered around the Township, fragmented by existing development and constrained lands. Land use policies for these areas of potential development will have the greatest influence on future growth in the Township.



Developable lands – those with more than four acres not otherwise protected or constrained – account for approximately 42 percent of the Township. Significant changes are likely in Penn Township’s future landscape if these lands are developed.

Planning Implications

Natural Constraints

The natural constraints in the Township are focused around the stream valleys, and include the regulated riparian buffer area, steep slopes, wetlands, and hydric soils. Growth should be directed away from these areas and they should be permanently protected when possible.

Protected Lands

A limited amount of land is protected permanently within Penn Township. Future preservation efforts should focus on preserving recreational space in the southern portion of the Township for public use and open and agricultural space in the northern portion of the Township.

Developed Lands

Development in Penn Township has traditionally radiated out from the village of Jennersville, with smaller areas of growth around Kelton and Elkview, and this pattern generally continues. The Route 1 bypass has acted as a boundary to a degree, with most development occurring in the southern portion of the Township and the northern portion remaining largely agricultural and rural. In the Jennersville area, a mix of uses has been an important part of the character of the village.

Developable Lands

A large portion of Penn Township remains developable – 42 percent. This indicates a large potential for significant change in the Township over time. Management of these lands will play a large role in determining the future quality of life in the Township.

Development Pressure

While the economic downturn has slowed development pressure in Penn Township, it is anticipated that growth will still continue but at this slower pace given the existence of the commercial services and medical facilities, availability of public sewer, and location along the Route 1 corridor. Balancing growth with protection of agricultural, natural, scenic, and historic resources on the remaining developable lands will be critical to the future of Penn Township.

Future Land Use Plan

This section of the Chapter recommends an overall land use pattern for the Township until the year 2030 and provides recommendations for how to achieve that pattern. This Chapter responds to, and is informed by, the goals, objectives, and recommendations of the other elements of the Plan, such as community facilities and natural resources. Consistency in the vision for the many elements that create

communities is key to maintaining the quality of life that Penn Township residents currently enjoy.

Land Use Plan Categories

The land use plan categories described below were developed with consideration of the Planning Implications previously noted, as well as projected population growth, the need to allow for a variety of housing types, and consistency with the land use policies of the Chester County Policy Plan, Landscapes2. The overall intent is to contain growth in areas where it can best be accommodated (Potential Growth Areas) and to limit development in areas where it is least appropriate (Resource Protection Areas). Map 10-3 (Appendix A) depicts the land use plan categories, which are described below.

Resource Protection Areas

3,396 acres, 55%

Resource Protection Areas are characterized by agricultural operations, natural resources such as streams, and low-density residential uses. While these areas include a limited number of local commercial uses and scattered residential uses, the absence of infrastructure (public sewer and water) has restricted the development of large residential subdivisions and commercial operations. The Township has expressed a desire to restrict expansion of infrastructure into these areas. Development that does take place in these landscapes should have protection of resources as a leading focus.

Rural

Rural (1,798 acres, 29 percent) represents the transition area from predominantly agricultural areas (primarily located to the north and west of Penn Township) to the growth areas located within and to the east of Penn Township. Uses in the Rural area include agriculture, open space, natural resources, and low-density residential. Residential uses include single family homes along road frontage and as part of subdivisions at a density of approximately one dwelling unit per one to two acres, served by on-lot water and sewer facilities.

Agricultural uses in this area should be maintained and encouraged. While future residential development should be limited, it may continue to be permitted at a suggested density of one dwelling unit per one to four acres to accommodate a limited amount of population growth. To limit the disturbance of natural resources (including agricultural soils, riparian buffer zones, and wetlands), these resources should be netted out of development calculations and development design should be appropriate for the rural setting. Penn Township should continue to coordinate with local landowners, land preservation organizations, and the County to preserve agricultural operations and farmland in the Rural area.



Existing rural lands in northern Penn Township.

Sensitive Resources

Sensitive Resources (1,598 acres, 26 percent) represents lands that have natural resources such as streams, wetlands, and steep slopes. The Big Elk Creek and all of its

tributaries in Penn Township are Special Protection Waters due to their designation as High Quality by PADEP. The White Clay Creek and all of its tributaries in Penn Township are included in the federal Wild and Scenic River designation. These areas should be protected through Township regulation to limit impacts on the resources and prevent issues such as increased flooding in the future or imposition of water quality regulations from outside agencies. Sensitive Resources extend across the Township, and fragment the other land use category areas.

Potential Growth Areas

2,780 acres, 45%

Potential Growth Areas include those categories intended for the orderly and efficient development of suburban areas of the Township, at appropriate densities that meet the population growth in the Township and take infrastructure limitations into consideration. These areas are planned to accommodate a diversity of residential uses to meet the needs of the socioeconomic range of the population, while also accommodating commercial, industrial, and institutional uses to provide for the economic and employment needs of the Township and provide an adequate tax base. Development should occur in a manner that preserves community character.

Town Center

Town Center (364 acres, 6 percent) represents the area including the village of Jennersville and extends along Baltimore Pike. The area has experienced intense growth since the 1990s, and has a mix of uses – institutional, residential, and commercial. To remain the focal point of the Township while providing services to both local and regional residents, the area needs to become more pedestrian and transit friendly. Improving walkability throughout the area, adding traffic calming and gateway treatments, and permitting a variety of uses will help ensure that this area remains Penn Township’s core area for services.



The Town Center includes a mix of uses, such as residences, professional offices, institutional uses, and retail businesses.

Suburban Center

Suburban Center (622 acres, 10 percent) represents the area outside the village of Jennersville that has experienced intense growth since the 1990s. There is a mix of uses in this area – institutional, residential, and commercial – as well as an expanded presence for industrial uses. This area should provide for larger scale commercial, institutional, and industrial uses that require more acreage than is available in the Town Center and that generate less pedestrian and transit traffic. The Suburban Center area can also encourage appropriate uses along the rail line.

Suburban

Suburban (1,794 acres, 29 percent) represents the southernmost portion of Penn Township, with its dominance of residential development. This area should remain focused on providing for residential uses in the future, while exhibiting a lower intensity of development than the Suburban Center or Town Center areas. Agricultural operations will likely to continue in this landscape, but are not the predominant use. Efforts should be made to minimize conflicts between different uses in this landscape.

Accommodation of Future Growth

Accommodation of Residential Growth

A land use plan must consider whether future population growth can realistically be accommodated within the areas it has designated for growth. In this section, an estimate of potential future development is determined based on the Future Land Use Plan Map, the accompanying descriptions of each Land Use Plan category, and developable land. This information, in conjunction with the future population and housing projections, is used to determine whether the Future Land Use Plan can accommodate projected growth to the year 2030 within the Potential Growth Areas.

Developable land consists of the remaining lands in the Township after natural constraints, developed lands, and other protected lands (i.e., parks and eased land) are subtracted from the total. Parcels of four acres or more that had one house on them were also factored into the analysis to reflect their potential for further subdivision. Figure 10-4 shows the amount of developable land in each Future Land Use Plan category. The Township is divided almost evenly between Resource Protection Areas (55 percent) and Potential Growth Areas (45 percent). Figure 10-4 reflects the developed nature of both the Town Center and Suburban Center, but developable lands remain in each. A significant portion of the Rural area is developable, which speaks to the potential for substantial changes in this area if growth is not properly managed.

Figure 10-4: Land Use Plan Categories - Developable Land

Land Use Plan Category	Acres of Land in Category	Percent of All Township Land In Category	Acres of Developable Land in Category
Resource Protection Areas			
Rural	1,798	29	1,243
Sensitive Resources	1,598	26	0
<i>Total</i>	<i>3,396</i>	<i>55</i>	<i>1,243</i>
Potential Growth Areas			
Town Center	364	6	67
Suburban Center	622	10	377
Suburban	1,794	29	911
<i>Total</i>	<i>2,780</i>	<i>45</i>	<i>1,355</i>
<i>Total All Lands</i>	<i>6,176</i>		<i>2,598</i>

Source: Chester County Planning Commission, November 2011.

An estimate of the potential development that could occur in each Future Land Use Plan category is provided in Figure 10-5. In addition to subtracting developed, constrained, and protected lands, 15 percent is subtracted from each category to account for infrastructure such as roads, sewers, and stormwater facilities. An estimate for the portion of the area that will be developed in residential uses (versus non-residential uses) is also factored in, based on existing development patterns and uses permitted under current zoning regulations.

The last column in Figure 10-5 indicates the approximate amount of growth that could occur in each land use designation based on the Future Land Use Plan’s recommended guidelines for development in that category. The information in Figure 10-5 is an approximation of potential development and provides an estimate of future build-out short of a highly detailed parcel by parcel analysis. The purpose of this analysis is to evaluate the general capacity of the Future Land Use Plan Map in accommodating projected population for the estimated timeframe of this Plan. The Township is projected to need an additional 603 total dwelling units to accommodate the population growth by the year 2030 (see Chapter 11, Housing Inventory and Plan). Figure 10-5 indicates the potential for 1,838 residential dwelling units under the Future Land Use Plan under the stated assumptions, including 1,336 units within the Potential Growth Areas (Suburban, Suburban Center, and Town Center), exceeding the required units (603) for growth projected through 2030.

Figure 10-5: Potential Future Development by Land Use Plan Categories and Map

Land Use Plan Category	A. Density Range*	B. Acres of Developable Lands in Category	C. Reduction for Infrastructure (15% of B)	D. Net Developable Land in Acres (B-C)	E. Land Assumed for Residential Use**	F. Potential Residential Units [(D)(E)(A)]
Rural	1 du/2.0 acres	1,243	186	1,057	95%	502
Suburban	1 du/1.0 acre	911	137	774	90%	696
Suburban Center	3.25 du/1.0 acre	377	57	320	55%	539
Town Center	3.25 du/1.0 acre	67	10	57	55%	101
<i>Totals</i>		<i>2,598</i>				<i>1,838</i>

* Based on the current Zoning Ordinance.

** Based on existing development patterns and permitted uses in the Zoning Ordinance

Accommodation of Non-Residential Growth

Figure 10-5 directly discusses potential residential development, but can also be used to discuss non-residential development. As noted in column E, a certain percent of the land use plan category is assumed for residential use (based on existing development patterns and permitted uses in the Zoning Ordinance), leaving the remainder (45 percent in both the Town Center and Suburban Center) for other forms of development, such as commercial, institutional, or industrial. In the Town Center, 45 percent of the remaining developable lands equates to 26 acres; in the Suburban Center, 45 percent equates to 144 acres being available for non-residential uses. Assuming average building coverage in the range of 20 to 30 percent, between 1,481,000 and 2,222,000 square feet of additional non-residential development is possible. By way of comparison, the Exton Mall is 1,086,859 square feet and the Shoppes at Jenner’s Village is 140,455 square feet.

Another way to view commercial and industrial development potential is to compare available acres with acres already developed. There are 149 acres of existing commercial

and industrial uses in Penn Township, and 170 acres that are assumed to be available for non-residential development, which will clearly accommodate a significant amount of non-residential development. Commercial and industrial uses provide a more diversified tax base, and, unlike most residential uses, typically generate more tax revenue than municipal services consumed. Institutional uses do not improve the tax base in the form of real estate-based taxes, but often provide a steady employment base and critical services.

Consistency with Adjacent Land Use Plans

Adjacent Municipalities

London Grove Township

London Grove Township adopted its latest comprehensive plan in March 2011. The Baltimore Pike corridor remains the area with the most intense land uses, including commercial, industrial, and medium and high density residential uses. As with Penn Township, London Grove Township has more intense uses to the south of Route 1. Directly along the western boundary, London Grove has identified primarily low density residential uses south of Route 1 (with the exception of an area of industrial/light industrial along Baltimore Pike and the rail line) and a mix of low density residential and agriculture to the north of Route 1. Penn Township has designated the lands adjacent to London Grove as Rural to the north of Route 1 and Suburban to the south of Route 1. The Suburban land use calls for providing residential uses in the future (at a lower intensity than other growth areas), while the Rural land use calls for a continuation of agricultural uses and low density residential uses. The land uses proposed along this area by each township are generally consistent.

New London Township

New London Township adopted its latest comprehensive plan in February 2012. The village of New London remains the focal point of development in the Township, with the majority of the remaining lands designated for residential uses. New London Township did identify two large parcels currently in agricultural use in the northwest portion of the Township (and therefore adjacent to Penn Township) as residential uses and candidates for agricultural preservation or open space preservation. Lands owned by the Avon Grove School District and currently in use by the District were designated as institutional; these are also adjacent to Penn Township. Penn Township has designated the lands adjacent to New London Township as Suburban, which focuses on providing for residential uses in the future at a lower intensity than other growth areas. Agricultural operations are expected to continue in the area and efforts should focus on minimizing conflicts between different uses. The land uses proposed along this area by each township are generally consistent.

Lower Oxford Township

Lower Oxford Township adopted the Oxford Region Comprehensive Plan in July 2012. The portion of Lower Oxford Township adjacent to Penn Township is designated as Suburban, which is a growth category calling for residential uses at a density of one dwelling unit per 0.5 to two acres. Penn Township has designated the lands adjacent to Lower Oxford Township as Suburban, which calls for providing residential uses in the future, but at a lower intensity than other growth areas (Suburban Center and Town Center). Additionally, the entire Big Elk Creek corridor is noted to be within the Sensitive Resources category, which should be protected by Township regulations to limit impacts. The land uses proposed along this area by each township are generally consistent.



