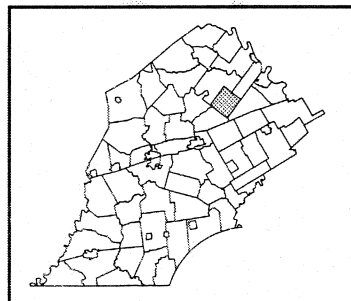
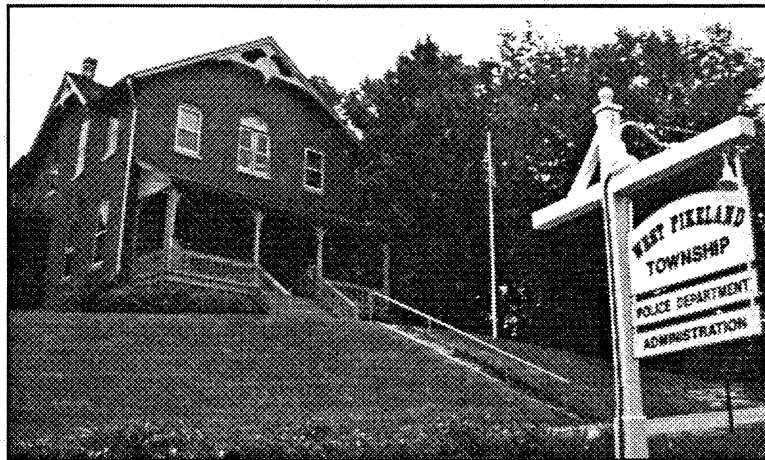
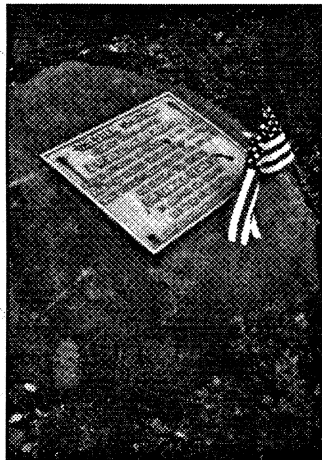


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# WEST PIKELAND TOWNSHIP

Chester County • Pennsylvania



## COMPREHENSIVE PLAN

**West Pikeland Township**  
**Chester County, Pennsylvania**

**West Pikeland Comprehensive Plan Update**

***November 15, 1999***

# **WEST PIKELAND TOWNSHIP**

## **Comprehensive Plan Update**

### **BOARD OF SUPERVISORS**

Dr. George M. Irwin, Ph.D., Chairman  
J. Christopher Petry, Vice Chairman  
Andrew N. McCreight, Member

### **COMPREHENSIVE PLAN UPDATE TASK FORCE**

Franklin L. Best, Chairman  
Dr. George M. Irwin, Ph.D., Vice Chairman  
William P. Cracas  
Michael Craven  
David W. Dinwoodie  
Peter S. Hughes  
Sean A. O'Neill  
J. Christopher Petry

### **PREPARATION AND FUNDING**

This Plan was prepared by the West Pikeland Township Comprehensive Plan Task Force, with technical assistance provided by the Chester County Planning Commission. Funding was provided, in part, through a grant from the Vision Partnership Program sponsored by the Chester County Board of Commissioners. The Plan has been prepared in conjunction with the principles of the County's policy plan, *Landscapes*, as a means of achieving greater consistency between local and county planning programs.

RESOLUTION # 99-26

West Pikeland Township  
Chester County, Pennsylvania

- WHEREAS:** West Pikeland Township recognizes the need to update the 1976 Comprehensive Plan in order to provide solid information on which to base future land use decisions and proactively plan for development in a manner that protects the existing character of the Township as well as its natural resources, and
- WHEREAS:** A municipal Task Force, comprised of members of the Board of Supervisors and the Planning Commission, was authorized to undertake the plan update, and
- WHEREAS:** The Task Force has completed a final draft of the West Pikeland Township Comprehensive Plan Update in accordance with the Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended, and
- WHEREAS:** A public meeting, pursuant to public notice, was held to provide information of the Plan Update and hear any comments and concerns, and
- WHEREAS:** The comments of the surrounding municipalities, the Downingtown Area School District, and the Chester County Planning Commission, as well as public comments were considered and incorporated as appropriate, and
- WHEREAS:** The West Pikeland Township Board of Supervisors held a public hearing, pursuant to public notice, as required by the Municipalities Planning Code, to formally hear comments and consider adoption of the Comprehensive Plan Update,

**Therefore Be It Resolved:** The West Pikeland Township Comprehensive Plan Update Task Force formally recommends to the Board of Supervisors, adoption of the Comprehensive Plan Update inclusive of all maps, charts and textual material included in the document. The Plan shall become effective upon the date of adoption.

**RESOLVED AND ENACTED** this 15<sup>th</sup> day of November 1999.

Attest: *Patricia A. Carson*  
Secretary

West Pikeland Township  
Board of Supervisors

*Steve M. R.*  
Chairman

*Paul C. [Signature]*  
Vice-Chairman

*Andrew N. McIntosh*  
Member



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# INTRODUCTION

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## Purpose

With population on the rise and new development occurring at a rapid rate throughout the region, West Pikeland seeks to take a proactive approach to growth management. Planning for an appropriate level of development to occur in an area where it can clearly be accommodated, while simultaneously protecting the sensitive environmental resources and rural character that the Township is known for, will help it to meet the land use challenges of the coming two decades.

The purpose of this Comprehensive Plan Update is to guide future land use decisions by delineating the policies on which those decisions will be based over the next two decades. To ensure that Plan recommendations are capable of being implemented and will meet municipal goals and objectives, analysis of those factors affecting land use, and how they interrelate, is necessary. The various physical characteristics of the land such as geology, topography, soils, water resources, vegetation, and historical significance must be assessed in terms of the land's overall capability of supporting certain types of uses. This then leads to the development of a comprehensive plan to guide future land use decisions.

## Process

This planning effort was lead by an eight member Task Force consisting of representatives of the Board of Supervisors, Planning Commission and Park and Recreation Commission. The Task Force met on a monthly basis for nearly a year to collect, analyze and evaluate pertinent data affecting future land use both within the Township borders as well as on a regional basis. The future vision of the Township was delineated throughout this time frame and municipal goals and objectives were refined. Various approaches to meeting those goals and objectives were discussed and evaluated, and consensus reached on the resulting comprehensive plan. It is presented in the form of four plan elements dominated by the future land use plan.

## Contents

Demand for development is determined by reviewing the Township's present and projected demographic characteristics while intensity of development is determined by evaluating the availability of community services and facilities and quality of the road network. Together, these elements comprise Chapters 1 through 7, the background or "inventory" chapters. This information serves as the foundation for Chapters 8 through 12, the "plan" chapters. An important component of the Update is the future land use plan because it synthesizes all the information presented by defining the desired future land use patterns.

This Update was completed in compliance with the provisions of Article III of the Pennsylvania Municipalities Planning Code (MPC), Act 247 of 1968, as 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.

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, sewage 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 the relationship of the existing and proposed development of the municipality to the existing and proposed development and plans in contiguous municipalities, to the objectives and plan for development in the county of which it is a part and to regional trends.*

### **Interrelationship of Plan Elements**

Comprehensive planning, by its very nature, requires not only the in-depth analysis of the individual qualities and characteristics of the community, but the integration of each element into a comprehensive program that balances competing issues and creates planning priorities that address local goals. In order for this prioritization to occur, each planning implication must be evaluated and considered in conjunction with all others, so that plan recommendations can be developed that incorporate all aspects of the issue. This is critical to the process since planning considerations often conflict consequently requiring difficult decisions. Although the inventory chapters focus on the analysis of a specific topical area, the plan elements serve to integrate all components, with each discussing how various factors interrelate. The West Pikeland Township Task Force, as an innate part of this comprehensive planning process, thoroughly evaluated each planning issue, balanced competing concerns, and developed recommendations aimed at achieving the community's goals and objectives. The results of this evaluation are embodied in each of the four plan elements. The land use and housing plan is the chapter in which all of the issues and concerns are translated into a land use scenario that represents the future vision of the community.

## **Implementation**

The contents of the comprehensive plan are subject to the requirements of the MPC as indicated, however, the plan is not a legal document in and of itself. It is instead, 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 but 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 planning programs, special projects or policy actions.

The planning horizon for the West Pikeland Township Comprehensive Plan is twenty years, however, with development pressure expected to be intense, the plan should be revisited in ten years or as necessary to ensure that it continues to reflect current views and adequately address land use issues and concerns. The plan should be amended as the need arises.

## **Public Participation and Plan Adoption**

An important component of this Comprehensive Plan Update is citizen input and public participation. Many efforts were made by members of the Task Force collectively, as well as by the Township's Boards and Commissions, to encourage participation in this planning process. Citizens attended various meetings of the Task Force based on individual interests and concerns. The West Pikeland Township Newsletter was an important vehicle in disseminating information on meeting times and dates, and on key concepts discussed by the Task Force. Homeowner Associations were also contacted by the Task Force and the membership was invited to attend and participate in the planning process.

The Comprehensive Plan Task Force membership represented a wide range of views on land use, thus providing for broad input on the planning issues discussed. Since the Open Space, Recreation and Environmental Resources Plan (1992) is relatively recent, the results of the public survey included in this document served as an additional source of information and insight on the community's prospective.

The Comprehensive Plan Update was adopted in accordance with the provisions stipulated in the Pennsylvania Municipalities Planning Code. A public meeting was held in October of 1999; the public hearing and subsequent adoption occurred in November of 1999. Both the public meeting and hearing were held pursuant to public notice as required by the MPC. Legal advertisements concerning the meetings were placed in the Daily Local News. Each household in the Township also received individual notification of the Plan's pending adoption attendance at the information meeting as well as the public hearing was encouraged. Attendance at both the public meeting and the public hearing was encouraged through every means available in this rural Township.



## Chapter One

### GOALS AND OBJECTIVES

---

Goals and objectives are a series of statements that articulate the future vision for West Pikeland Township and are intended to guide the development of land use policy. Goals establish the general, long-term vision for the Township while objectives represent shorter term targets that will help achieve the goals. Together, the goals and objectives serve as the foundation for the comprehensive planning effort by defining the Township's overall philosophy with regard to each plan element.

The goals and objectives contained in the Township's Comprehensive Plan (1988) and Open Space, Recreation and Environmental Resources Plan (1992) were used as the basis for those contained in this chapter. Input from residents as represented by members of the Comprehensive Plan Update Task Force was critical to the formulation of these goals and objectives. They are presented by plan element as follows:

<b>ENVIRONMENTAL AND HISTORIC RESOURCES PROTECTION</b>
--

#### **RESOURCE PROTECTION GOAL:**

***Protect those natural, scenic and historic resources that contribute to the unique character of the Township.***

#### **Objectives**

- Evaluate the Township's environmental and historic resources protection regulations to ensure they are effective.
- Facilitate preservation of environmental and historic resources through public and private initiatives that limit development.
- Encourage the use of easements, buffers, setbacks and other land use controls that protect sensitive environmental resources while allowing for some level of development to occur.
- Protect natural resources including flood plains, steep slopes, productive agricultural soils, wetlands, and woodlands by allowing only for low intensity uses with minimum disturbance.
- Preserve existing development patterns including historic villages, hamlets, and farmsteads when considering future land uses.

**RESOURCE PROTECTION GOAL:**

***Use innovative land management techniques to facilitate the preservation and protection of the environmental and historic resources.***

**Objectives**

- Protect historic villages by permitting certain forms of non-residential use and the adaptive reuse of existing structures that complement the scale, architecture, and site characteristics of each village.
- Review regulations intended to protect sensitive environmental features and implement changes where needed.
- Consider the use of development incentives as a means of protecting critical natural and historic site characteristics.
- Provide for development alternatives that are designed to protect natural and historic features such as cluster provisions.
- Ensure that all new construction complies with State and Township development regulations.
- Provide education to increase the sensitivity toward the natural and historic resources of the Township.

<b>TRANSPORTATION AND CIRCULATION</b>
---------------------------------------

**TRANSPORTATION AND CIRCULATION GOAL:**

***Provide for a safe and effective circulation system that minimally impacts the Township's rural character, open space, and scenic roadways.***

**Objectives**

- Facilitate road safety improvements that comply with the Township's functional classification system.
- Identify and improve circulation system deficiencies on an on-going basis and coordinate road improvements with new development.
- Work cooperatively with State and federal officials in identifying, planning, and implementing roadway improvements.
- Develop an access management program to reduce roadway conflicts and provide safe and efficient access to the road network.
- Maintain the rural and scenic character of selected roadways.
- Identify and improve non-vehicular circulation networks.

## COMMUNITY FACILITIES AND SERVICES

### **COMMUNITY FACILITIES AND SERVICES GOAL:**

***Provide for community facilities and services that address the needs of residents and are consistent with the overall goals for the Township.***

#### **Objectives**

- Establish measures that protect the quantity and quality of water resources to ensure that the potable water needs of present and future residents are met.
- Adopt a Sewage Facilities Plan in accordance with Act 537 to address sewage disposal needs.
- Prioritize on-lot sewage disposal methods where feasible and accommodate alternatives when necessary.
- Continue to secure open space through purchase and the acquisition of easements, using both private and public funding sources, which will provide recreational opportunities as well as enhance the quality of life of Township residents.
- Monitor emergency services specifically police, fire and ambulance, to ensure that services are fiscally responsible and effective in meeting Township residents needs.
- Develop recreational opportunities in compliance with the Township's Open Space, Recreation, and Environmental Resources Plan that advance the physical and social needs of Township residents.
- Continue to recognize and support important cultural resources in the Township such as the Chester Springs Library, Historic Yellow Springs, and Anselma Mill.

## LAND USE AND HOUSING

### **RESIDENTIAL LAND USE GOAL:**

***Ensure that residential development respects the rural character of the Township and is developed in a manner that protects environmental resources and maintains open space as an integral part of West Pikeland Township.***

#### **Objectives**

- Establish a growth boundary for West Pikeland Township that guides new residential development to areas best able to accommodate such growth.
- Establish standards for clustered residential development that respects site characteristics with emphasis on preserving open space.
- Adopt regulations to protect natural and historic resources existing on sites proposed for new development.

- Ensure that varied housing forms are available to accommodate all types of residential needs in those portions of the Township designated for growth.
- Provide for flexibility in land use ordinances and regulations to encourage innovative site design and alternatives to conventional subdivisions.
- Consider design standards for higher density housing that seek to preserve natural site features.
- Develop standards that require developers to design in a manner that protects natural or scenic qualities.

***NON-RESIDENTIAL LAND USE GOAL:***

***Provide for non-residential development in keeping with the rural character of West Pikeland Township to allow for a reasonable level of growth.***

**Objectives**

- Accommodate limited commercial and industrial land uses in keeping with the Township's rural character and at a scale appropriate to its current population and future growth projections.
- Encourage the concentration of non-residential uses in clusters to prevent strip development along the major roadways.
- Determine those locations capable of supporting non-residential uses without compromising the rural character of the Township.
- Ensure that new non-residential development complies with design standards that minimize negative environmental impacts and reflects the rural and historic characteristics of the Township.
- Encourage adaptive reuse and renovation of historic sites in village settings for limited forms of non-residential use under design standards, which enhance their setting as a traditional rural center.

***AGRICULTURAL LAND USE GOAL:***

***Support the agricultural industry in the Township by protecting land and soil resources.***

**Objectives**

- Protect prime agricultural soils through zoning or other regulatory measures that limits development of these land resources.
- Seek to preserve the agricultural industry while respecting the needs of the landowners to supplement their income.
- Encourage both public and private methods of limiting development of agricultural land through the use of conservation easements.

- Recognize and support equestrian activities as a valid and important ongoing agricultural use that helps preserve the rural character of the Township.
- Continue to support farming while recognizing that the industry is in transition and part-time agricultural activities are becoming more prevalent.

<b>REGIONAL COOPERATION</b>
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***REGIONAL COOPERATION GOAL:***

***Provide for the broader needs of Township residents through participation in regional initiatives.***

**Objectives**

- Cooperate with nearby municipalities in regional land use planning efforts.
- Encourage through regional forums, the construction of commercial, and employment centers in those areas best able to accommodate such development.
- Support on a regional basis, efforts to revitalize Boroughs so they can continue to function as business and commercial centers.

## Chapter Two

### REGIONAL INFLUENCES

---

Regional influences are the conditions and circumstances existing beyond municipal borders that affect the physical, social and economic characteristics of a municipality. Regional influences can be naturally occurring and include conditions such as shared land characteristics or natural features that may affect land use, or they can be man-made and include highways, public facilities or institutions that impact development patterns. By coordinating planning and land use policies, municipalities can better manage the impact of regional influences.

This chapter discusses the regional characteristics that have influenced land use and development patterns in West Pikeland Township. It includes analysis of how the planning policies of surrounding municipalities have affected the region as a whole. Recognizing the implications of these land use decisions will help identify ways in which municipalities can work cooperatively to address common goals on a regional level.

#### REGIONAL CHARACTERISTICS

Geographic setting, circulation system, facilities, institutions, and environmental qualities are characteristics shared by West Pikeland and the surrounding municipalities. Each of these characteristics is discussed in the following overview. The Township's location within the region can be seen on Map 2-1, and the Regional Influences are depicted on Map 2-2.

##### Geographic Setting

West Pikeland Township is located in the northern tier of Chester County municipalities. It is bordered by West Vincent Township to the north and west, East Pikeland and Charlestown Townships to the east, and Uwchlan and Upper Uwchlan to the south. The Township is 9.9 square miles in size and contains 6,323 acres. At the time the area was settled in 1705, East and West Pikeland were a single jurisdiction. West Pikeland was formally established when the two Townships divided in 1838. Unlike the boundaries of most municipalities, West Pikeland's is rectilinear, forming a nearly perfect square.

The 1990 census reported a population of 2,323 and a density of 232 persons per square mile. These population figures represent a fifty percent increase over the 1980 figure. In 1996, the population was estimated to be 2,660 and is projected to increase to 3,240 by the year 2010. It is likely that the Township has already exceeded this figure.