Big Elk Creek forms a natural buffer between Penn Township and Upper Oxford Township and Lower Oxford Township to the west.

Upper Oxford Township

Lower Oxford Township adopted the Oxford Region Comprehensive Plan in July 2012. The portion of Upper Oxford Township adjacent to Penn includes three land use categories – Suburban to the south, a transitional Rural area near the Baltimore Pike/Route 1 corridors, and Agriculture north of Route 1. Penn Township has designated the lands adjacent to Upper Oxford Township as Rural to the north of Route 1, which calls for a continuation of agricultural uses and low density residential uses. The area between Route 1 and the southern municipal boundary is transitional – Town Center along Baltimore Pike, Suburban Center surround the Town Center, and Suburban further south. Additionally, the entire Big Elk Creek corridor is noted to be within the Sensitive Resources category, which should be protected by Township regulations to limit impacts. The land uses proposed along this area by each township are generally consistent.

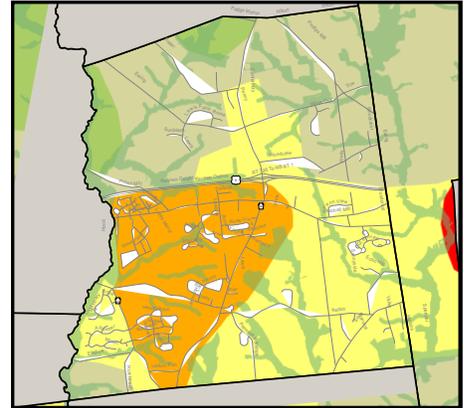
Londonderry Township

Londonderry Township adopted its latest comprehensive plan in March 2007. Londonderry Township is a member of the Octorara Regional Planning Commission, which adopted a regional comprehensive plan in 2005. The individual plan for Londonderry was consistent with the regional plan, and tailored to provide a more detailed analysis of conditions and issues specific to Londonderry Township. Londonderry Township is dominated by agricultural uses, and preservation of these uses has been a focus. As of 2006, approximately 45 percent of Londonderry Township was permanently protected, primarily through the use of easements (Londonderry Township Comprehensive Plan). The future land use plan for Londonderry Township calls for limited areas of commercial development and two villages along Route 41, with the remainder of the Township being designated for agriculture. The southern portion of the Township is designated for agriculture – open space (to the east) and agriculture – rural residential (to the west). The rural residential area directly adjacent to Penn Township includes areas that are currently developed in residential uses. Penn Township has designated the lands adjacent to Londonderry Township as Rural, which calls for a continuation of agricultural uses and low density residential uses. The land uses proposed along this area by each township are generally consistent.

Consistency with Chester County Comprehensive Policy Plan

The Chester County Comprehensive Policy Plan, *Landscapes2*, was adopted in 2009, and includes the Livable Landscapes map. The Livable Landscapes map is generally consistent with the Penn Township Future Land Use Plan.

Landscapes2 designates the entire area south of Route 1 as being within a growth area, with the western portion being designated as a Suburban Center and the eastern portion being designated as Suburban. A small area of Suburban, and therefore growth area, extends to the north of Route 1 along Route 796. The majority of the area north of Route 1 is within a rural resource area, primarily Rural with limited areas of Agriculture in the north and west. A Natural Landscape overlay follows the Township's stream valleys. *Landscapes2* and the Township's Future Land Use Plan are consistent with one another.



Penn Township and Landscapes2

Recommendations

The recommendations noted below respond specifically to the land use issues raised in this Chapter. To fulfill the future land use vision for the Township however, implementation of recommendations in the remaining Plan Chapters is also necessary, as natural resources, parks, recreation, open space, community facilities, housing, and transportation cannot be separated from land use. Those recommendations are not repeated below, but should be viewed as vital to fulfillment of the future land use vision. Appropriate commercial, institutional, and industrial growth, reduction of residential sprawl, preservation of open space, and preservation of agriculture uses are underlying considerations for the land use recommendations. Priorities for the implementation of these recommendations are established in Chapter 12, Implementation Measures. Implementation of the recommendations identified below will help Penn Township achieve its land use goal to:

Strengthen the community by planning for, accommodating, and managing the use of land in a manner that provides for a balance and range of uses, meets the needs of current and future residents, and establishes a balance between growth, protection of resources, and preservation of community character.

Overall

- 10-1. Promote energy efficient standards in development and construction, such as LEED, LEED-ND, and Energy Star certification, and the installation of alternative energy generation systems where appropriate.**

The Township will likely need to initially pursue this recommendation by providing information to residents and businesses about the value of energy efficient standards, or providing incentives. The recently developed Dansko headquarters facility, which is LEED Gold Certified for new construction, is an example that can serve as a model for future projects. LEED-ND can serve as a guide in creating standards and incentives for residential site selection or neighborhood development.

10-2. Remove Township regulatory restrictions that inadvertently discourage energy efficiency and educate developers and the public to discourage their use in homeowner association covenants.

Restrictions, such as prohibiting alternative energy or forbidding seasonal mowing of low-use lawn areas, can discourage energy conservation. This effort might include review of Township ordinances and coordination with homeowner associations regarding their homeowners provisions.

10-3. Support the expansion and promotion of manufacturing and agricultural operations that provide local products to nearby major markets, and support regional efforts to promote the sale of these products.

Such efforts could include promoting the County Agricultural Development Council “Buy Fresh, Buy Local” guide to local agricultural products and fresh food markets. Another option is hosting a farmer’s market at the Penn Township Community Park, which has been done in past years. This location has adequate parking and is nearby to the Jenner’s Pond and Luther House communities. Farmers markets can serve as an overall community gathering place and a valuable community amenity. Local manufacturing is also a relevant issue to Penn Township, with Dansko serving as one example. Local businesses that serve a broader region are valuable pieces of the Township’s economy and quality of life.

10-4. Coordinate the Act 537 Plan (Sewage Facilities) with the future land use vision to manage the extension of public sewer into growth areas and restrict the extension of those facilities into resource protection areas.

Public sewer can play a critical role in reinforcing growth areas and resource protection areas. The Township needs to remain aware of this interaction, and ensure the consistency of the Act 537 Plan with the Future Land Use Plan.

Resource Protection Areas

Rural

10-5. Update zoning regulations to ensure that agricultural operations have the ability to adapt to a changing market.

The zoning regulations should be reviewed to ensure that agricultural opportunities such as Community Supported Agriculture (CSAs) and other secondary uses on agricultural lands are permitted, better enabling agricultural

operations to remain financially solvent as the marketplace for agricultural products changes.

10-6. Update zoning regulations to ensure that future residential development in the Rural area is low-density and context-sensitive.

The Rural area is currently primarily agricultural uses and scattered residential uses, with the typical density of one dwelling unit per two acres for the residential uses. Current zoning districts include the R-1 Residential (with a two acre minimum lot size) and limited areas of R-2 Residential (with a one acre minimum lot size). As this area of the Township is not anticipated to receive public water or public sewer in the foreseeable future, limiting the density of future development is appropriate. Low density does not however, mandate a two acre minimum lot size as the standard, but can instead be interpreted in terms of maximum density. For a rural area, an appropriate maximum density of one dwelling unit per two to four acres, with a minimum *net* lot size that can accommodate on-lot water and septic would be appropriate. Development should be specific to a site, and resources such riparian buffers, historic structures, woodlands, and scenic views should be protected and preserved. Consideration for the need to limit the potential conflicts between agricultural and residential uses should be a priority. A guideline to developing in a rural area is “*Rural Residential District: Protecting Natural, Scenic, and Historic Resources*,” developed by the Montgomery County Planning Commission (2008).

10-7. Update zoning regulations to ensure that future institutional or commercial development in the Rural area is context-sensitive and has limited impacts on surrounding properties.

The current zoning in the Rural area includes the Open Space Institutional district, which permits, by right, places of worship, public or private schools, and museums or cultural uses of a similar nature at a minimum net lot size of two acres. Given the heavy agricultural presence in this area, the Township should review if the density permitted in this zoning district is appropriate, with consideration for the need to limit the potential conflicts between agricultural and other uses. Additionally, the regulations for places of worship and public or private schools should be reviewed to ensure they are appropriate for the Rural area. Museums or cultural uses of a similar nature are currently not defined in the Zoning Ordinance and have no specific regulations attached to them. A definition should be added and consideration given to the development of specific regulations for this type of use, as currently exists for places of worship and schools.

Additionally, see Chapter 8, Parks, Recreation, and Open Space Inventory and Plan for recommendations that specifically address agricultural lands as open space and park and recreation resources.

Sensitive Resources

See Chapter 4, Natural Resources Inventory and Plan, and Chapter 8, Parks, Recreation, and Open Space Inventory and Plan for recommendations that address the resources contained within the Sensitive Resources portion of the Resource Protection Areas.

Potential Growth Areas

Town Center

- 10-8. Review zoning and subdivision and land development regulations in the Town Center to ensure they permit a mix of uses and encourage pedestrian scale development.**

The Town Center encompasses an area that is already largely developed, but in a somewhat incohesive and inconsistent manner. The sidewalk network is incomplete, the scale of development varies greatly from site to site. A review of zoning regulations to ensure that infill development and site redevelopment are achieving a more pedestrian friendly, transit friendly, mixed use development pattern would ensure that this area maintains its importance as the central core of the Township. Ensuring a pedestrian scale to development will improve access to retail and service businesses, while providing residents the option of leaving their cars behind. See Chapter 6, Transportation and Circulation Inventory and Plan, for additional recommendations regarding circulation within the Town Center area.

Suburban Center

- 10-9. Review zoning and subdivision and land development regulations in the Suburban Center to ensure they permit a mix of uses, provide opportunities for a range of commercial, institutional, and industrial development to serve as an adequate tax base for the Township, and minimize conflicts between uses.**

The Suburban Center currently encompasses a wide range of uses, including places of worship, larger scale industrial development, residential development, and limited commercial development. The industrial and commercial uses form an important part of the Township's tax base and provide employment opportunities for area residents. Regulatory controls should continue to permit a range of uses in this area, but also minimize the proximity of conflicting uses and ensure appropriate buffering between different uses.

- 10-10. Coordinate with East Penn Railroad regarding future possibilities for use of the rail line by Township businesses, particularly industrial uses located northeast of Kelton.**

The East Penn Railroad has become an increasingly active line in recent years across southern Chester County. Neighboring municipalities have taken advantage of the economic factors that have spurred business interest in use of the rail line to grow a diversified tax base. Penn Township should remain open and aware of opportunities along the rail line, particularly given the proximity of the I-1 Limited Industrial zoning district.

Suburban

- 10-11. Review regulatory controls to ensure they are facilitating the type and form of development desired in this medium-density, primarily residential, setting.**

Most of the land within the Suburban area is currently zoned R-2 Residential, and permits single family housing with a minimum lot size of one acre. Public sewer is currently extended to portions of this area and not available in other areas. In considering future land use densities, the Township should make a determination of whether public sewer will eventually be extended to the entire Suburban area. Additionally, several properties are currently zoned I-1 Limited Industrial along Sunnyside Road, most of which are smaller in size. With the current requirement of a minimum lot size of four acres, most of the lots along Sunnyside Road that are zoned I-1 are currently nonconforming with regard to lot size. A range of uses are permitted in the I-1 district as well, which could create conflicts given the small size of many lots and the surrounding residential uses. The Township should review where the I-1 designation is most appropriate, the uses permitted, and the minimum lot size.

Links

Landscapes2

www.landscapes2.org/

Chester County – Discover the Future

www.chescopagreen.org/

Montgomery County – Rural Residential District: Protecting Natural, Scenic, and Historic Resources

<http://planning.montcopa.org/planning>

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HOUSING INVENTORY AND PLAN

Introduction

The Pennsylvania Municipalities Planning Code (MPC) sets forth each municipality's responsibilities in terms of housing. It requires that these needs be addressed in the comprehensive plan and offers examples of strategies that include conservation, rehabilitation of existing housing, and facilitating new construction based on projected needs. Although the MPC stops short of mandating housing for all incomes, it does reference the accommodation of "new housing in different dwelling types and at appropriate densities for households of all income levels."

This chapter discusses housing trends and emphasizes key issues as they impact Penn Township. Inventory information provided includes number of units, household size, housing types, ownership, and cost. Recommendations are designed to address each issue and to implement the housing goal and objectives of this Plan.

This chapter addresses the following topics:

- Inventory
 - Number of Housing Units
 - Persons Per Household
 - Housing Projections
 - Housing Types
 - Age-restricted Housing
 - Home Ownership
 - Housing Costs
 - Housing Cost Burden
 - Fair Share Analysis
- Planning Implications
- Recommendations



Inventory

Number of Housing Units

Between 1990 and 2000, the number of housing units in Penn Township increased by 29 percent, a rate slightly higher than the rate of the County, and fairly consistent with the housing growth rate of the region. (see Figure 11-1). Between 2000 and 2010, Penn's rate of increase was 110 percent, about three times that of the region and more than six times that of the County. These numbers are consistent with the significant development in Penn Township since 2000 and with the population data discussed in Chapter 3.