As with most surrounding municipalities, West Pikeland developed as an agricultural community. The land is fertile and the climate conducive to many agricultural activities. Farms were established throughout the Township despite the constraints posed by the extensive stream network, dense forests and steep hills. They typically produced crops such as corn, wheat and soybeans. In addition to dairy products, dairy farms usually also produced hay, alfalfa and similar feed crops to support the livestock. The less productive soils provided pasture for livestock. Agriculture was the major industry in the five surrounding Townships as well.

The Township is located near three major transportation corridors, Route 30, Route 202 and the Pennsylvania Turnpike which physically crosses the southern tip of the Township. Despite the development occurring within these major corridors, West Pikeland has remained fairly rural and is comprised mainly of

low-density residential development with no significant commercial or industrial centers. It is situated midway between the Borough of Downingtown and the Borough of Phoenixville. Residents meet most retail and commercial needs outside of the Township depending on their proximity to area commercial centers. These centers offer varied shopping opportunities and provide for the retail and service needs of West Pikeland as well as those bordering the Township. West Pikeland is situated just north of Exton, the suburban center located at the intersection of Route 30 and Route 100, and a wide variety of services are concentrated in this vicinity.

### **Transportation and Circulation**

In addition to Route 100, Route 30 and Route 202, all of which impact circulation in the area surrounding West Pikeland; two State roads pass through the Township. Route 113 connects the Borough of Downingtown with the Borough of Phoenixville and travels through the center of the Township southwest to northeast. Route 401 traverses the Township from northwest to southeast and links Route 30 in the vicinity of Malvern and Paoli, to Elverson, ultimately converging with Route 23 at the County's northern border. Route 113 intersects with Route 401 at Opperman's Corner, with Yellow Springs Road at Chester Springs, and with Pikeland Road at Pikeland Village before exiting the Township at its northern border. Route 401 had its beginnings as the Allegheny Trail and later became known as the Conestoga Pike.

The Pennsylvania Turnpike passes through the southern tip of the Township and although a major component of the overall circulation network in the County, it does not significantly impact West Pikeland since there are no interchanges directly accessing Township roads. The nearest access is located at Route 100 in Uwchlan Township. The transportation and circulation system is discussed in detail in Chapter Five.

### **Regional Facilities**

Regional facilities can impact a municipality in any number of ways depending on their type, purpose and size. Educational and institutional facilities will have a different effect than a recreational or cultural facility. Regional commercial centers probably have some of the greatest impacts. Depending on the type and proximity, the effect can be both positive and negative. The implications must be considered when planning locally for circulation, infrastructure and land use. There are several types of regional facilities located around West Pikeland but only three are located within the Township. They are the Horseshoe Trail, Indian Springs Camp, and the Yellow Springs Historic District. These facilities enhance recreational and cultural opportunities on a regional basis and support Township goals.

The Horseshoe Trail, which begins at the Appalachian Trail, north of Harrisburg, winds through Chester County ending at Valley Forge Park, travels for nearly three miles through West Pikeland. Most trail users access the facility from points outside the Township. The Indian Springs Camp is a small, private day camp; however, it does have a regional draw. Yellow Springs is a nationally recognized historic site owned and managed by the private, non-profit organization, Historic Yellow Springs, Inc. The mission of the organization is to preserve and protect the buildings and land associated with the site. It hosts various programs and events for both educational and fundraising purposes and although it draws regionally, the focus is narrow. A non-profit organization has recently been formed to develop and administer the historic Anselma Mill site located in the southern part of the Township. Once operational, this site is expected to have a regional draw. A major recreational facility in the region is Marsh Creek State Park, the majority of which is located in nearby Upper Uwchlan Township.

Colleges, universities and similar educational facilities can create a regional impact. The Montgomery School is an independent school offering programs for grades K-8. Although it is a relatively small facility, its location on Route 113 influences circulation in the Township. There are no higher education facilities in West Pikeland, however, Penn State University has a branch off Route 30 just south of the Township and

Immaculata College is located in the vicinity. The Valley Forge Christian College is located outside of Phoenixville.

Many types of regional commercial and industrial facilities are located within the Route 100 and the Route 30 corridors; however, none are physically located in West Pikeland Township. The largest commercial center in the region is located at the intersection of these two routes in Exton. One of the largest industrial employment centers, the Great Valley Corporate Center, is located adjacent to Route 202 in East Whiteland Township. To date, most regional commercial and industrial centers have been confined to the Route 30/Route 202 corridors, however, both commercial and industrial development along Route 100 through Uwchlan Township is steadily increasing. Most institutional facilities serving the region are located in these corridors as well.

### **Environmental Conditions**

In Chester County, the land characteristics and natural features vary between those municipalities lying to the north of Chester Valley and those lying to the south. Chester Valley is one of the County's most prominent geographic features. It is underlain by a limestone formation that ranges between one to four miles in width and extends from Atglen to Treddlyfrin. The valley divides the County into two distinct geographic areas varying in terms of geology, groundwater capabilities and topography. West Pikeland Township lies to the north of this geological feature.

The topography in West Pikeland and the surrounding area is gently rolling with moderate to steep wooded slopes. Streams cut steep valleys in many areas. The French, Pickering, Pine and Pigeon Run Creeks all traverse the region. Since they are undisturbed for most of their lengths, they tend to be quite scenic and generally have a high water quality. Protecting these creeks, along with their headwaters areas is a unifying goal and has been the focus of regional planning efforts undertaken by the Federation of Northern Chester County Municipalities and the French and Pickering Creeks Conservation Trust, Inc. West Pikeland Township has also undertaken various types of conservation measures

East Pikeland, West Vincent, Charlestown, Uwchlan and Upper Uwchlan Townships share most of the natural features found in West Pikeland Township. All five municipalities have large areas underlain by graphitic gneiss, which is prevalent in West Pikeland. The other dominant rock type in the region is hybrid gneiss. Shales and sandstones underlie the northern half of East Pikeland. The geology is a major determinant of soil type and prime agricultural soils are found in all municipalities in the region. Groundwater capabilities are also determined mainly by geology and those areas underlain by graphitic gneiss are likely to produce moderate yields while the hybrid gneiss tends to produce lower yields. The shales and sandstones of northern East Pikeland could potentially produce high amounts of groundwater. Environmental resources are further discussed in Chapter Four.

## **PLANNING PROGRAMS OF ADJACENT MUNICIPALITIES**

The planning policies of adjacent municipalities have been evaluated as part of the comprehensive planning process. Even though common physical and geographical features may link municipalities in a region, they may not share common planning philosophies. When the type and form of use permitted along the boundary in one municipality does not generally complement uses permitted in the adjacent municipality, serious conflict can result. Considering how land use is permitted in adjacent municipalities is necessary in order to ensure some degree of compatibility that allows the region to function as a whole. Respecting political boundaries is less important than ensuring that the needs of residents are met and that services are provided



in an efficient and effective manner. The planning programs of those municipalities adjacent to West Pikeland Township are described in the following discussion.

### **East Pikeland Township**

East and West Pikeland share a common history as the “Pikelands”, the area settled by the family of Joseph Pikeland in 1705. The two municipalities were one entity until 1838 at which time they split into the two entities we know today. East Pikeland is 8.8 square miles consisting of 5,645 acres. Like West Pikeland, it developed primarily as an agricultural community but has historical roots associated with the various land uses that developed along the French Creek and the Schuylkill River. It is one of the more suburban of the surrounding municipalities with a 1996 population estimated at 6,700. By 2010, the population is projected to reach 6,520.

Most of the residential development in East Pikeland Township consists of low-density single family detached housing. Commercial and industrial development is mainly small scale and located in the Eastern half of the Township along the major transportation routes. The environmental characteristics of the two Townships are similar with the French Creek influences East Pikeland in much the same manner that the Pickering Creek influences West Pikeland. Preserving the water quality and the scenic landscapes created by these corridors is a common environmental issue.

In terms of land use, East Pikeland Township’s Comprehensive Plan (1984) specifies low density residential development in the southern half with higher density residential and non-residential designations in the central portions extending to the Schuylkill River. The Township has seven zoning districts. The R-1 Farm Residential district encourages agricultural activities but allows for residential development at a density of one unit per 100,000 square feet. The R-2 Community Residential and the R-3 Mixed Residential district both requires one acre lot sizes with reductions permitted in the R-3 district if served by public sewerage or community water facilities. Multiple family and mobile home parks are permitted as conditional uses in this district. The ordinance also includes cluster development and lot averaging provisions. In addition, the KR Kimberton Retail district provides for mixed uses in the Village of Kimberton, while the C Commercial district provides for more general commercial uses. The Light and Heavy Industrial districts accommodate industrial and offices uses. Provisions are in place to protect flood plains, and natural and historic resources.

Although East Pikeland is more developed than West Pikeland, there are no current land use conflicts along the shared border. Both have zoned for agriculture/ low-density residential in this vicinity, and the greatest threat is that of sprawl. Effective growth boundaries in both communities would reduce this potential. Along with overall growth management issues, East and West Pikeland Townships share Route 113 corridor concerns and stream corridor issues.

### **Charlestown Township**

Charlestown Township shares West Pikeland’s entire eastern boundary. This Township is 12.5 square miles in size comprising 8,019 acres. The population in 1990 population was 2,754 and it was one of the few municipalities that experienced a population decrease from the 1980 level. The estimated 1996 population was 3,120 and it is projected to increase to 3,190 by the year 2010. An important regional feature affecting the Township is the Pennsylvania Turnpike that dissects the southern portion. At present, however, there are no access ramps to local roads.

Charlestown Comprehensive Plan (1976) designates most of the Township, including all the land adjacent to West Pikeland, as conservation, agriculture or low intensity residential. Most development is large lot single family residential. Two planned developments comprise the major population centers with scattered subdivisions found throughout the Township. Commercial development is insignificant and serves mainly

the local population. Most non-residential uses are located in the northern sector of the Township on the outskirts of Phoenixville Borough.

Charlestown Township has environmental, historical and scenic features similar to those in West Pikeland. Preserving remaining open space and protecting natural and historic features are goals shared by the two municipalities, but sprawl development again, is a potential threat. The largest percentage of Charlestown's land area is zoned FR Farm Residential. This district is intended to promote agricultural uses, but allows for single family residential units on 100,000 square foot lots. This zoning is designated along West Pikeland's boundary and poses no use conflicts. The R-1 Residential district and three PRD Planned Residential Districts accommodate other forms of residential development. One PRD is located adjacent to West Pikeland's southern tip complementing the zoning in this location. Charlestown's zoning ordinance provides for institutional, neighborhood commercial, and limited industrial uses, however, none of these districts are located near the shared boundary with West Pikeland.

Charlestown Township's zoning ordinance contains resource protection measures in the form of flood plain regulations and steep slope provisions. Both Charlestown and West Pikeland have certified local historic districts. These ordinances allow the municipality to regulate alterations and modifications to historic buildings. Protecting the Pickering Creek corridor is a shared concern and options are outlined in the 1976 publication, The Pickering Creek Valley: A Preservation Opportunity. The Pigeon Run wetlands located at the shared boundary is another sensitive area that should be the focus of cooperative efforts.

### **West Vincent Township**

Much of West Pikeland's north and east boundaries are shared with West Vincent. It is one of the larger municipalities in the region at 17.4 square miles in size equating to approximately 11,162 acres. Its population in 1990 was 2,262 and in 1996 was estimated to be 2,600. The population for the year 2010 is projected to be 3,750.

A rural municipality, much of the Township is still farmed. The Comprehensive Plan (1985) designates the majority of the land area as rural conservation and low density residential. This includes all the land adjacent to West Pikeland Township. Much of this land is also sensitive from an environmental standpoint. The rural conservation category is particularly concentrated in the southeast area. Most residential development is very low density and located on private drives and single cul-de-sacs accessing Township roads. Many of the larger residential parcels are actually horse farms with barns and related outbuildings. There are two rural centers in the Township both with historical significance. Ludwigs Corner has a commercial focus and is located along Route 100, the major north/south route through the County. Birchrunville is located in the center of the Township and serves as a community focal point.

The topography of West Vincent is similar to West Pikeland in that the slopes are steep and the ridgelines prominent. Open areas are more common in West Vincent and many are farmed despite the slopes. The topography has served to limit development to some extent. Large agricultural areas are found in the southeast quadrant south of Route 401 which currently conflicts with the adjacent residential uses in West Pikeland, however, it is zoned for residential development and a new subdivision has been proposed. It is part of the Philadelphia Suburban Water Company franchise area and with water service available, the development could occur at higher densities than presently found in other parts of the Township. Such residential uses would be more compatible with the adjacent uses in West Pikeland, but circulation in this entire vicinity could be effected.

West Vincent's zoning consists of nine base and twelve overlay districts. The Township provides for a high degree of flexibility by offering four design alternatives or a "tiered" approach to residential development. There are also four village/commercial districts and a municipal district that requires new construction to

complement existing development in terms of scale and design. The overlay districts address corridor development, mobile home park development, planned residential development, and natural and historic resource protection.

The zoning along the West Pikeland boundary is residential; however, the resulting density cannot be determined since the ultimate design is dependent on site constraints and the development option chosen. The pattern and net density of resulting development designed in accordance with the tiered approach is highly variable depending on site characteristics and environmental constraints. Because of their similar land use philosophies and the extent of the boundary shared by West Vincent and West Pikeland, there is an opportunity to coordinate development in this region.

### **Uwchlan Township**

Uwchlan Township adjoins West Pikeland's southwest border. Uwchlan is 10.5 square miles in size consisting of 6,694 acres. The population in 1990 was reported to be 12,999 and was estimated to be 15,640 in 1996. It is projected to increase to 16,210 by 2010. It is the most developed of the municipalities that surround West Pikeland and is considered a regional suburban center. Extensive commercial, office and industrial uses serving a broad area are located within the Route 100 and Route 113 corridors. The volume of traffic on these roads is a joint concern. Residential development flanks these corridors and housing in varying densities can be found in the Township. The Pennsylvania Turnpike passes through Uwchlan and Route 100 serves as a major access point.

Uwchlan's Comprehensive Plan indicates most of the areas adjacent to the West Pikeland as low density residential; however, it should be noted that this plan is dated 1970. The Zoning Ordinance designates ten zoning districts including a flood plain overlay. Four are residential providing mainly for medium and low-density development of one-half to one unit per acre. The RR Rural Residential and the R-1 Low-Density Residential districts are designated along most of the West Pikeland border. These designations transition well into the residential uses found in West Pikeland's growth area.

The remaining districts provide for differing forms of planned commercial and industrial development. Most of the Township is built out with an exception being the Planned Industrial Commercial district north of Lionville. The headwaters of a branch of the Pickering Creek are located in this vicinity and new development could create runoff that would reduce the water quality. The overall problem of industrial runoff into the Creek has been greatly reduced over the past two decades and both municipalities should continue to monitor the water quality to ensure that it remains high in the face of new development. Maintaining the water quality of the Pickering Creek is an environmental concern shared by all municipalities in the region.

One of Uwchlan's major goals is the protection of remaining open space. With the exception of the area between Route 113 and the Turnpike, the area immediately bordering West Pikeland Township is either undeveloped or low density. This "buffer" provides for a natural transition between the higher density development generally found throughout Uwchlan Township and the lower density development and open spaces of West Pikeland. The land use in the two Townships complement one another on a regional scale.

### **Upper Uwchlan Township**

Upper Uwchlan shares the section of West Pikeland's southwestern boundary extending from Byers Road west to the Township line. Although a small area it is nonetheless important as the point at which the main branch of the Pickering Creek enters West Pikeland. Upper Uwchlan's Comprehensive Plan (1985) designates this quadrant as the growth area, however, the land immediately bordering West Pikeland is constrained. An update to this Plan has been underway since 1994. This area is zoned R-3 Residential which

equates to one and one half units per acre, and complements the planned development in neighboring West Pikeland. A flexible development district facilitating environmentally sensitive design, overlays this area. It represents an important design alternative considering the sensitivity of the Pickering Creek corridor. The Pickering Creek is a unifying feature that should be viewed as a key planning issue concerning both municipalities.

## REGIONAL PLANNING EFFORTS

As Chester County continues to develop, regional planning will continue to take on greater importance. Municipalities are impacted by the policies of neighboring municipalities because most land use decisions have regional implications. As the population rises and the demand for services increases municipalities will need to coordinate to a greater extent to maximize resources, improve efficiency and reduce duplication. Municipalities can cooperate through regional planning initiatives and the preparation of joint studies, and by coordinating community services and facilities, and participating together in preserving environmental and historic resources.

There are a total of nine regional planning entities in Chester County. Those presently active include the West Chester Region, the Kennett Area Region and the Federation of Northern Chester County Communities. Inactive entities include the Avon Grove Region, Oxford Region, the Upper Brandywine Watershed, Octorara Region, Eastern Region and Central Region.

West Pikeland Township is a member of the Eastern Chester County Regional Planning Commission, which has been inactive since 1989. The other members are East Pikeland, Charlestown, Easttown, Schuylkill, Willistown and Treddyfrin Townships, and Malvern and Phoenixville Boroughs. It was first established in 1974 as a cooperative planning council of five municipalities. It has expanded over the years to include nine municipalities and in 1978, a staff person was hired to coordinate activities. The Valley Forge Sewer Authority was a major unifying project (this did not, however, involve West Pikeland). The Eastern Region remained active until the early 1990's and produced several important documents. They are listed as follows:

- 1979: A Regional Strategy: *Housing Issues*
- 1979: A Regional Strategy: *Storm water Management*
- 1979: A Regional Strategy: *Open Space*
- 1979: A Regional Strategy: *Transportation*
- 1982: Water Resources Study
- 1983: Zoning Ordinance Analysis
- 1984: U.S. Route 30 Corridor Study

Regional planning is an important endeavor and as the County grows, the benefits of cooperating on a regional basis become more evident. Municipalities should consider their own role within the region when establishing local policy and strive to coordinate planning and community development activities.