Figure 11-1: Number of Housing Units 1990, 2000, and 2010

	1990	2000	2010	Change 1990-2000		Change 2000-2010	
				Number	Percent	Number	Percent
Penn	848	1,093	2,297	245	29	1,204	110
Avondale	347	350	353	3	1	3	1
Franklin	942	1,181	1,477	239	25	296	25
London Britain	901	979	1,128	78	9	149	15
London Grove	1,307	1,698	2,404	391	30	706	42
New London	922	1,390	1,788	468	51	398	29
West Grove	780	889	938	109	14	49	6
Avon Grove Region	6,047	7,580	10,385	1,533	25	2,805	37
Chester County	139,597	163,773	192,462	24,176	17	28,689	18

Source: U.S. Census Bureau.

Persons per Household

The nationwide trend of decreasing numbers of persons per household is apparent in Penn Township. Generally, household size is projected to continue to decline, but the rate is expected to slow, both in the County and nationwide. Average household sizes are shown in Figure 11-2.

Figure 11-2: Persons per Household 1990, 2000, and 2010

	Average Household Size		
	1990	2000	2010
Penn	2.72	2.65	2.43
Chester County	2.73	2.65	2.65

Source: U.S. Census Bureau, American Community Survey.



Senior living units typically decrease the average household size, a trend that is evident in Penn Township.

Factors contributing to the smaller households in Penn may include lower birth rates, young people postponing marriage, divorced or separated individuals living on their own, and increasing numbers of older people living alone, as reflected in the popular assisted care facilities and age-restricted communities. Smaller household sizes have planning implications because it takes a greater number of housing units, infrastructure, and land to accommodate the same population in a traditional suburban development pattern. However, the decreasing household size also may indicate a change in housing needs in terms of cost, size, and maintenance.

Housing Projections

Penn Township can expect an increase in the demand for new housing units over the next 20 years to accommodate the growing population. The housing projections are provided in Figure 11-3 for Penn Township and the surrounding municipalities in the Avon Grove area, and are calculated by dividing the population projection for that year (see Figure 3-3) by the average household size, based on Census 2010 data. This calculation results in an approximation of the number of housing units needed to accommodate the projected population.

Figure 11-3: Housing Unit Projections 2020 and 2030

	2010 (actual)	Projections		Change 2010 – 2020		Change 2020 – 2030	
		2020	2030	Number	Percent	Number	Percent
Penn	2,297	2,503	3,012	206	9.0	509	20.3
Avondale	353	364	422	11	3.1	58	15.9
Franklin	1,477	1,595	1,878	118	8.0	283	17.7
London Britain	1,128	1,139	1,218	11	1.0	79	6.9
London Grove	2,404	2,673	3,214	269	11.2	541	20.2
New London	1,788	1,961	2,345	173	9.7	384	19.6
West Grove	938	961	1,069	23	2.5	108	11.2
Avon Grove Region	10,385	11,196	13,158	811	7.8	1,962	17.5
Chester County	192,462	203,324	229,210	10,862	5.6	25,886	11.2

Source: U.S. Census Bureau, DVRPC.

The Penn Township increase in housing between 2010 and 2020 is projected to be 206 housing units (9.0 percent), for a total number of 2,503 units. The projected change from 2020-2030 in Penn Township is 509 units, which represents a 20 percent growth rate over that decade. London Grove and New London Townships are expected to grow at a relatively similar rate from 2020-2030. The region as whole is projected to grow 17 percent over that decade, which is a faster growth rate than the projection for the County. The factors affecting actual population increases (available land, land use

regulations, and the economy) will also influence housing growth, as will the social conditions reflected in household size.

Housing Types

Figure 11-4 shows the number of housing units in Penn Township by type, for 1990, 2000, and 2005-2009¹. The significance of this data is found in the multifamily unit comparison. From 1990 to 2000 there was a reduction in the already small number of multifamily/other units, which could possibly be accounted for in the manner in which units were characterized or counted. The 2005-2009 average data show a significant increase in percentage for multifamily units, from one percent in 2000 to ten percent for the 2005 – 2009 average. This increase generally reflects the apartment units constructed at Jenner’s Pond and the Luther House complex since 2000. Single family attached housing experienced an increase in percentage from 1990 to 2000, but then a decrease from 2000 to the 2005-2009 average. Single family detached units have been, and remain, the predominant housing type in Penn Township.



Single family detached units remain the predominant housing type in Penn Township.

Figure 11-4: Penn Township Housing Units by Type 1990, 2000, and 2005-2009 Average

Type of Unit	1990	2000	2005-2009 Average
	Percent	Percent	Percent
Single Family Detached	63	64	62
Single Family Attached	3	15	12
Multifamily	3	1	10
Mobile Home	31	20	17
Other	1	-	-

Source: U.S. Census 1990, 2000; American Community Survey 2005-2009

Figure 11-5 shows a comparison of unit types from the 2005-2009 American Community Survey (ACS) data, between Penn Township and Chester County. Based on this ACS data, 62 percent of the homes in Penn Township are single family detached. Mobile homes and single family attached units make up a significant portion of the remaining housing stock. In comparison with the County, Penn Township has a higher percentage of mobile homes and a lower percentage of multifamily units.

Figure 11-5: Chester County and Penn Township Housing Units by Type 2005-2009 Average

	Single Family Detached	Single Family Attached	Multifamily	Mobile Home
	Percent	Percent	Percent	Percent
Penn	62	12	10	17
Chester County	62	19	16	3

Source: American Community Survey 2005-2009

¹ The most current detailed census data available is from the American Community Survey 5-year data from 2005-2009. These data are estimates based upon a sampling of the population. The decennial census no longer provides detailed population and housing data as it did in the past.

Age-Restricted Housing

A key component of the future of Penn Township, and impacts on public facilities and services, is age-restricted housing and assisted living facilities. Multiple age-restricted developments already exist and there is potential for more. These developments include: Villages at Penn Ridge (170 units, all single family), Ovations (281 units, primarily single family with a limited number of twins), Jenner's Pond (162 cottages and 92 apartments), Luther House (four apartment buildings), and Rose View (twins and quads, still under development). This situation influences the Township in several ways.

Age-restricted housing typically occurs at a relatively higher density than other types of housing (such as single family subdivisions) because the residents generally prefer less outdoor area to maintain. Also, some forms of age-restricted housing, such as assisted living facilities, have a lower vehicle ownership rate, reflecting the decreased need and, in some cases, ability to drive. Third, age-restricted housing typically has a lower persons-per-household ratio than the average residence, signifying changes in the household makeup.

These household differences can alter the types of services needed for these populations. Health care typically must be more responsive and effective, as there tends to be a higher rate of emergency calls and responses to age-restricted facilities. Ideally, commercial and entertainment services should be more conveniently located for a population more limited in transportation options. Public transit options become more important for meeting daily needs. Public facilities such as public water and sanitary sewer must be equipped to handle higher population concentrations.



Ovations is an age-restricted community with primarily single family detached units.



Jenner's Pond includes cottages and apartments within the community, as well as a nursing home.

Home Ownership

The percentage of residents who either rent or own their homes generally corresponds to the types of housing available in a particular community. The higher the number of single family detached homes, the higher the percentage of homeowners versus renters (see Figure 11-6). Penn Township's percentage of home ownership (81 percent) is significantly higher than its percentage of single family homes (62 percent). However, factoring in mobile homes, which are predominantly located in the Oxford Village Mobile Home Park, the number of units is much the same as the actual home ownership figure, as a total of about 79 percent of all units are single family detached or mobile home.

Figure 11-6: Owner or Renter Occupied 2005-2009 Average

	Percent of Occupied Units	
	Owner	Renter
Penn	81	19
Chester County	78	22

Source: American Community Survey 2005-2009



Oxford Village Mobile Home Park includes more than 200 units, which are predominantly owner occupied.

Housing Costs

The median housing value in the Township (as reported by homeowners to the Census Bureau) is at a slightly lower level than that for the County (Figure 11-7). Rental costs grew faster than the County in the 1990s, reflecting a change in rental property market conditions in Penn Township. As of the 2000 Census, Penn Township median rent surpassed the County median. By 2009, rents in the Township had fallen, and were significantly lower than the County median, which is likely due to the development of Luther House, an income-restricted rental community for seniors.

Figure 11-7: Median Housing Value and Rent 1990, 200 and 2005-2009 Average

	Value			Rent			Percent Change 1990 to 2000		Percent Change 2000 to 2005-2009	
	1990	2000	2005-2009	1990	2000	2005-2009	Value	Rent	Value	Rent
	Penn	\$131,300	\$172,400	\$294,000	\$304	\$877	\$715	31	189	71
Chester County	\$155,900	\$182,500	\$328,900	\$496	\$754	\$1,042	17	52	80	38

Source: U.S. Census Bureau, American Community Survey.

Figure 11-8 shows the median sale price of homes sold in Penn Township and the County between 2000 and 2010². As seen in the table, housing prices in the early 2000s were rising rapidly in the Township and at the County level, with median sales prices in the Township, on average, more affordable than the County. By 2003, however, the median sales price in Penn Township was higher than the countywide median and that was consistent through 2010. Following the national trend of decreasing home values, both the Township and the County saw a decrease in median sales price in 2008 and 2009. It appears, however, from the 2010 data, that prices in Penn and countywide have begun to stabilize.

² This is a different dataset than that provided in Figure 11-7; "Housing Value" is reported by the homeowner to the Census and "Median Sales Price" is obtained from the County Assessment Office.

Figure 11-8: Annual Median Sales Price 2000-2010

Year	# of Penn Sales	Penn Median Price	# of County Sales	County Median Price
2000	45	\$156,400	9,241	\$188,000
2001	38	\$185,176	9,083	\$200,000
2002	37	\$172,753	9,212	\$224,900
2003	163	\$270,400	10,240	\$245,000
2004	102	\$289,274	9,492	\$265,000
2005	164	\$360,000	9,333	\$295,000
2006	91	\$353,000	8,336	\$302,000
2007	70	\$360,000	7,335	\$312,000
2008	51	\$343,500	5,911	\$300,000
2009	43	\$305,000	5,413	\$276,700
2010	49	\$305,000	5,188	\$295,000

Source: Chester County Planning Commission, *Housing Costs Profile*, 2000-2010.

Housing Cost Burden

Households at every income level are in need of quality, affordable housing. Housing is generally considered affordable if the household spends 30 percent or less of its gross monthly income on housing costs. One useful measure of the affordability of a community is the incidence of cost burden. Any household that is paying more than 30 percent of income on housing is considered to be cost burdened and therefore at risk of experiencing a housing crisis.

Based on ACS data, 35 percent of Penn Township households are cost burdened. This compares to 33 percent of households countywide. On average, renters typically experience a higher cost burden than homeowners. In Penn Township however the respective rates are very similar, 35 percent for homeowners and 38 percent for renters. This is likely due to the recent growth in multifamily rental units, many of which are subsidized specifically to maintain affordability for the members of the household. The combined cost burden rate for the Township is slightly higher than for the County. Both, however, are significant and the Township should consider affordability relative to new development proposals moving forward.

Fair Share Analysis

The Basic Concept of Fair Share

The 1988 amendments to the Pennsylvania Municipalities Planning Code (MPC) require that through zoning, each municipality provide "...for residential housing of various dwelling types encompassing all basic forms of housing, including single family and two family dwellings, and a reasonable range of multiple family dwellings in various arrangements..." (MPC Section 604.4). This amendment stemmed from the judicial determination that local governments are required to plan for and implement land use

regulations that meet the legitimate needs of the range of people who may desire to live in the community. In spite of this “fair share” mandate, however, the Pennsylvania Legislature has not specified the necessary amount of any residential use, nor has the Legislature offered guidance for a municipality to determine if it has met its obligation to provide for each residential use.

The courts, however, have been somewhat more instructive on how a community may determine if it has met its fair share obligations. In 1977, the Pennsylvania Supreme Court decided the landmark case, *Surrick v. Zoning Hearing Board of Upper Providence Township* 776 Pa. 182, 382 A.2d 105, which laid out an analytical “fair share” test, or methodology, to help determine if a municipality is allowing only a token provision of a residential housing type, particularly multifamily dwellings³, or whether a municipality is meeting its fair share obligation. The process by which to determine if a municipality has met such a responsibility is termed a “fair share” analysis. A fair share analysis attempts to assess, based on available information, whether a municipality is providing for its “fair share” of all housing types, particularly multifamily housing, and whether the municipality is attempting to meet its obligation to accommodate future growth.

This fair share analysis considers the availability of land and the provision for multifamily housing from several different perspectives to ensure that Penn Township has designated a reasonable amount of land for multifamily dwellings, based upon the Land Use Plan recommendations. The analysis is intended to prevent the township from directly or indirectly excluding any common form of residential housing, particularly multifamily housing from within its borders.

The Fair Share Test

The fair share analysis is primarily comprised of a three-tier test laid out by the *Surrick* Court. This test is not appropriate if a municipality completely excludes multifamily housing. A zoning ordinance that completely excludes a type of residential use will be found invalid. Rather, the fair share test is to determine if the amount of multifamily units provided for is token or “de facto” exclusionary (permitted by the ordinance as a specific use, but which does not allocate sufficient land for that use or otherwise negates the actual provision of the use).

While the case law following *Surrick* has provided some general principles of law, neither the courts nor the Legislature have developed clear standards for meeting fair share. Indeed, even with the three-tier *Surrick* fair share test, “the question of whether or not a zoning ordinance is exclusionary in its effect...always depends on the unique facts in each case and, thus, can only be decided on a case-by-case basis.”⁴

Notwithstanding the individual nature of each municipality, the courts have established the following tiers for determining if a municipality is providing for its fair share obligation:

³ Note that in the context of this fair share analysis, the term “multifamily” means any housing type of three or more dwelling units, including but not limited to townhouses, quadruplexes, and apartments. The definition does not include twins, duplexes, or two family units. This distinction is based on the MPC language in Section 604(4) which supports distinguishing two family homes from structures with three or more dwelling units.

⁴ *Kaiserman v. Springfield Township*, 22 Pa. Cmwlth. 287, 348 A.2d 467 (1975) at 470.

- **Tier 1:** Is the municipality a logical area for population growth and development? (i.e., is it in the path of growth?)
- **Tier 2:** Is the municipality a developed or developing community?
- **Tier 3:** Is the amount of land zoned/available for multifamily development disproportionately small, in relation to population growth pressure and present level of development?

Tier 1 - Path of Growth

Is the Township in the Path of Growth?

The first tier of the Surrick test examines whether a community is a logical area for development and population growth or “in the path of growth.” There are several factors to consider in determining whether Penn Township is in the path of growth. The township’s past and projected population is a factor in the Tier 1 analysis. Another growth factor is the transportation network and accessibility to the township and surrounding region. The township’s proximity to a large metropolitan region or fast growing areas is another consideration.

Penn Township is a logical area for population growth and development. In terms of the Township’s location, development history, and growth patterns, the Township is in the path of growth. Figure 11-9, below shows a steady increase in population in Penn Township over the last forty years. This growth is most significant in the last decade when the Township population grew by 2,552 residents or 90.8 percent (2000-2010). Based on current population projections, growth is expected to continue, although at a slower rate. In terms of location, the Township is accessible from Route 1, an interstate highway that serves to link Philadelphia to Baltimore and areas further north and south.

Figure 11-9: Penn Township Population Trends 1970 to 2030

Year	Population	Numeric Increase	Percent Increase
1970	989	-	-
1980	1,888	899	90.1%
1990	2,257	369	19.5%
2000	2,812	555	24.6%
2010	5,364	2,552	90.8%
2020*	6,084	720	13.4%
2030*	7,320	1,236	20.3%

Source: US Census Bureau (1970-2010); *2020 and 2030 Projections (DVRPC) 2012.

Conclusion: Based on the above analysis, Penn Township is located in the path of growth.

Tier 2 - Present Level of Development

Is the Township a Developed or Developing Community?

The second tier of the fair share analysis looks at the present level of development within the township. The following key factors are examined to help make this determination. (See Figure 11-10 for a summary of the Tier 2 analysis.)

- The percentage of **remaining developable land**, which essentially shows the degree to which the community is “built out.”
- Existing and **potential multifamily** housing units and projected housing needs.
- The **amount of land available** for multifamily development.

A. Developable Land Remaining in Penn Township

Based on the land use analysis completed in Chapter 10, approximately 2,598 acres or 42 percent of the township land (6,176 total acres) is potentially developable (see Table 10-4). Developable land is defined as land that is not naturally constrained, protected through easements or some other mechanism, or already developed. Courts have held that, until a community is almost fully developed (i.e., 95% plus), it is still a developing community and, therefore, is still obligated to provide for its fair share of multifamily housing.

Conclusion: With **42 percent** of its land area potentially developable, Penn Township is considered a developing community.

B. Existing and Potential Multifamily Units and Projected Housing Needs

There are two basic factors that should be reviewed when considering existing and projected housing stock: 1) current multifamily units as a percentage of all housing; and 2) number of housing units (both single and multifamily) needed to accommodate the projected population. These factors are explored below.

B.1 Current Multifamily Units as a Percentage of Existing Housing Stock

The amount of multifamily housing currently on the ground offers the township a snapshot of its current mix of housing, what the market has thus far dictated, and is a consideration in assessing where the township stands in meeting its fair share obligation. While market factors (in addition to zoning) drive what type of housing is built, the current ratio of multifamily housing to all other residential housing types gives some insight into whether the township has been accommodating its share of multifamily housing, and how much more, ultimately, at build-out the township should accommodate.

Based on information provided by the Comprehensive Plan Task Force in 2011, the township had 375 multifamily units (primarily within Luther House, Jenner’s Pond, and Rose View). Therefore, approximately **16** percent of the housing stock in Penn Township consisted of multifamily units.

Conclusion: The percentage of multifamily units in Penn Township as of 2011 is generally consistent with the 15 percent fair share benchmark (See B.2.b for explanation of this benchmark). This indicates that the township has been accommodating its fair share of multifamily units.



The Luther House includes 256 multifamily units, a significant portion of the existing multifamily units within Penn Township.

B.2 Needed and Potential New Multifamily Units

B.2.a. Multifamily Units Needed to Accommodate Projected Population

The number of multifamily units needed to accommodate the projected population to 2030 is the first factor to consider in terms of potential multifamily units. According to the information in Table 11-3, 715 new homes will be needed in Penn Township to accommodate the projected population growth to 2030. A review of Pennsylvania case law indicates that planning for at least **15 percent** of these projected units to consist of multifamily units should fall within the parameters of the fair share test. Therefore, of the approximately 715 total housing units needed to accommodate Penn Township's projected population to the year 2030, the township should allow for a potential minimum of **108 additional multifamily units**.

This analysis only considers the multifamily housing units possibly developed in the Suburban Center (SC) and Town Center (TC) designations of the Land Use Plan, as they are the primary designations that are likely to accommodate multifamily units. Within the SC and TC land use categories, based on the Potential Residential Units shown in Table 10-5, Penn Township can accommodate an additional **640** housing units. **Any or all of those** could be multifamily units based upon future land use policies and projected densities. If the current ratio of multifamily units as a percentage of existing house stock (16 percent) is continued with future development, that would yield **102** multifamily units. In order to meet the projected need for 108 multifamily units, an additional **6** (of the 640) units would need to be multifamily.

Conclusion: Based on the above analysis, Penn Township can accommodate projected multifamily housing needs through the time horizon of the land use plan.

B.2.b Percentage of Multifamily Units at Build-out

The potential percentage of multifamily in relation to other types of housing at build-out is examined in this portion of the analysis. The courts have upheld different percentages of multifamily units at build-out as satisfying fair share obligations, as they determine fair share obligations on a case-by-case basis. Based on review and interpretation of this case law, it is recommended that Penn Township **allow for 15 to 20 percent** of all units to be multifamily at build-out.

Based on the information in Table 10-5, at build-out the potential percentage of multifamily units in the township is estimated to be 24 percent (1,015 multifamily units out of 4,135 total units⁵). This exceeds the 15 to 20 percent recommended range. It is difficult, however, to predict with much certainty the percentage of multifamily units at build-out because there are many market factors which will determine what type of housing is built. Therefore, while an initial conclusion may be that the township is "over allowing" for multifamily housing (potential for 640 units when 245⁶ units are needed at build-out to meet the minimum of 15 percent) the reality is that market factors may produce a smaller percentage of that number. However, it is not unreasonable to project that an additional 245 units could be accommodated within the SC and TC land use designations.

⁵ 2,297 existing units + 1,838 additional = 4,135 total possible units; 375 existing + 640 additional = 1,015 total possible multifamily.

⁶ Multifamily units at build out: 4,135 total units x .15 = 620 multifamily needed. 620 minus 375 existing units = 245 additional multifamily units needed.

Conclusion: Under a build-out scenario, Penn allows for a reasonable mix of multifamily versus single family units.

C. Amount of Land Available for Multifamily Dwellings

The amount of land available for multifamily dwellings is the final consideration under this tier of the fair share analysis. The courts have not specifically defined the term “available” as used in *Surrick*. While the courts may have assumed a general definition of the word, and intended it to mean developable land only, the court cases include discussions on total lands whether already developed or not. Because of this discrepancy, this analysis uses two approaches in determining how much land is available for multifamily development. These approaches are based on review and interpretation of the fair share case law.

The two approaches, described below, primarily differ in how they define “available” land:

C.1 Approach 1 - “Developable Lands”

This approach to determining how much land is available for multifamily housing includes only developable lands; i.e., those lands that have not already been developed in the Suburban Center and Town Center designations and that are not protected or naturally constrained. This definition of “available” lands is considered the more conservative of the two approaches and is probably the most relevant in a community like Penn which has a significant amount of developable land remaining (42 percent).

The Penn Township Future Land Use Plan designates potentially 444 acres⁷ or 17 percent of its developable lands for multifamily development. While the case law does not prescribe a set percentage of land for multifamily use, when using the more conservative “developable lands” approach, the percentage of land designated for multifamily uses should ideally equal **at least five percent and no less than four percent**.

Conclusion: Penn Township provides an adequate amount of developable lands for multifamily housing.

C.2 Approach 2 - “Total Lands”

This approach to determining how much land is available for multifamily housing includes all lands designated for multifamily uses, including developed, developable, constrained, and protected lands. This approach is the less conservative of the two because it includes already developed areas and land that cannot be further developed. Penn Township designates 986 acres⁸ or 15 percent of its total lands for multifamily development. In the case of the less conservative “total lands” approach, it is recommended that at least **seven percent** of the land be designated for multifamily uses.

Conclusion: As demonstrated by the numbers above, Penn Township provides an adequate amount of total lands for multifamily housing.

⁷ Developable acres in the SC and TC future land use designations.

⁸ Total acres in the SC and TC future land use designations.

Figure 11-10: Summary of Fair Share Analysis Results

A. Developable Land Remaining in Township:			
	Total acres and percentage of developable land	2,598 acres or 42 percent	
B. Existing Multifamily Units:			
B.1	Current multifamily units as a percentage of existing housing stock	375 mf/2,297 all units 16% mf units	
B.2	Additional housing units of all types needed to accommodate projected population growth to 2030.	715 units	
B.2.a	Estimated number of potential new multifamily units that would meet current fair share obligations to 2030 (<i>recommended minimum - 15% of 715 total projected units, or 108 mf units</i>)	108-640 mf units	
B.2.b	Total housing units of all types possible under the future land use categories at build-out	4,135 units	
B.2	Total multifamily units possible at build-out (<i>recommended minimum - 15% to 20% of total possible units</i>)	1,015 mf units 24% mf units	
C. Percentage of Land Available for Multifamily Development:		Acres	Percent
C.1	Developable land designated for multifamily units (recommended minimum – 5% of developable land)	444	17
C.2	Total land designated for multifamily units (<i>recommended minimum – 7% of total land</i>)	986	15

Source: Chester County Planning Commission, 2012.

Tier 3 - The Extent of Any Exclusion

Is the amount of land available for multifamily development disproportionately small in relation to population growth pressure and present level of development?

The third tier of the fair share analysis is to determine the extent, if any, of the exclusion of multifamily housing in the township. It is a balancing test, in essence, to determine if the amount of land designated for multifamily development is disproportionately small, in relation to population growth pressure and present level of development. To do so, it is necessary to consider the percentage of land available under the future land use categories for multifamily dwellings in light of the current population growth pressure and in light of the total amount of developable land in the township.

Conclusion: As demonstrated by the number of units and percentages of land (both developable and total) and the population growth pressure in Tier 2, there is no exclusion of multifamily housing in the township.

Planning Implications

Housing Supply

Penn Township population and housing stock has grown rapidly over the last decade. Much of the housing growth has been in single family detached dwellings with a smaller percentage of attached and multifamily dwellings. There may be a future demand for housing options such as townhouses for residents seeking a lifestyle that is more

affordable and offers a lower maintenance commitment than more traditional single family detached dwellings.

Age-Restricted Housing

In recent years the focus of development in the Township has been age-restricted communities. Age-restricted housing trends favor continued growth in the area, but this type of development needs to be appropriately supported by other facilities and services in order to provide a high quality living environment for these populations and to maintain a high quality of life for the community as a whole.

Household Size

The ratio of persons per household plays a critical role in determining future housing demand, and also in determining the types of services needed by those households. A declining ratio, such as in Penn Township, indicates that more housing units, land, and infrastructure may be needed to serve the same population.

Housing Affordability and Diversity

Median sales price for homeownership in Penn Township has increased significantly over the last decade and in 2010 was higher than the countywide median. This is driven for the most part by market forces but also by Township policy. It is important to recognize that 35 percent of households in the Township, including rental units, are cost burdened. This situation reinforces the importance of encouraging housing affordability and diversity.

Fair Share Obligations

A “fair share” housing analysis is necessary to determine if, based on current case law and Township regulations, opportunity for a reasonable diversity of housing is being provided. It is also important to recognize the influence and limitations imposed by market conditions on the development and availability of various housing types. Under current conditions and future land use recommendations, this analysis found that the Township provides for a reasonable mix of housing types.