### **Landscapes, Chester County's Comprehensive Policy Plan (1996)**

The primary goal of *Landscapes*, the County's comprehensive policy plan, is to reduce sprawling residential development by focusing new development in areas where it can best be accommodated and encouraging the revitalization of the County's urban areas. The Plan stresses the importance of protecting natural and historic resources, emphasizing the need to protect farms and prime agricultural soils.

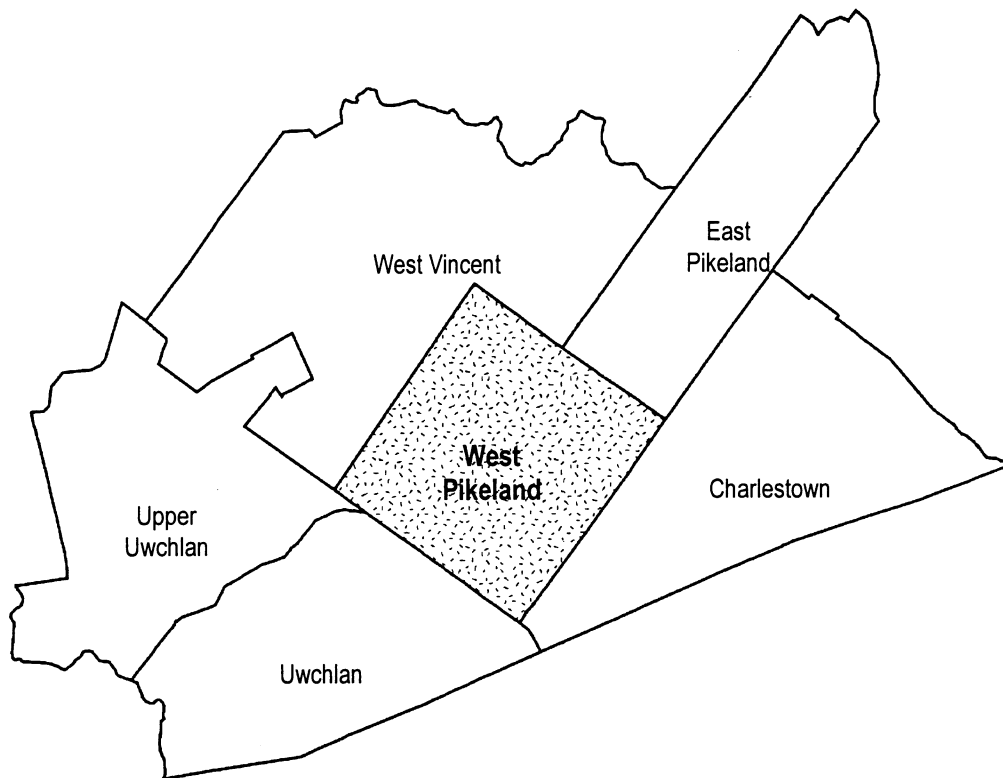
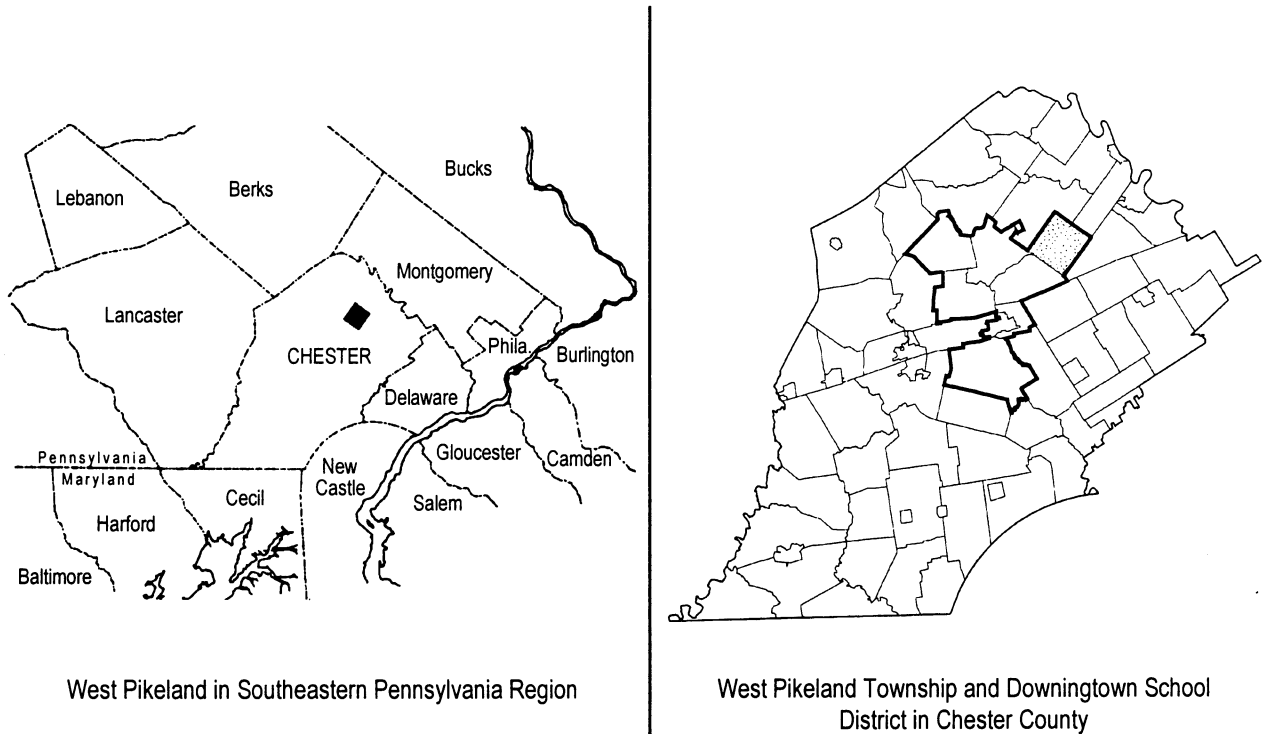
The Plan contains a series of goals intended to guide the formulation of policy related to land use, economic development, transportation, community facilities, utilities, housing, human services, public health, and planning and coordination. Specific objectives are defined for each area and implementation actions are identified. Since the County has no authority to mandate compliance with *Landscapes*, it seeks to partner with municipalities in implementing the Plan and through the Vision Partnership Program, provides grant funds to assist Townships and Boroughs in implementation.

West Pikeland's land use policies overall are consistent with those contained in *Landscapes*. The majority of the Township is considered a Rural Landscape by the County and this designation is generally supported by the local policy. The region south of Route 401 is considered a Suburban Landscape by the County which is also consistent with Township policy which identifies this region as its growth area. This policy consistency carries through to this Comprehensive Plan Update. Strong zoning controls that focus growth within the growth boundary and limits development outside the boundary are key implementation measures contained in this Update.

### PLANNING IMPLICATIONS

- ☐ West Pikeland Township is in proximity to Route 30 and Route 202, but since it is not located directly in the path of development generated by these major roads, it has remained relatively rural. Several of the adjacent municipalities have experienced high growth rates that could potentially affect West Pikeland unless growth boundaries are established and supported through zoning regulations.
- ☐ Five municipalities border West Pikeland Township and share land characteristics and development histories, and consequently impact land use patterns. Many also have similar development philosophies that could serve as the basis for a higher degree of regional cooperative efforts associated with resource preservation.
- ☐ The creeks passing through West Pikeland Township and the bordering municipalities have high water quality and significantly contribute to the scenic nature of the region. Since the streams transcend political boundaries, all municipalities in the region should work together in protecting these important corridors.
- ☐ Since the municipalities in the region share similar historical roots and retain many historic resources, the opportunity exists for West Pikeland to coordinate preservation efforts to a greater degree with adjacent municipalities.
- ☐ A large percentage of the land area in the municipalities surrounding West Pikeland Township is zoned for low-density residential development. If development actually happens in accordance with present zoning, the entire region would be consumed by sprawl. A regional, coordinated approach to land use is needed to reduce the potential of this scenario occurring.
- ☐ The residential development occurring in the municipalities adjacent to West Pikeland is generating an increase in traffic, particularly at the borders. Coordination with the surrounding municipalities is needed to effectively manage on a regional basis, changes in traffic volumes and circulation patterns.