Housing Accessibility

In Penn Township the predominant housing type is single family detached homes. The majority of these homes, especially the newer developments, have some type of age restriction in place. The percent of multifamily units has risen since 2000; however, many of those units are also age-restricted. Penn Township should be aware of its obligation under the Fair Housing Act to permit housing opportunities for all people, including members of the protected classes. Those classes include race, color, national origin, gender, religion, disability, and familial status (the presence of children under 18 in the household).

Recommendations

The recommendations below detail how Penn Township can address issues of housing supply, sustainability, affordability, diversity, fair share, and accessibility, as well as age-restricted housing. Recommendations include both regulatory controls and outreach and education on the part of the Township. Priorities for the implementation of these recommendations are established in Chapter 12, Implementation Measures. Implementation of the recommendations identified below will help Penn Township achieve its housing goal to:

Provide for adequate, safe, and diverse housing to accommodate current and future residents in a manner compatible with existing development and which is supported with the necessary infrastructure.

Housing Supply

11-1. Review ordinances and amend if needed to allow varying residential densities and diverse housing choices in the Potential Growth Areas of Penn Township.

The population of Penn Township nearly doubled between 2000 and 2010. The rate of growth is expected to slow but the Township will have a need for additional housing over the next ten to twenty years. One goal for future residential development should be to achieve more diversity for housing options within the Township. Currently the majority of units are single family detached (62 percent). Mobile homes have the second highest rate at 17 percent. The Township should consider where and how it could accommodate more single family attached and multifamily housing. In addition, a diversity of housing choices should be available for senior citizens, younger individuals, and families with children.

Housing Sustainability

11-2. Encourage the development and redevelopment of housing that meets Leadership in Energy and Environmental Design (LEED), Energy Star, or other “Green” building standards.

Sustainable housing is housing that is affordable to the resident over the long term, within healthy, vibrant neighborhoods. For some homeowners and renters, housing becomes unaffordable with the additional cost of heat and other utilities. Incorporating green methods and materials reduces energy costs, making utility costs more manageable. Features such as water conserving fixtures, energy star appliances, high efficiency lighting, renewable energy sources (including

photovoltaic and geothermal), and green roofs all contribute to reducing energy usage and therefore lowering the long term costs for the resident.

11-3. Review procedures for inspection of rental properties related to concerns about health, safety, and welfare protections.

The township will consider new regulations for rental property inspections to occur at the time of change in occupancy.

11-4. Inform homeowners about available resources to assist with home repair and maintenance needs through local and countywide home repair programs.

Project R.A.K.E., which is associated with the New London Presbyterian Church, provides volunteer home repair services to township homeowners in need. Also, Good Neighbors, a faith-based non-profit affiliated with Koinonia Christian Ministries, provides home repair services to low-income households, with a focus on southern Chester County and the US Route 1 corridor. The services are provided at no or low cost to the eligible homeowner. Often, low- or moderate-income residents in need of home repair services are not aware that these programs exist and continue to live in substandard conditions when help may be available. The Township newsletter and website could be used to educate residents regarding these programs.

Housing Affordability and Diversity

11-5. Support efforts to maintain the existing high quality of housing available in the Oxford Village mobile home park.

There are a total of 224 lots in the mobile home park and they are typically all filled. The mobile homes themselves are individually owned and generally well maintained. The lots are leased by the homeowner, and the homeowner is responsible for maintenance of the unit. The mobile home park provides a practical housing option that may be more affordable than standard home ownership. The Township should continue to support efforts to sustain the Oxford Village as a viable affordable housing option for current and future residents.

11-6. Continue to permit development of quality, attractive housing that is well integrated into the community and meets low- to moderate-income affordability standards.

Penn Township has accommodated housing for low-income residents with the 256 apartment units of the Luther House community. Luther House is an example of quality affordable housing that will be well maintained and remain affordable over time because of the funding mechanisms that supported its development. The need for moderately-priced housing extends to other residents in the Township as well, as indicated by the cost burden data from the American Community Survey (ACS). The ACS data indicate that 35 percent of Penn Township households are cost-burdened (2005-2009 average data). The Township should consider additional

affordable development for single family or two family units that may or may not be age-restricted.

11-7. Assist in educational efforts that focus on the need for affordable housing in order to reduce opposition to moderately priced development.

Most local opposition to affordable housing is based on a lack of understanding, and therefore a prejudice toward persons who may occupy what is considered to be “low-income housing.” The County and numerous local and countywide non-profit advocacy groups can provide information and educational materials aimed at addressing incorrect assumptions about affordable housing. Penn Township should take a leadership role in supporting such programs and to participate in efforts dealing with the affordability issue. Making existing educational materials available at the Township Building and using the website and newsletter would be appropriate methods to educate residents on this issue.

Age-restricted Housing

11-8. Continue to support development of a mix of unit types in future age-restricted communities.

Penn Township has welcomed multiple age-restricted communities over the last ten years. The market has provided demand for various unit types including higher-end single family, small single family, quadruplexes, condominiums, income-restricted apartments, assisted living, and nursing care. Demographic projections indicate that over the next twenty years the demand for senior housing will continue to increase along with a need for accompanying services for seniors as they age. Jenners Pond is an example of a continuing care retirement community that offers housing options varying from independent living all along the continuum to nursing care.

11-9. Continue to consider the broad range of services associated with age-restricted development during design and construction, as well as after completion of development.

As discussed above, Penn Township can anticipate a growing demand for senior housing, which in turn creates specific needs regarding medical resources, community services, shopping, and services to meet other basic needs of the residents. The Shoppes at Jenner’s Village, Jennersville Regional Hospital campus, and associated medical services are currently available to local residents. These goods and services may not, however, be easily accessible without the use of an automobile, and seniors generally drive less as they age. The SCCOOT bus currently serves residents of Luther House and Jenner’s Pond for travel to the shopping center and the medical campus. The Township will continue to support this type of user funded service. See Chapter 6, Transportation and Circulation Inventory and Plan, for additional recommendations regarding public transit and pedestrian movement.

11-10. Support programs offered through Jennersville Regional Hospital, Oxford Area Senior Center, or other community agencies that provide supportive services to senior citizens desiring to “age-in-place” and remain living in their own homes.

Aging seniors remaining at home will eventually need some level of supportive services. The Senior Circle at Jennersville Hospital promotes the healthiest, most active lifestyle possible through meaningful education, wellness, health, volunteer opportunities, and social activities at the hospital and throughout the community. Membership includes free programs, activities and events as well as discounts from local merchants, and is open to anyone 50 years and over. Another resource, the Oxford Area Senior Center, strives to enhance the quality of life of senior citizens in Southern Chester County by providing programs and services that promote health, wellness, and fellowship. The Senior Center has partnered with the Oxford Neighborhood Services Center to provide the “Adopt a Friend” program. This program provides assistance to aging, disabled, or isolated people who reside in the community. Volunteers provide visitation, transportation services, and friendship to program members. Penn Township should continue to support these programs that provide quality of life enhancements to senior residents.

Fair Share Obligations

11-11. Support Luther House apartments to be maintained as income-restricted multifamily rental housing.

The fair share analysis for Penn Township showed that the Township should be able to provide opportunity for its fair share of multifamily housing through the year 2030. Much of that determination is based upon the 256 existing multifamily units at the Luther House campus. These units currently represent 11 percent of the total number of housing units in the Township and redevelopment of the property for any other use would negatively impact the Township’s fair share evaluation.

11-12. Ensure that zoning regulations continue to create adequate opportunities for the development of additional multifamily housing.

Penn Township should review existing zoning regulations with regard to multifamily housing. Currently the use is allowed by right in the R-3 district but there is no longer any developable land available in that district. In addition to the R-3, multifamily use is permitted only in the Community Institutional district where it is a conditional use and must be part of an age-restricted development. Over the long term, it may benefit the Township to permit general occupancy multifamily housing, in an appropriate location, where there is developable land available.

Housing Accessibility

- 11-13. Review Township ordinances, and update as needed, to provide for housing opportunities for all members of the classes protected under the federal Fair Housing Act.**

The Fair Housing Act prohibits discriminatory treatment with regard to housing opportunities toward any group or individual based upon race, color, national origin, gender, religion, disability, or familial status (presence of children under 18). A request to provide housing that would serve members of the protected classes cannot be denied on the basis of discrimination against members of those groups who are expected to occupy that housing.

- 11-14. Review to ensure that zoning regulations support opportunities for congregate living situations for people with special needs.**

People with disabilities face some of the greatest challenges compared with other demographic groups with regard to securing safe, affordable, and accessible housing. Physically accessible units are in very short supply across the County. Also, regulatory restrictions on uses such as group homes and/or negative stereotypes of residents may have the impact of restricting housing choices available to individuals with disabilities.

- 11-15. Continue to grant “reasonable accommodations,” that may include zoning variances and SLDO waivers, to permit development or redevelopment of housing situations for individuals with disabilities.**

The federal Fair Housing Act requires that a request for relief from zoning, SLDO, or other local code requirements be granted if the request is reasonable and the relief creates an opportunity for the disabled to access housing of their choice within the local community. The request may be denied if it would create an undue burden on the municipality or result in a fundamental change to the character of the neighborhood. Based on the law, a congregate living situation for people with disabilities should be treated like any other residential use with like requirements and restrictions.

Links

DVRPC – Population Projections

www.dvrpc.org/webmaps/Popforecast/index.htm

Landscapes2

www.landscapes2.org/

Chester County – Discover the Future

www.chescopagreen.org/

Oxford Area Senior Center

www.oxfordseniors.org/

Kennett Area Senior Center

www.kennettseniorcenter.org/

Project R.A.K.E.

www.projectrake.com

Good Neighbors Home Repair

www.goodneighborshomerepair.org

U.S. Department of Housing and Urban Development – Fair Housing Act

http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/FHLaws/yourrights

Fair Housing Council of Suburban Philadelphia

www.fhcsp.com/

IMPLEMENTATION STRATEGIES

Introduction

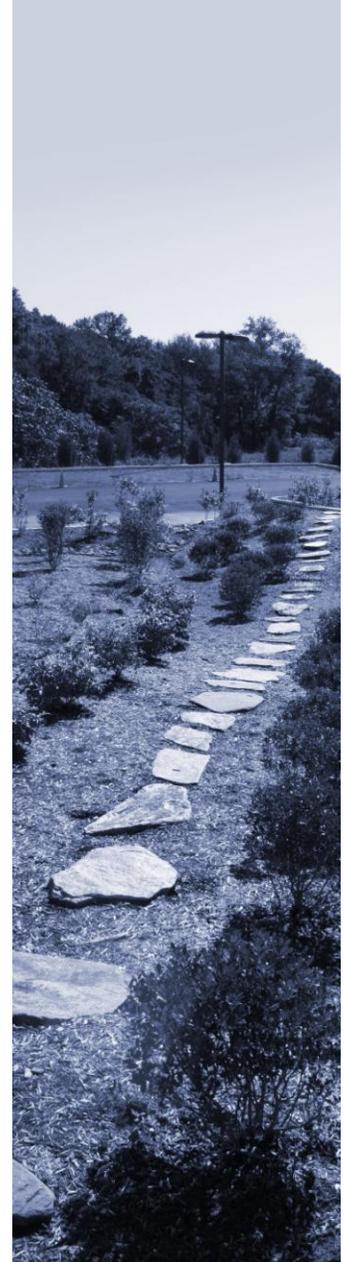
This chapter provides both a broad overview of plan implementation and a summary of the specific recommendations described in the preceding plan chapters.

A Framework for Future Actions

In the preceding chapters, planning issues and recommendations are discussed within the context of a specific resource, such as natural resources. Stepping back from that resource-specific focus, this section discusses issues and actions in a broader framework. Most of the specific recommendations noted in the plan chapters should be considered within the context of the three overall categories of Focused Development and Rural Lands Protection, Comprehensive Regulatory Updates, and Protecting and Improving Water Resources. Such a context will help the Township understand the interactions of specific recommendations and prioritize implementation.

Focused Development and Rural Lands Protection

Penn Township has developed in a distinct pattern: more dense growth in the southern portion of the Township, with a core of commercial uses around Jennersville. The Future Land Use Plan continues that general pattern, with a more distinct focus on directing higher density development to and around the Jennersville/Baltimore Pike corridor, and maintaining the northern portion of the Township in rural and lower-density uses. In particular, the Future Land Use Plan and supporting elements of the plan (such as transportation and housing) call for making the Jennersville/Baltimore Pike corridor a more pedestrian friendly environment while maintaining a mix of uses in the area.



Comprehensive Regulatory Updates

The Penn Township Zoning Ordinance dates from 1968, with a recodification in 2007 and multiple amendments since 2007. The Subdivision and Land Development Ordinance dates from 1997, with multiple amendments since that time. Throughout the plan there are numerous specific recommendations on updating these regulatory tools in regard to specific issues such as natural resources, historic and scenic resources, and land use. Given the time passed since these ordinances were originally passed, and the many amendments to them (some of which have created inconsistencies between and within the ordinances), the Township would be best served by a complete update to both ordinances. While both are critical to the Township, the zoning ordinance update should take priority over the subdivision and land development update. A thorough update to both ordinances will provide a path for implementation of many plan recommendations and the Future Land Use Plan. The Township should consider using a task force and a consultant for comprehensive ordinance updates.

Protecting and Improving Water Resources

This issue is key to Penn Township for many reasons. The Township serves as a headwaters area for both the White Clay Creek (and therefore Christina River) and Big Elk Creek (and therefore the Chesapeake Bay). Both watersheds are becoming increasingly regulated with the Pennsylvania Watershed Improvement Plan and Total Maximum Daily Load (TMDL) requirements, as well as NPDES Phase II and MS4 requirements. Over half the land area of the Township still relies on on-lot wells for its drinking water, and even more of the Township relies on on-lot septic systems for disposal of wastewater. Additionally, Penn Township relies on land application of its treated wastewater that is collected through the Township public sewer system. For these reasons and others, it is critical to protect and preserve the water quality of both surface and groundwater within the Township, and where possible, to improve that quality. Managing the quantity and quality of stormwater is also critical. Recommendations specific to water resources can be found within the natural resource recommendations (such as establishing and protecting riparian buffers with clear and consistent regulation), as well as community facilities and services recommendations (such as ensuring current and effective stormwater management regulations). Water resources need to be a focus point for the Township, and implementation of water related recommendations a high priority.

Resource Based Recommendations

Figures 12-1 through 12-8 present all of the plan's recommendations, along with pertinent information for implementation. The implementation strategies in Figures 12-1 through 12-8 are organized in the same manner that resources were presented in the preceding chapters, with individual recommendations presented as discussed within

each plan chapter. Also included are the corresponding chapter recommendation number, priority, responsible entities, and additional discussion on method or partnering organizations as appropriate.

Priority

The priority assigned to the implementation strategies should be interpreted as follows:

- **Immediate**

The recommendation is related to a high priority item for the Township, and implementation should be commenced within the next one to two years. Typically these types of recommendations can be accomplished relatively quickly, or are the first step in a long-term program.

- **Short-Term**

The recommendation is a medium priority for the Township, and implementation should be commenced within the next three to five years.

- **Long-Term**

The recommendation is a lower priority for the Township, and implementation should be commenced within the next five to ten years or as funding becomes available.

- **Ongoing**

The recommendation will require a continued effort. The initial action, if not already begun, should be undertaken in the next one to two years. These actions often involve monitoring or the continuation of existing programs.

- **Periodic**

The recommendation is of a nature that requires effort at intervals, such as every two years.

Who

The group or groups with primary responsibility for implementing a particular recommendation are listed under this heading. Generally, the groups with the most responsibilities assigned are the Planning Commission, Board of Supervisors, or staff.

Groups are identified as follows within Figures 12-1 through 12-8:

- **BoS:** Board of Supervisors
- **PC:** Planning Commission
- **HC:** Historical Commission
- **RC:** Recreation Committee
- **Staff:** Township Staff (to include staff such as the Township Manager, Zoning Officer, or Road Master as appropriate)
- **EMC:** Emergency Management Coordinator

The leadership of the elected officials of Penn Township in setting priorities and assigning groups to undertake the tasks outlined in this chapter is very important. In the case of ordinances, while it is the Board of Supervisors that must adopt a proposed ordinance, primary responsibility for ordinance development falls to the Planning Commission. If appropriate, a task force can be formed to address specific recommendations. The Township should consider using a task force and a consultant for comprehensive ordinance updates.

Suggested Method/Partners

Specific implementation methods are noted here, such as ordinance updates or public outreach tools. Potential partnering organizations are also noted if appropriate, particularly when a recommendation cannot be accomplished without reaching beyond the Township, or when a partnering organization can bring valuable skills to the task at hand. Organizations are also noted if they can provide information for public education purposes.

Figure 12-1: Implementation Strategies – Natural Resources

#	Recommendation	Priority	Who*	Suggested Method/ Partners
<i>#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.</i> <i>*BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator</i>				
GENERAL				
4-1	Direct growth to the most appropriate areas, as identified in the Future Land Use Plan and supported by the Act 537 Plan, Zoning Ordinance, Subdivision and Land Development Ordinance (SLDO), and review of natural and historic resource mapping.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to the ZO and SLDO, including establishment of disturbance limits.
4-2	Establish net-out provisions for natural resources.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to the ZO, covering net-out for primary and secondary resources.
4-3	Encourage natural resource protection at the individual level through public education regarding the value of natural resources.	Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Existing public outreach methods (Township newsletter, website, municipal building).
WATER RESOURCES				
4-4	Monitor the Pennsylvania Watershed Improvement Plan (WIP), Total Maximum Daily Load (TMDL) requirements, and related issues for Chesapeake Bay tributaries to ensure compliance in the Big Elk Creek watershed.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Monitoring, coordination.
4-5	Monitor TMDL requirements within the White Clay Creek watershed to ensure compliance, and coordinate with other organizations to identify opportunities to improve water quality and wildlife habitat within the watershed.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Monitoring, coordination.
4-6	Work to improve surface water quality through regulatory controls as well as partnerships with other municipalities and organizations.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Partners: White Clay Creek Wild and Scenic Management Committee, White Clay Creek Watershed Association, Chesapeake Bay Foundation.
4-7	Create consistent regulations in the Zoning Ordinance and SLDO to protect riparian areas through establishment and regulation of riparian buffers.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to ZO and SLDO.
4-8	Update floodplain regulations within both the Zoning Ordinance and the SLDO, and make them consistent between the two documents in order to protect regulated floodplains from encroachment, ensure safe conveyance of 100 year flood waters, and minimize public risk and costs associated with flooding.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to ZO and SLDO.
4-9	Establish a groundwater protection zone and protective measures within that zone that protect recharge areas, quantity, and quality of groundwater to sustain stream baseflows, wetlands, and water supply.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Ordinance amendment.

LAND RESOURCES				
4-10	Ensure erosion and sedimentation regulations are up to date and encourage best management practices.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to the ZO provisions, or establishment of a stand-alone ordinance; coordination with CCCD.
4-11	Update slope protection regulations to be consistent and regulate activities on all slopes 15 percent or greater.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to the ZO and SLDO.
4-12	Investigate options to protect agricultural soils, such as net-out provisions and related options such as support of agricultural easements, encouragement of Secondary/Accessory Agricultural Businesses, encouraging enrollment in Agricultural Security Areas and the Clean and Green programs (Act 43 and Act 319), and encouraging the activities of land preservation non-profit organizations.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Updates to the ZO and SLDO; public education and facilitation via existing public outreach tools.
BIOTIC RESOURCES				
4-13	Encourage the use of native plant species through Township ordinances and public education and outreach.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Updates to the ZO and SLDO; use of existing public outreach methods.
4-14	Encourage the protection and linking of significant undeveloped areas to preserve biotic resources.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Natural resource net-out provisions in ZO; mandatory park/fee-in-lieu dedication; support of private land conservation efforts. See also Chapter 8 recommendations.
4-15	Revise ordinances to include specific disturbance limitations for woodlands, hedgerows, and other vegetation that prescribe the maximum area that can be disturbed and establish tree replacement requirements where the disturbance is unavoidable.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to the ZO and SLDO.
4-16	Encourage tree planting to increase the tree coverage throughout the Township.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Regulatory controls (ZO and SLDO); existing public outreach methods; partnerships with Township businesses/institutions.
4-17	Maintain an awareness of unique habitats, migration corridors, and plant and animal species that are designated as rare, threatened and endangered (by Federal or state agencies) and encourage the protection, restoration, or establishment of viable habitat for these species.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	See Pennsylvania Natural Heritage Program (PNHP) and Department of Conservation and Natural Resources (DCNR) for additional information.
4-18	Investigate options for management of the deer population within Penn Township.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Coordination with neighboring municipalities; public education.
4-19	Update the Wetland Protection Zone regulations in the SLDO and make the measures consistent in the Zoning Ordinance to protect and manage wetlands for their hydrologic and ecologic functions.	Immediate	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Updates to the ZO and SLDO.

Figure 12-2: Implementation Strategies – Historic and Scenic Resources

#	Recommendation	Priority	Who*	Suggested Method/ Partners
<i>#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.</i> <i>* BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator</i>				
HISTORIC RESOURCES				
<i>Historic Resource Identification and Survey</i>				
5-1	Continue to identify and evaluate historic resources through historic resource surveys such as the Chester County Historic GIS Atlas Project.	Immediate and Ongoing	➤ HC	Continued coordination with Chester County Parks Heritage Preservation Coordinator.
5-2	Support nominations of high priority properties for eligibility and/or listing on the National Register of Historic Places in order to provide recognition of, education about, and increased interest in historic resources.	Ongoing	➤ HC	Sharing of Township information on historic resources.
5-3	Contact PHMC to inform them that the Charlton/Lewis Farm has been impacted by development and request a determination on its status, and that the structures on the Hodgson Farm/Earl Hatton Property have been demolished and the site should no longer be designated as National Register eligible.	Immediate	➤ HC	Coordination with PHMC.
5-4	Investigate historic certification through the Chester County Historic Certification Program for individual resources or districts.	Short-term	➤ HC	Coordination with Chester County Heritage Preservation Coordinator.
<i>Historic Resource Regulatory</i>				
5-5	Review the existing historic resource provisions in the Zoning Ordinance and consider revising to further promote and create incentives for historic preservation.	Short-term	➤ HC ➤ PC	Adaptive reuse incentives, density bonuses.
5-6	Consider including provisions in the subdivision and land development ordinance to help promote historic resource recognition and protection, such as requiring identification of historic resources on subdivision and land development plans and consideration of measures to avoid/minimize/mitigate impacts.	Short-term	➤ HC ➤ PC	Ordinance review and updates.
5-7	Review regulatory provisions which established the Historical Commission to ensure that ordinance elements are up to date and accurately reflect the duties of the Historical Commission.	Short-term	➤ HC ➤ BoS	Ordinance review and update.
5-8	Continue to support the Historical Commission, which can serve as an advisor to the Board of Supervisor and residents, and act as a liaison between public and private organizations on historic preservation matters.	Ongoing	➤ Bos ➤ PC ➤ Staff	Specified in recommendation.
5-9	Work to ensure all PHMC comments on	Ongoing	➤ PC	Internal coordination.

	projects requiring a sewage planning module have been received prior to granting preliminary or final plan approval.		➤ Staff	
Historic Resource Education and Outreach				
5-10	Conduct public outreach regarding local historic resources and the broader topic of historic preservation.	Ongoing	➤ HC ➤ Staff	Existing public outreach methods.
5-11	Investigate installing historic markers, using PHMC's Historical Marker Program or developing a local marker program, to identify and acknowledge important regional historic resources.	Short-term	➤ HC	Coordinate with PHMC.
5-12	Encourage private historic preservation measures, such as the sale or donation of easements, deed restrictions, and restrictive covenants, as a historic preservation strategy for individual owners of historic property.	Ongoing	➤ HC	Existing public outreach methods.
SCENIC RESOURCE				
Scenic Resource				
5-13	Update municipal ordinances to guide development to areas less likely to impact scenic resources.	Short-term	➤ PC	<ul style="list-style-type: none"> • Recognize the importance of scenic resources within ordinances. • Maintain a current listing of resources. • Require within ordinances that any proposed subdivision, land development, or permit action in the vicinity of a recognized scenic resource avoid, minimize, and/or mitigate negative scenic impacts.
5-14	Update Township ordinances to protect historic, natural, park, recreation, open space, and agricultural resources, as these form a critical part of the scenic character of Penn Township.	Ongoing	➤ PC ➤ HC	See recommendations 5-1 through 5-12 and recommendations for Chapters 4 and 8.
5-15	Coordinate with PennDOT (or Chester County as appropriate) on any proposed transportation projects early and throughout the project development process to ensure a context sensitive design.	Ongoing	➤ BoS ➤ Staff	Coordination with PennDOT and Chester County Planning Commission.
5-16	Support efforts to organize volunteers to participate in PennDOT's Adopt-a-Highway Program and the Great Pennsylvania Cleanup Program.	Ongoing	➤ Staff	Existing public outreach methods.
Scenic Intrusion				
5-17	Update municipal ordinances to recognize the negative impact of scenic intrusions and require that applicants seeking to construct a new scenic intrusion, or redevelop an existing scenic intrusion, investigate options to avoid, minimize, or mitigate the negative scenic impacts of these intrusions.	Short-term	➤ PC	Require within ordinances that any proposed subdivision or land development involving a scenic intrusion avoid, minimize, or mitigate negative scenic impacts.
5-18	Adopt ordinance language to diminish the negative impacts of lighting and promote the continuance of dark skies.	Short-term	➤ PC	PA Outdoor Lighting Council for model ordinance.
5-19	Recognize the importance of dark skies	Ongoing	➤ PC	Existing public outreach methods.

	protection and educate residents through the Penn Township newsletter, website, and other outreach methods.		➤ Staff	International Dark-Sky Association for public education materials.
5-20	Adopt ordinance provisions that will diminish the impact of outdoor signage, and investigate the option of developing specific design guidelines.	Short-term	➤ PC	Ordinance updates.
5-21	Review ordinance provisions to ensure they permit and encourage utility structures and transmission lines (such as cell towers, stormwater management facilities, and overhead utility lines) to respond to scenic qualities as well as functional requirements, and conduct coordination early with outside groups regarding construction of these features.	Long-term	➤ PC	Ordinance review and updates.
5-22	Review ordinance provisions to ensure they permit and encourage design of parking facilities to respond to scenic qualities as well as functional requirements.	Long-term	➤ PC	Ordinance review and updates.