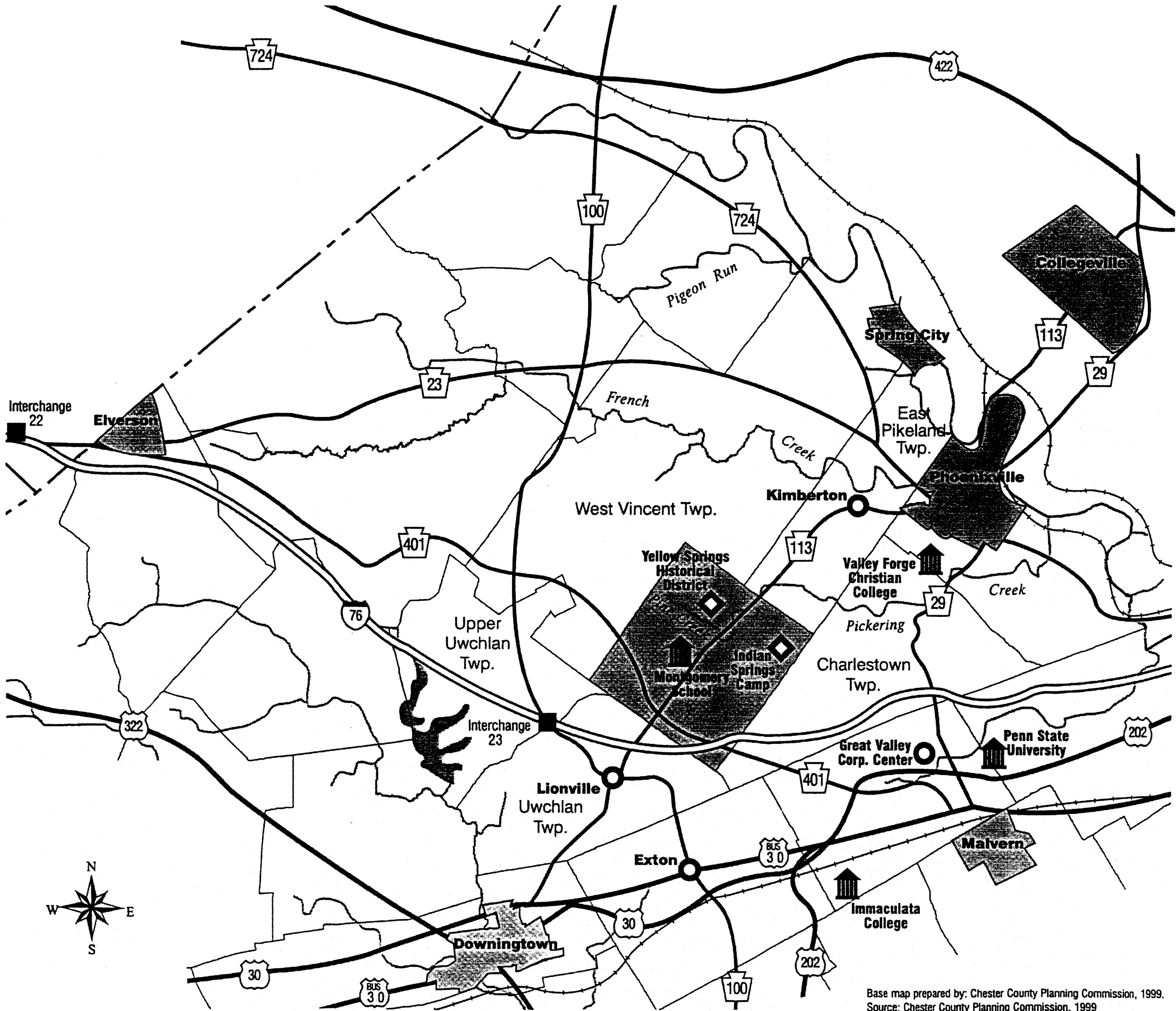
**Map 2-1  
WEST PIKELAND REGIONAL SETTING**



West Pikeland and Surrounding Municipalities

**Map 2-2  
Regional Influences**

- Rural & Suburban Centers
- ⌚ Educational Facilities
- ◇ Points of Interest



Base map prepared by: Chester County Planning Commission, 1999.  
Source: Chester County Planning Commission, 1999

**West Pikeland Township**

Comprehensive Plan

## Chapter Three

### DEMOGRAPHIC CHARACTERISTICS

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This chapter summarizes the demographic characteristics of the Township and analyzes how these characteristics influence land use, community facilities, and circulation patterns. Since decennial census data is the best source of information for this type of analysis, and new information will not be available until 2001, estimates are used where applicable to supplement the 1990 data. Although the 1990 data is now nearly ten years old, it should still be reviewed and evaluated in order to establish benchmarks and identify demographic trends. Preparations for the year 2000 census are underway and once it is available, the data can be used to confirm or adjust the conclusions reached in this chapter. Comparisons between West Pikeland Township and the surrounding municipalities are made in order to offer a regional prospective.

This chapter is divided into three sections. The section on population characteristics discusses the size and composition of the population in terms of age, sex, and household composition. The economic characteristic section discusses resident employment, while the final section addresses housing characteristics. The planning implications are presented at the end of the chapter.

#### POPULATION CHARACTERISTICS

West Pikeland's population has grown steadily in the last half of this century increasing by 1,640 persons since 1950 to reach 2,323 residents as of the 1990 US Census. The 1990 Census reported that 1,146 persons, or 49%, were male and 1,177 persons, or 51% were female. The greatest rate of increase occurred during the decade of 1960-1969, when the population grew by over 80%. The rates of increase were lower in subsequent decades, but the absolute numbers of population increase was the highest between 1980 and 1989, when population increased by almost 800 people. The average increase per decade from 1950 to 1990 was approximately 39 percent. Chester County averaged roughly 24% over the same period of time.

#### Population Change

West Pikeland is located in an area near the Pennsylvania Turnpike that, overall, has seen substantial growth over the past few decades. The I-76 interchange and development in Uwchlan Township and the Route 100 corridor have had considerable impact on West Pikeland in terms of pressure for residential construction. Development in Montgomery County to the northeast has also impacted the number of people moving into the immediate area.

Because West Pikeland had such a low base population beginning in 1950, these increases are a considerable concern. While the most current increase is not the highest in terms of percentage, it is the largest numerically. The 1997 Chester County estimate for West Pikeland shows only an 18% increase, yet the numerical figure of 437 persons is the third largest in Table 3-1. If this trend is maintained, the population could continue to grow in large proportions.



**TABLE 3-1  
POPULATION CHANGE  
West Pikeland Township (1950 - 1990)**

<b>YEAR</b>	<b>POPULATION</b>	<b>NUMBER INCREASE</b>	<b>PERCENT INCREASE</b>
<b>1950</b>	683	-	-
<b>1960</b>	782	99	14.5%
<b>1970</b>	1,420	638	81.6%
<b>1980</b>	1,536	116	8.2%
<b>1990</b>	2,323	787	51.2%
<b>1997*</b>	2,750	427	18.4%

\*1997 Estimate, Chester County Planning Commission Planning Data Sheet #55  
Source: US Census Bureau

### **Population Estimates**

An estimate is an assessment of population based on calculation of current or past times. The Chester County Planning Commission annually produces estimates for all Chester County communities. The methodology used to produce the estimates is based on analysis of birth rates, death rates, and migration patterns for individual municipalities as well as analysis of building permits and real estate data.

Between 1990 – 1997, the population of West Pikeland is estimated to have risen by 427 people. This represents an increase of 18.4% over this seven-year period. While this number is higher than the estimated County growth rate of 13.5%, it is the lowest among the surrounding municipalities. For example, nearby Uwchlan and Upper Uwchlan Townships had estimated increases of 23.9% and 44.9% respectively. While West Pikeland will continue to grow, it is likely that the rate of growth will moderate and the large spikes in population seen in the past are unlikely to reoccur. Table 3-2 compares the estimated population of the municipalities surrounding West Pikeland Township.

**TABLE 3-2  
POPULATION ESTIMATES  
West Pikeland Township and Surrounding Municipalities (1991-1997)**

<b>TOWNSHIP</b>	<b>1990*</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
<b>WEST PIKELAND</b>	<b>2,323</b>	<b>2,400</b>	<b>2,480</b>	<b>2,590</b>	<b>2,620</b>	<b>2,640</b>	<b>2,660</b>	<b>2,750</b>
Charlestown	2,754	2,780	2,800	2,840	2,880	2,930	3,120	3,270
East Pikeland	5,825	5,980	6,170	6,300	6,440	6,570	6,700	6,930
Upper Uwchlan	4,396	4,550	4,690	5,010	5,360	5,810	6,060	6,370
Uwchlan	12,999	13,490	13,950	14,450	14,880	15,260	15,640	16,100
West Vincent	2,262	2,280	2,320	2,390	2,440	2,500	2,600	2,710

\*Actual US Census figures.

Source: US Census Bureau (1990); Chester County Planning Commission Population Estimates (1991-1997)

## **Population Projections**

Population projections differ from estimates in that projections extend past growth trends into the future to assess future population sizes. These figures can then be used to determine demand for certain types of land uses, and project facility and infrastructure needs. Projections serve as indicators only because accurately determining future population is extremely difficult. New, unanticipated developments in and around the Township reduce the usefulness of the projections and hinder planning efforts.

Three separate techniques have been used to provide a range of population projections for West Pikeland Township. Since many variables can affect population projections, no single method can be viewed as an entirely accurate method on which to base the future land use plan. Three methods are described as follows each contributing to the range of growth possibilities. The results of these three techniques are summarized in Table 3-3.

**Arithmetic Technique:** This technique establishes a constant numeric change among past data used to project changes in the future. An average gain of 410 persons per decade was experienced by West Pikeland between 1950 to 1990. Using this technique, the total population projected for the year 2020 is 3,553 or a gain of 1,230 since 1990.

**Geometric Technique:** This technique uses the average rate of change for the existing data and projects this rate into the future. The average rate of increase for the decades 1950 to 1990 was 38.9 percent. This method projects a high rate of growth and the results indicate a total population of 6,221 in 2020 or a gain of 3,898 since 1990.