Figure 12-3: Implementation Strategies – Transportation and Circulation

#	Recommendation	Priority	Who*	Suggested Method/ Partners
<i>#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.</i> <i>* BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator</i>				
SYSTEMWIDE				
6-1	Support completion of projects identified on the TII, and continue to submit identified transportation improvement priorities to the CCPC for inclusion on the TII.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Coordinate with Chester County Planning Commission.
6-2	Seek out funding from traditional and non-traditional sources for transportation projects.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	See DVRPC <i>Municipal Resource Guide</i> (2009) for funding sources.
6-3	Ensure that context sensitive design is supported and enabled through the Township’s regulatory documents and that the Township coordinates with PennDOT to develop context sensitive roadway and bridge improvements.	Periodic	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Ordinance review and updates; see <i>Smart Transportation Guidebook</i> (PennDOT and NJDOT, 2008) for additional information.
6-4	Coordinate with East Penn Railroad regarding public safety along the rail corridor.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Coordination with East Penn Railroad.
6-5	Coordinate with East Penn Railroad regarding the railroad’s operations and potential to serve businesses within the Township.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Coordination with East Penn Railroad.
ROADWAYS AND BRIDGES				
6-6	Undertake a traffic calming study.	Immediate	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Special study.
6-7	Review and revise ordinances to permit the Township to require traffic calming measures in association with subdivision and land development when warranted.	Short-term	<ul style="list-style-type: none"> ➤ PC 	See PennDOT’s <i>Pennsylvania’s Traffic Calming Handbook</i> , Publication 383 for more information.
6-8	Implement gateway improvements to calm traffic and provide for aesthetic and visual cues at entranceways to the Township.	Long-term	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Special study and implementation.
6-9	Monitor and identify necessary maintenance and improvements to bridges within the Township.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Periodic inspection or assessment; annual budget process and CIP.
6-10	Continue to support the design and construction of a vehicular loop system around the village of Jennersville.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Specified in recommendation.
6-11	Continue to ensure that maintenance of local roads is addressed on a continuing basis in the annual budget and capital improvements plan.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Annual budget process and CIP.
6-12	Conduct routine maintenance and re-timing of traffic signals, particularly as new signals are installed.	Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Periodic inspection or assessment.
6-13	Update Township access management regulations to prevent future development from creating detrimental access issues,	Long-term	<ul style="list-style-type: none"> ➤ PC 	See PennDOT’s <i>Access Management Model Ordinances for Pennsylvania Municipalities Handbook</i> , Publication 574 for more

	increasing congestion, or creating safety problems.			information.
6-14	Coordinate with PennDOT regarding highway occupancy permits (HOPs) to plan for access points on state roads.	Ongoing	<ul style="list-style-type: none"> ➤ PC ➤ Staff 	Coordination with PennDOT.
6-15	Undertake periodic reviews of the Zoning Ordinance, Subdivision and Land Development Ordinance, and other regulations to ensure that standards regarding roadways, sidewalks, and trails are current.	Periodic	<ul style="list-style-type: none"> ➤ PC 	Periodic ordinance review.
6-16	Continue to coordinate with surrounding municipalities on regional transportation issues, particularly in regard to Route 896.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Coordination with Route 896 Task Force municipalities.
6-17	Consider adoption of an Official Map to delineate the desired locations of new roadways and pedestrian and bicycle facilities and to ensure that the future transportation network is consistent with the Township's vision.	Long-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	See PennDOT Publication 703, <i>The Official Map: A Handbook for Preserving and Providing Public Lands and Facilities</i> (2011) for more information.
6-18	Investigate if there are options available to restore more north/south transportation connections within the Township.	Long-term	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Special study.

PEDESTRIAN AND BICYCLE CIRCULATION

6-19	Continue efforts to expand sidewalks within the Jennersville village area and along Baltimore Pike, and require sidewalks in new developments within this area.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Special study and implementation.
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Additionally, see recommendations within Chapter 8 regarding trails.

PUBLIC TRANSPORTATION

6-20	Continue to support the continuation and expansion of SCCOOT bus service in the area.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Existing public outreach methods.
6-21	Support the construction of bus shelters for the SCCOOT bus service along Baltimore Pike.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	As part of development/redevelopment proposals along Baltimore Pike; through coordination with area businesses.

PARKING

6-22	Advocate for the development of a park and ride area near the Route 1 interchange.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Existing public outreach methods.
6-23	Review ordinances for parking standards and amend as necessary to ensure parking requirements remain both appropriate and flexible.	Long-term	<ul style="list-style-type: none"> ➤ PC 	Ordinance review and potential updates.

Figure 12-4: Implementation Strategies – Community Facilities and Services

#	Recommendation	Priority	Who*	Suggested Method/ Partners
<i>#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.</i> <i>* BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator</i>				
TOWNSHIP ADMINISTRATION				
7-1	Create a capital improvements plan (CIP) to address long-term maintenance and improvements to Township facilities.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	CIP.
7-2	Continue to use professional consultants when appropriate to bring expertise and experience to the Township without the financial commitment of additional staff.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Engage consultants as needed.
7-3	Establish a volunteer recognition program to acknowledge those residents and businesses that significantly contribute to the Township and to promote volunteerism.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Annual luncheon, awards program, or existing public outreach methods (Township newsletter, website, etc.)
7-4	Continue to seek grants and explore other sources of revenue to address specific facility or service needs.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ HC ➤ Staff 	See recommendation discussion in the narrative for potential grant sources.
7-5	Ensure that public outreach is timely and comprehensive by regularly updating the Township website, publishing the Township newsletter on a regular basis, and using other media outlets as necessary.	Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Periodic review and updates with existing public outreach methods.
SEWAGE FACILITIES				
7-6	Regularly update the Act 537 Plan in order to consider population growth while maintaining consistency with the Comprehensive Plan, its Future Land Use Plan, and those regulatory tools that work to implement the Comprehensive Plan.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Act 537 Plan.
7-7	Continue to encourage and mandate management and maintenance of on-lot and community sewage facilities to protect water quality and increase the lifespan of these systems.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Enforcement of mandated maintenance (Ordinance No. 2009-01).
7-8	Maintain a focus on innovative wastewater treatment and disposal systems to reduce impacts on natural resources and watershed water balances.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Promote groundwater recharge with sewage disposal facilities and policies.
WATER SUPPLY				
7-9	Encourage the routine testing of on-lot wells used as a source of drinking water and educate the public on protecting the water quality of these wells.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Existing public outreach methods.
7-10	Maintain consistency between provision of water supply and the Comprehensive Plan, its Future Land Use Plan, and those regulatory tools used to carry out the Comprehensive Plan.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Continued support of the ZO public water supply limits.

STORMWATER MANAGEMENT				
7-11	Ensure that stormwater management ordinances mandate proper design, construction, and maintenance of stormwater management infrastructure, and amend as necessary to keep current with emerging technologies and practices.	Periodic	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Coordinate with Chester County Water Resources Authority regarding the countywide Act 167 Plan and model ordinance.
7-12	Provide public education and information about cost-effective and reasonable maintenance practices to owners and operators of stormwater management facilities and the general public.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Using information provided by sources such as Chester County Water Resources Authority, PADEP, or websites (www.stormwaterpa.org); delivered through existing public outreach methods.
7-13	Track NPDES Phase II and MS4 requirements to ensure that the Township is in compliance with the regulations, to include regular inspection of inlets and outfalls, updates to mapping of stormwater infrastructure as necessary, opportunities for the public to participate in stormwater management program development and implementation, and development of a plan to reduce runoff from municipal properties and operations.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Periodic review of regulatory requirements; inspection program; education and outreach via existing public outreach methods.
SOLID WASTE COLLECTION AND DISPOSAL				
7-14	Update regulatory ordinances to require curbside recycling by all private haulers that operate within Penn Township, and continue to promote recycling by residents and businesses with outreach, education, and provision of convenient drop-off locations.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Ordinance update; existing public outreach methods.
7-15	Support the continued use of the SECCRA landfill as an essential element in the Township's solid waste management program, and support SECCRA's commitment to recycling and alternative energy generation as critical components of extending the landfill's lifespan.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Specified in recommendation.
EMERGENCY SERVICES				
Overall Emergency Management				
7-16	Update the Basic Emergency Operations Plan (EOP) on an annual basis in coordination with the Chester County Department of Emergency Services, and participate in updates to the Chester County Hazard Mitigation Plan.	Short-term and Periodic	<ul style="list-style-type: none"> ➤ BoS ➤ Staff ➤ EMC 	Specified in recommendation. Coordinate with AGREM.
7-17	Continue to disseminate information to residents and businesses on prevention and preparedness such as use of fire alarms, proper display of house numbers, escape plans, 911 protocols, and the Special Needs Registry.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ EMC ➤ Staff 	Existing public outreach methods.
7-18	Encourage and support volunteer emergency services providers to seek grant funding from the state and federal levels and alternative sources, and seek funding at the municipal level as appropriate.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Specified in recommendation.

7-19	Continue record-sharing coordination between the Township and local emergency services providers to provide information on new development and redevelopment in the Township.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Establish a meeting schedule for coordination.
7-20	Continue participation in the Avon Grove Regional Emergency Management (AGREM) and Southern Chester County Co-op for their benefits related to emergency management and response.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ Staff ➤ EMC 	Continued participation in AGREM.
7-21	Identify potential hazard mitigation projects.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ Staff ➤ EMC 	Contact Chester County Department of Emergency Services for additional information.
7-22	Ensure emergency service providers have the appropriate training.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ Staff ➤ EMC 	Specified in recommendation, contact Chester County Department of Emergency Services for additional information.
7-23	Adopt an ordinance ensuring minimum acceptable in-building radio coverage for emergency communications.	Short-term	<ul style="list-style-type: none"> ➤ BoS 	Contact Chester County Department of Emergency Services for a model ordinance.
Police				
7-24	Monitor state police staffing levels and response times to ensure that adequate protection is provided.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Periodic review.
7-25	Consider adopting a False Alarm Ordinance.	Short-term	<ul style="list-style-type: none"> ➤ BoS 	See Upper Uwchlan Township or Kennett Township for an example false alarm ordinance.
Fire and Ambulance				
7-26	Monitor fire and ambulance staffing levels, response times, and the number of calls within Penn Township to ensure that adequate protection is provided.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Periodic review.
7-27	Determine equitable funding for fire and ambulance services and budget appropriately on an annual basis.	Periodic	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Annual budget process.
7-28	Support local fire companies by publicizing the benefits and needs of volunteer fire and ambulance service.	Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Existing public outreach methods.
7-29	Consider adoption of the local option for residential sprinklers as part of the local building code.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ Code Officer 	See West Whiteland Township for an example.
7-30	Encourage local fire company participation in the Pennsylvania Fire Incident Reporting System (PennFIRS).	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Specified in recommendation.
7-31	Appoint a Fire Marshall.	Immediate	<ul style="list-style-type: none"> ➤ BoS 	Specified in recommendation.
LIBRARIES				
7-32	Determine equitable funding for the Avon Grove Library and budget appropriately on an annual basis.	Periodic	<ul style="list-style-type: none"> ➤ BoS 	Annual budget process.
7-33	Publicize within the local community the need to support (with funding and time) the Avon Grove Library and the services it provides the community.	Periodic	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Existing public outreach methods.
POST OFFICE				
7-34	Continue communication with the Kelton Post Office about the possibility of relocating the Post Office building to the	Periodic	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Communication on a periodic basis.

	Township owned property on Lewis Road.			
EDUCATION				
7-35	Communicate on a regular basis with the Avon Grove School District regarding proposed and approved development plans that may impact student enrollment levels, after-school use of school facilities for community and recreational purposes, and future expansion plans of the district.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Monthly notices regarding development approvals and periodic coordination on other issues.
7-36	Continue to communicate on a regular basis with Chester County Technical College High School.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Periodic coordination as necessary.
HEALTH CARE				
7-37	Continue to support the Jennersville Regional Hospital and local medical providers serving the residents of Penn Township and the region.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	As specified in recommendation.
7-38	Support efforts to expand assisted living and skilled nursing facilities and services within the Township, and the region, to meet the continuing care needs of an aging population.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	
7-39	Assist Spanish-speaking residents in accessing services provided by Project Salud, a primary health care facility located in Kennett Square, or other regional health care clinic with bilingual staff and services.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Existing public outreach methods.
HUMAN SERVICES				
7-40	Support the programs and make referrals to organizations where services and activities are available for senior citizens in the southern park of the County, such as the Senior Circle, Oxford Area Senior Center, and Kennett Area Senior Center.	Long-term	<ul style="list-style-type: none"> ➤ Staff 	Partnering and coordination with existing programs; existing public outreach methods.
7-41	Provide information and referral materials through the Township office, website, and other outreach methods for residents with basic needs assistance.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Existing public outreach methods.
7-42	Publicize public transportation services available within the Township, and promote enhancement and expansion of public transportation services, to assist senior citizens and disadvantaged populations with access to jobs and supportive services.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Existing public outreach methods; advocacy for public transportation improvements.

Figure 12-5: Implementation Strategies – Parks, Recreation, and Open Space

#	Recommendation	Priority	Who*	Suggested Method/ Partners
#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.				
*BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator				
PARKS AND RECREATION				
8-1	Consistently define terms such as active recreation, passive recreation, open space, trails, greenways, and different types of ownership in plans, ordinances, and other Township materials. Designate a variety of active and passive recreation parks and facilities.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ RC ➤ PC 	Ordinance updates
8-2	Continue to provide active recreation facilities with a preference for those which can accommodate multiple uses.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Specified in recommendation.
8-3	Review and update as necessary formal recreation policies that address property issues and organizational structure.	Short-term and Long-term	<ul style="list-style-type: none"> ➤ BoS ➤ RC ➤ Staff 	Review and update policies.
8-4	Establish and regularly update a park and recreation Capital Improvements Program (CIP) that focuses on funding land acquisition and the construction and maintenance of facilities in a way that will help leverage matching grants.	Short-term	<ul style="list-style-type: none"> ➤ BoS ➤ RC 	Establish a park CIP.
8-5	Establish a park and recreation endowment fund that can receive cash donations as gifts.	Short-term	<ul style="list-style-type: none"> ➤ BoS 	Establish an endowment fund.
8-6	Continue to enforce fee-in-lieu ordinance provisions for park and recreation facilities that are current with real estate values.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Continued enforcement of ordinance and periodic review of fees.
8-7	Periodically review user fees at Township recreation facilities to ensure that they return funds to recreation facilities without discouraging users.	Periodic	<ul style="list-style-type: none"> ➤ BoS ➤ RC ➤ Staff 	Periodic review.
8-8	Continue to develop the recreation portion of the Township website.	Ongoing	<ul style="list-style-type: none"> ➤ RC ➤ Staff 	Website updates.
8-9	Continue to offer special events to build awareness of parks as community centers.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ RC ➤ Staff 	Specified in recommendation.
OPEN SPACE PRESERVATION				
8-10	Establish an open space effort to identify and prioritize methods and opportunities to protect open space.	Long-term	<ul style="list-style-type: none"> ➤ BoS 	
8-11	The Township should consider direct acquisition of land or conservation easements for preservation of open space.	Long-term	<ul style="list-style-type: none"> ➤ BoS 	
8-12	Support open space and agricultural preservation efforts by land preservation organizations, and cooperate with them to identify future preservation opportunities.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Facilitation; existing public outreach methods.
8-13	Continue to enforce fee-in-lieu ordinance	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	Ordinance language update.

	provisions for open space, and consider broadening the language.		➤ RC ➤ PC	
8-14	Continue to promote the creation of large contiguous areas of homeowners association (HOA) open space.	Ongoing	➤ BoS ➤ PC	Through SLDO process.
8-15	Support the extension of a protected open space network into suburban and residential areas via greenways.	Ongoing	➤ BoS ➤ PC	Through SLDO process.
8-16	Coordinate with agricultural landowners and other stakeholders to investigate options to protect agricultural open space, such as Purchase of Development Rights, encouragement of Secondary/Accessory Agricultural Businesses, encouraging enrollment in Agricultural Security Areas (ASA, Act 43) and the Clean and Green program (Act 319), and encouraging the activities of land preservation organizations.	Short-term and On-going	➤ BoS ➤ PC	Facilitation, existing public outreach methods; updates to ZO and SLDO.

TRAILS, PATHS, AND PEDESTRIAN NETWORK

8-17	Plan and establish a recreational network of trails, paths, sidewalks and bicycle routes.	Short-term and Long-term	➤ BoS ➤ RC ➤ PC	Linking existing sidewalks, trails, and bike routes; develop a plan for a broader network.
8-18	Update ordinances to include provisions that address the planning and funding of trails, paths, and bicycle routes through the land development process.	Short-term	➤ BoS ➤ RC ➤ PC	Updates to ZO and SLDO.
8-19	Consider the adoption of an official map.	Long-term	➤ BoS ➤ PC ➤ RC	Official Map and ordinance.
8-20	Pursue projects and grant funding to support pedestrian, bicycle, and motorist safety.	Long-term	➤ BoS ➤ RC ➤ Staff	Funding sources such as PCTI, TCDI, and CMAQ.

RECREATION PROGRAMMING AND ADMINISTRATION

8-21	Continue to pursue opportunities to coordinate recreation programming initiatives with public, private, and institutional stakeholders.	Ongoing	➤ BoS ➤ Staff	Specified in recommendation.
8-22	Support a balanced diversity of competitive sports and non-sports recreation programming to meet the various interests of the public.	Ongoing	➤ BoS	Specified in recommendation.
8-23	Support the continuation of responsible hunting, fishing, and outdoor recreation as a formally recognized form of public recreation.	Ongoing	➤ BoS ➤ RC	Existing public outreach methods.

Figure 12-6: Implementation Strategies – Energy

#	Recommendation	Priority	Who*	Suggested Method/ Partners
#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.				
* BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator				
RECYCLING, REUSE, AND REDEVELOPMENT				
9-1	Support programs that offer consumers opportunities to re-use materials that would otherwise be disposed.	Short-term	➤ Staff	Existing public outreach.
9-2	Promote the development of energy efficient schools, government offices, and other publicly funded buildings in existing developed areas.	Short-term and Ongoing	➤ BoS	Advocacy and education, incentives.
9-3	Promote and appropriately regulate on-site energy generation such as solar, wind, geothermal, and other alternative technologies in all land uses.	Short-term	➤ BoS ➤ PC	Updates to ZO.
GOVERNMENT, PUBLIC, AND UTILITY INFRASTRUCTURE				
9-4	Perform an energy audit to determine energy conservation measures that could be incorporated into Township buildings, vehicles and operations.	Short-term	➤ BoS ➤ Consultant	Audit.
9-5	Continue with the use of wastewater treatment and disposal technologies that reduce energy demands and recharge local groundwater.	Ongoing	➤ BoS	Audit, potentially upgrades.
9-6	Support the upgrading of power infrastructure to promote more efficient energy conversion, storage, and transmission in order to meet anticipated electric consumption.	Ongoing	➤ BoS	Advocacy.
9-7	Encourage utility providers to improve energy efficiency in their operations.	Ongoing	➤ BoS ➤ Staff	Advocacy and education.
EDUCATION AND OUTREACH				
9-8	Support education efforts that encourage energy and resource saving practices at home, school, and the work place.	Ongoing	➤ Staff	Existing public outreach.
9-9	Support programs that allow residents to improve energy efficiency in their homes through weatherization, efficient climate control, and conservation of hot water.	Ongoing	➤ Staff	Existing public outreach.
9-10	Support construction and development projects that implement energy conservation, including demonstration projects and programs.	Ongoing	➤ BoS ➤ PC	Advocacy, existing public outreach.

Figure 12-7: Implementation Strategies – Land Use

#	Recommendation	Priority	Who*	Suggested Method/ Partners
#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.				
* BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator				
OVERALL				
10-1	Promote energy efficiency standards in development and construction, such as LEED, LEED-ND, and Energy Star certification, and the installation of alternative energy generation systems where appropriate.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Existing public outreach, incentives.
10-2	Remove Township regulatory restrictions that inadvertently discourage energy efficiency and education developers and the public to discourage their use in homeowner association covenants.	Short-term and Ongoing	<ul style="list-style-type: none"> ➤ PC 	Updates to SLDO and ZO, education and existing public outreach
10-3	Support the expansion and promotion of manufacturing and agricultural operations that provide local products to nearby major markets, and support regional efforts to promote the sale of these products.	Immediate and Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Buy Fresh, Buy Local publication, farmer’s market, existing public outreach methods.
10-4	Coordinate the Act 537 Plan (Sewage Facilities) with the future land use vision to manage the extension of public sewer into growth areas and restrict extension of those facilities into resource protection areas.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Act 537 Plan process; ordinance updates.
RESOURCE PROTECTION AREAS				
<i>Resource Protection Areas - Rural</i>				
10-5	Update zoning regulations to ensure that agricultural operations have the ability to adapt to a changing market.	Short-term	<ul style="list-style-type: none"> ➤ PC 	Updates to ZO.
10-6	Update zoning regulations to ensure that future residential development in the Rural area is low-density and context-sensitive.	Immediate	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	See Montgomery County publication for additional detail – <i>Rural Residential District: Protecting Natural, Scenic, and Historic Resources (2008)</i>
10-7	Update zoning regulations to ensure that future institutional or commercial development in the Rural area is context-sensitive and has limited impacts on surrounding properties.	Immediate	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Ordinance provisions, particularly definitions and supplemental use regulations
<i>Additionally, see recommendations within Chapter 8.</i>				
Resource Protection Areas – Sensitive Resources				
<i>See recommendations within Chapter 4 and Chapter 8.</i>				
POTENTIAL GROWTH AREAS				
<i>Potential Growth Area – Town Center</i>				
10-8	Review zoning and subdivision and land development regulations in the Town Center to ensure they permit a mix of uses and encourage pedestrian scale development.	Immediate	<ul style="list-style-type: none"> ➤ PC 	ZO and SLDO review; see also Chapter 6.

Potential Growth Area – Suburban Center				
10-9	Review zoning and subdivision and land development regulations in the Suburban Center to ensure they permit a mix of uses, provide opportunities for a range of commercial, institutional, and industrial development to serve as an adequate tax base for the Township, and minimize conflicts between uses.	Short-term	➤ PC	ZO and SLDO review.
10-10	Coordinate with East Penn Railroad regarding future possibilities for use of the rail line by Township businesses, particularly industrial uses located northeast of Kelton.	Long-term	➤ BoS	Coordination with East Penn Railroad.
Potential Growth Area – Suburban				
10-11	Review regulatory controls to ensure they are facilitating the type and form of development desired in this medium-density, primarily residential, setting.	Immediate	➤ PC	ZO and SLDO review.

Figure 12-8: Implementation Strategies – Housing

#	Recommendation	Priority	Who*	Suggested Method/ Partners
<i>#: Corresponds to the recommendation number in the Chapter, refer to chapter narratives for additional detail.</i> <i>* BoS: Board of Supervisors; PC: Planning Commission; HC: Historical Commission; RC: Recreation Committee; Staff: Township Staff; EMC: Emergency Management Coordinator</i>				
HOUSING SUPPLY				
11-1	Review ordinances and amend if needed to allow varying residential densities and diverse housing choices in the Potential Growth Areas of Penn Township.	Immediate	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Ordinance review and amendments as necessary.
HOUSING SUSTAINABILITY				
11-2	Encourage the development and redevelopment of housing that meets Leadership in Energy and Environmental Design (LEED), Energy Star, or other “Green” building standards.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	Existing public outreach methods and advocacy.
11-3	Review procedures for inspection of rental properties related to concerns about health, safety, and welfare protections.	Immediate	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Regulatory review and changes as necessary.
11-4	Inform homeowners about available resources to assist with home repair and maintenance needs through local and countywide home repair programs.	Ongoing	<ul style="list-style-type: none"> ➤ Staff 	Existing public outreach methods.
HOUSING AFFORDABILITY AND DIVERSITY				
11-5	Support efforts to maintain the existing high quality of housing available in the Oxford Village mobile home park.	Ongoing	<ul style="list-style-type: none"> ➤ BoS 	
11-6	Continue to permit development of quality, attractive housing that is well integrated into the community and meets low- to moderate-income affordability standards.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	As part of the development process.
11-7	Assist in educational efforts that focus on the need for affordable housing in order to reduce opposition to moderately priced development.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC ➤ Staff 	Existing public outreach methods, advocacy.
AGE-RESTRICTED HOUSING				
11-8	Continue to support development of a mix of unit types in future age-restricted communities.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	As part of the development process.
11-9	Continue to consider the broad range of services associated with age-restricted development during design and construction, as well as after completion of development.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ PC 	As part of the development process.
11-10	Support programs offered through Jennersville Regional Hospital, Oxford Area Senior Center, or other community agencies that provide supportive services to senior citizens desiring to “age-in-place” and remain living in their own homes.	Ongoing	<ul style="list-style-type: none"> ➤ BoS ➤ Staff 	Existing public outreach methods, advocacy.

FAIR SHARE OBLIGATIONS				
11-11	Support Luther House apartments to be maintained as income-restricted multi-family rental housing.	Ongoing	➤ BoS	
11-12	Ensure that zoning regulations continue to create adequate opportunities for the development of additional multi-family housing.	Short-term	➤ BoS ➤ PC	Regulatory review and changes as necessary.
HOUSING ACCESSIBILITY				
11-13	Review Township ordinances, and update as needed, to provide for housing opportunities for all members of the classes protected under the federal Fair Housing Act.	Short-term	➤ BoS ➤ PC	Regulatory review and changes as necessary.
11-14	Review to ensure that zoning regulations support opportunities for congregate living situations for people with special needs.	Short-term	➤ BoS ➤ PC	Regulatory review and changes as necessary.
11-15	Continue to grant “reasonable accommodations,” that may include zoning variances and SLDO waivers, to permit development or redevelopment of housing situations for individuals with disabilities.	Ongoing	➤ BoS ➤ PC ➤ Zoning Hearing Board	As part of the development process.