**Chester County Technique:** The third projection method was assembled by the Chester County Planning Commission. It takes into consideration a number of variables such as adjusted 1990 Census data and regional transportation information not often available to municipalities. The first step involves calculation of unadjusted 1990 Census data. The second step further adjusted these figures based on variables such as past population trends, existing land use, known development proposals, transportation access, and multiple other factors. This projection is considered to be the most accurate available for planning purposes.

**TABLE 3-3  
POPULATION PROJECTION TECHNIQUES  
West Pikeland Township (1990-2020)**

<b>PROJECTION TECHNIQUE</b>	<b>1990*</b>	<b>2000</b>	<b>2010</b>	<b>2020</b>
Arithmetic Technique	2,323	2,733	3,143	3,553
Geometric Technique	2,323	3,226	4,480	6,221
Chester County Technique	2,323	2,890	3,240	3,510

\*Actual US Census figures.

Source: Chester County Planning Commission Planning Bulletin #45, US Census Bureau (1990)

The population in West Pikeland is also impacted by the population of the surrounding municipalities as shown in Table 3-4. The data in the following table suggests that the demand for housing in West Pikeland Township, and the surrounding municipalities, will likely continue well into the next century. West Pikeland has the second lowest population density in the region (behind Charlestown), suggesting that it is less developed than its neighbors, another trend that will likely continue based on these figures.

**TABLE 3-4**  
**REGIONAL PROJECTED POPULATION AND DENSITY**  
**West Pikeland Township and Surrounding Municipalities (1990 – 2020)**

MUNICIPALITY	1990 Census	2000 Projection	2010 Projection	2020 Projection	1990 Persons Per Square Mile
<b>WEST PIKELAND</b>	<b>2,323</b>	<b>2,890</b>	<b>3,240</b>	<b>3,510</b>	<b>232.3</b>
Charlestown	2,754	2,990	3,190	3,410	220.3
East Pikeland	5,825	6,070	6,520	6,910	661.9
Upper Uwchlan	4,396	6,010	6,720	7,350	407.0
Uwchlan	12,999	15,580	16,210	16,470	1,249.9
West Vincent	2,262	3,110	3,750	4,340	127.8
Chester County	376,396	425,800	460,200	489,300	497.9

Source: Chester County Planning Commission Planning Bulletin # 45: Population Projections 1995-2020.

### **Population by Age**

Analysis of the population by age categories is important for predicting future demand for community services, facilities, and housing. The two age categories that had the most significant change were in the ages of 35-44 and those under the age of five. Additionally the percentage of persons 15 and older who are married rose by almost 6 percent from 1980 to 1990. This suggests there is a growing number of new families in the Township and that there may be a higher demand for schools in the future as well as recreational facilities.

The median age in West Pikeland Township in 1990 was higher than the median age of the County as a whole and higher than in neighboring municipalities. The median age has been increasing, although West Pikeland's median age has not increased as much as the region as a whole or as much as Chester County. This suggests that the population will be at the age where housing is needed more for families rather than for individuals.

### **Educational Attainment**

Thirty seven percent of West Pikeland residents were college graduates and 18 percent had graduate or professional degrees. Chester County as a whole had figures of 22 and 12 percent, respectively. Another indicator that aids in measuring economic prosperity is the number of automobiles per household. West Pikeland households averaged 2.23 automobiles per household in comparison with 1.89 for the County.

### **Average Household Size and Number of Households**

Trends in household size can indicate potential demand for housing type and size and for community facilities such as schools and parks. The average household size decreased slightly over the decade of 1980 to 1990 from 3.03 to 2.95 persons per household. The County average in 1990 was 2.73 persons per household as a comparison. The lower County figure may be due the fact that the County average contains multi-family housing and smaller homes that are not characteristic of a rural Township such as West Pikeland. Decreasing household sizes reflect both regional and national trends. Factors contributing to smaller household sizes include couples having fewer children, young adults postponing marriage, more single parent households, and older people living independently.

West Pikeland experienced a large amount of residential growth from 1980 to 1990. The US Census data indicates that the number of housing units rose during that time by 292 units or by an additional 35 percent. Single family homes represented 92 percent of all units in 1990. During the period between 1990 and 1997, an additional 352 units were added comprised of 254 single family units and 98 townhouse units. The building permit data indicates that single family units comprised 72 percent of all units between 1990 and 1997.

## **ECONOMIC CHARACTERISTICS**

This section describes characteristics of West Pikeland's labor force and includes analysis of occupations, income, and means of travel to work. The data is based on the 1990 US Census.

### **Labor Force by Occupation and Industry**

The 1990 Census indicates that over 85 percent of West Pikeland's residents are engaged in managerial and professional specialty occupations, and in technical, sales, and administrative support. No other class of occupation represents over five percent of the total. This suggests that the vast majority of the Township's workers are engaged in a variety of professional occupations.

In analyzing the breakdown of employment by industry, there is little deviation when comparing the County and the Township as indicated in Table 3-5. However, there is a significant difference when comparing the occupational statistics of the Township and the County as a whole, as indicated in Table 3-6. While the County has high percentages in the Managerial and Professional Occupations, and the Technical, Sales, and Administrative categories, the Township had higher numbers in both categories. Because these two categories of occupations traditionally offer higher incomes than the remainder, these figures help explain the higher median income reported in the Township as contrasted with the County. The Township's median household income of 76,480 dollars was 30,838 higher than the County figure of 45,642 dollars as indicated by the 1990 Census.

**TABLE 3-5**  
**LABOR FORCE BY INDUSTRY**  
**West Pikeland Township (1990)**

INDUSTRY	1990	PERCENT OF TOTAL	CHESTER COUNTY
Agriculture, Forestry, Fisheries	39	3.4%	3.8%
Construction	74	6.5%	6.3%
Manufacturing	282	24.8%	19.7%
Transportation	24	2.1%	3.4%
Communications/Public Utilities	17	1.5%	2.7%
Wholesale Trade	104	9.1%	5.6%
Retail Trade	137	12.0%	14.5%
Finance, Insurance, Real Estate	106	9.3%	8.5%
Business & Repair Services	61	5.4%	5.7%
Personal & Recreational Services	23	2.0%	3.2%
Health Services	55	4.8%	8.4%
Educational Services	90	7.9%	8.4%
Other Professional Services	115	10.1%	8.1%
Public Administration	11	1.0%	1.8%
<b>TOTAL EMPLOYMENT</b>	<b>1,138</b>	<b>100.0%</b>	<b>100.0%</b>

Source: US Census Bureau (1990)

**TABLE 3-6**  
**LABOR FORCE BY OCCUPATION**  
**West Pikeland Township (1990)**

OCCUPATION	PERSONS	PERCENT OF TOTAL	COUNTY
Managerial and Professional	577	50.7%	34.6%
Technical, Sales, Administration	400	35.1%	32.8%
Service	54	4.7%	9.7%
Farming Forestry, Fisheries	32	2.8%	2.7%
Production, Craft, Repair	32	2.8%	9.4%
Machine Operators, Assemblers	24	2.1%	4.6%
Transportation, Material Moving	0	0.0%	2.9%
Handlers, Laborers	19	1.7%	3.2%
<b>TOTAL EMPLOYEES</b>	<b>1,138</b>	<b>100.0%</b>	<b>100.0%</b>

Source: US Census Bureau (1990)

### **Employment Location and Means of Travel to Work**

Residents of West Pikeland have an interesting variety of travel patterns. The Township had slightly higher percentage of people working outside the County than most Townships and also a higher than average percentage working in center city Philadelphia. These percentages may be due in part, to West Pikeland's northeastern location and proximity to Philadelphia and to Montgomery County. Access to the Pennsylvania Turnpike and SEPTA rail transit in Malvern and Paoli allows West Pikeland residents to easily commute to Philadelphia and locations beyond.

The commuting patterns of West Pikeland residents were typical of the County as a whole. A full 76 percent drove alone in a single automobile while approximately 5 percent used public transportation (slightly higher than the County average). This figure could be related to the number of residents commuting by rail to center city Philadelphia. Additionally the percentage of West Pikeland residents working out of their homes was substantially higher than the County average. Ten percent of West Pikeland residents worked out of their home as opposed to nearly 4 percent for the County.

### **Income Statistics**

Income statistics are indicators of how well a community is doing economically in relation to the region and the County as a whole. Household and family income levels, as well as per capita income levels, are all useful standard of living comparisons. Income per capita results when the aggregate income of an area is divided by the number of residents. In 1990, West Pikeland had the highest per capita income of the neighboring municipalities.

**TABLE 3-7  
INCOME STATISTICS  
West Pikeland Township and Surrounding Municipalities (1990)**

ENTITY	MEDIAN INCOME			PER CAPITA
	HOUSEHOLD	FAMILY	NON-FAMILY	
<b>WEST PIKELAND</b>	<b>\$76,480</b>	<b>\$78,200</b>	<b>\$42,434</b>	<b>\$30,990</b>
Charleston	\$63,909	\$74,725	\$31,786	\$21,737
East Pikeland	\$50,079	\$55,254	\$32,045	\$18,898
Upper Uwchlan	\$65,409	\$66,278	\$36,667	\$22,100
Uwchlan	\$57,483	\$64,039	\$34,186	\$21,815
West Vincent	\$52,352	\$56,564	\$45,556	\$23,969
Average for Townships	\$60,952	\$65,843	\$37,112	\$23,252
Chester County	\$45,642	\$52,325	\$25,677	\$20,601
State	\$29,069	\$34,856	\$15,099	\$14,068

Source: US Census Bureau (1990)

## HOUSING CHARACTERISTICS

Municipalities are responsible for monitoring housing as part of the overall responsibility to protect the health, safety and welfare of residents. The following data provides an overall assessment of homes in West Pikeland Township and evaluates the form, composition, and value of the dwellings as a whole. It also projects the number of new housing units required in order to accommodate the Township's projected population.

### **Composition of Housing Units**

In 1990, West Pikeland Township's housing included 837 dwellings, comprising 771 single family detached dwellings (92 percent), 56 attached dwellings (6.7 percent), and 10 mobile homes (1.2 percent). For the purposes of this Plan, the current ratio of single to multi-family dwellings has been applied to future population: approximately 92 percent single-family dwellings, seven percent attached dwellings, and one percent mobile homes. Home ownership in 1990 stood at 90 percent. The comparable figure for the County was 74.5 percent.

The number of dwellings is influenced by the average household size. The 1990 census counted an average of 2.95 persons per household. However, if the average household size decreases without commensurate decreases in total population, the number of dwellings needed by these households will increase. Despite decreasing size of households, the size of the units continues to remain stable or even increase slightly. In 1990 the largest percentage of homes in West Pikeland Township (52.8 percent) had 4 bedrooms per unit. The number of units having 5 or more bedrooms totaled 14 percent of all residences. In comparison, the largest percentage of homes in the County overall (37.5 percent) had 3 bedrooms per unit. Only 6 percent of the homes in Chester County had 5 or more bedrooms.

The median year for housing built in West Pikeland was 1978, the comparable figure for the County was 1954. This analysis indicates that a large proportion of West Pikeland's residential units has been constructed in the recent past. During the period from 1990 to 1997, 352 residential units were added according to Township building permit data, with most of these being single family detached units. According to the residential building permit data collected by Chester County Planning Commission, the average for the 73 municipalities in the County for the same time period was 262 units while the surrounding five townships had a surprising average of 523 units. While West Pikeland continues to grow at a more moderate rate than the surrounding area, development pressure is increasing.

### **Median Housing Value**

The median value of housing within the Township, based on actual sales, in 1990 was \$242,000. The County average value was \$149,000. The 1990 Census further reported a median housing value of \$257,900 for West Pikeland and \$155,900 for Chester County as a whole. The Chester County Housing Cost Profile (1996) indicates that the median sales price for homes in West Pikeland in 1996 was 214,894 dollars as compared to 156,250 for Chester County as a whole.

### **Housing Projections**

Population projections and numbers of dwellings (derived from average household size, which is anticipated to slightly decline) for West Pikeland Township are as follows:

**TABLE 3-8**  
**PROJECTED POPULATION**  
**West Pikeland Township Household Size and Total Dwellings (1990 – 2020)**

YEAR	POPULATION	INCREASE	PERSONS PER HOUSEHOLD	PERCENT INCREASE	TOTAL DWELLINGS
1990*	2,323	--	2.95	--	837
2000	2,890	567	2.84	24.4%	1,018
2010	3,240	350	2.83	12.1%	1,145
2020	3,510	270	2.80	8.3%	1,254

\*Actual 1990 Census Figure

Source: US Census Bureau (1990), Chester County Planning Commission Planning Bulletin # 45.

The data in Table 3-8 indicates that the Township will continue to grow into the next century, with 417 additional dwellings estimated to be constructed between 1990 and 2020, or almost a 50 percent increase in the total number of dwellings. The rate of population increase is projected to slow, although obviously total population will continue to increase. If the historic growth rates of almost 39 percent were to continue to the year 2020, then population would be well over 6000 people instead of 3510.

**TABLE 3-9**  
**PROJECTED NUMBERS OF UNITS**  
**West Pikeland Township (1990 –2020)**

DWELLING TYPE	1990	2000	Net Change 1900-2000	2010	Net Change 1990-2010	2020	Net Change 1990-2020
<b>Total Population</b>	<b>2,323</b>	<b>2,890</b>	<b>567</b>	<b>3,240</b>	<b>917</b>	<b>3,510</b>	<b>1,187</b>
Persons per Dwelling	3	3	0	3	0	3	0
SFD (92%)	771	936	165	1,053	282	1,154	383
Attached (7%)	56	71	15	80	24	88	32
Mobile Home (1%)	10	10	0	11	1	13	3
<b>Total Dwellings*</b>	<b>837</b>	<b>1018</b>	<b>181</b>	<b>1145</b>	<b>308</b>	<b>1254</b>	<b>417</b>

\* Does not equal total, due to rounding.

Source: US Census Bureau (1990), Chester County Planning Commission Planning Bulletin # 45.

This data suggests that the Township can anticipate an increased number of dwellings. An additional 417 dwellings are anticipated by the year 2020. While this number may not be large in an absolute sense, it represents an increase of almost 50% of the number of dwellings in 1990, which is a relatively-large increase in development for a rural municipality. These projections are estimates only, but represent a continuation of past trends and a significant challenge for the Township.

The population and housing increases that are projected above could consume a significant amount of land. The Township must ensure that it provides an adequate opportunity for this future population to be accommodated by designating appropriate amounts of land for future residential development. The new units projected should be planned for those areas best able to accommodate such development in terms of infrastructure, and in a manner that is less land consumptive than the standard 2 acre lot subdivisions.



### **Housing Affordability**

One manner of calculating the affordability of housing is to compare the total monthly household income to total monthly housing costs. A common definition of affordable housing is when total costs are less than or equal to 28 percent of an owner's gross income. The index is calculated by dividing 28 percent of monthly median household income by monthly home ownership costs. An affordability index of 100 or higher is considered affordable to a household income of \$57,965, the estimated median household income for Chester County in 1996. These figures are based on a number of items including home closing costs and housing information collected by the Chester County Planning Commission.

West Pikeland's 1996 housing affordability index was 78.3 as compared to 105.9 for all of Chester County. The figures are considered as estimates and are used as a guide for housing affordability in Chester County and are not intended to represent actual costs or affordability for any individual.

### **Fair Share**

This issue of population growth refers to the concept of "fair share" in terms of planning for future development. "Fair share" is considered to be the municipality's legal responsibilities for accommodating a variety of housing types and the people who are anticipated to move into the Township. The concept of fair share also relates to a municipality's responsibility for accepting commercial and industrial development. Pennsylvania's courts have clearly indicated that all municipalities that are in the path of growth must accept their fair share of regional growth. This means that they must allow new housing to be constructed and permit basic forms of housing.

The desire to protect the Township's environment and rural character necessarily involves the balancing of competing interests, which are all valid if viewed individually. The protection of the environment is a legitimate governmental responsibility as is providing for a reasonable amount of housing opportunities. Conflict arises when the desire to protect the rural character results in a full exclusion of necessary development. New development thus needs to be accommodated in those locations where it can best be supported. The Pennsylvania Supreme Court stated that "Zoning provisions may not be used ... to avoid the increased responsibilities and economic burdens which time and natural growth invariably bring." The Court also stated that "...protecting the character - really the aesthetic nature - of the municipality is not sufficient justification for an exclusionary zoning technique." *Girsh Appeal*, 437 Pa. 237, 263 A.2d 466, 468 (1975). West Pikeland seeks to meet its obligation to accept its fair share of new development through land use policies that focus new development in areas that have infrastructure available and can support new construction from an environmental perspective.

The "fair share" test was originally expressed in 1974 by the Commonwealth Court in the case of *Surrick v. Zoning Hearing Board of Upper Providence Township*, 11 Pa. Commonwealth Ct. 607, 314 A.2d 565 (1974), and has become the standard used by Pennsylvania courts to determine if a particular municipality has provided for its fair share of land for the development of housing (principally multi-family dwellings), and is not unlawfully excluding a particular type of housing. The test includes assessments of whether a municipality is in the path of development and whether it is a logical place for development and population growth. It evaluates the present level of development in the municipality, including population density and assesses the level of undeveloped land and the amount of land available for development as well as other issues.

Based on these issues, West Pikeland Township's growth responsibilities are limited as reflected in this Plan, for the following reasons:

1. The Township is in the path of growth. Past development data suggest that there is a continuing demand for housing in West Pikeland. This housing growth has primarily taken the form of single-family detached dwellings, with only a few attached homes or mobile homes.
2. The Township is a logical place for development. This is a matter worthy of discussion because the Township has a significant amount of environmentally sensitive areas. However, given the recent amount of development in West Pikeland, it should be concluded that there is a level of development that is appropriate for the Township.
3. The Township has a relatively low population density. When compared to its region, West Pikeland's population density is the lowest except for Charlestown. This reflects the Township's rural character.

West Pikeland's fair share of additional growth includes single-family detached and attached dwellings, as well as other forms of housing. This growth will best be accommodated in areas of the Township most suited for new development in terms of access to existing infrastructure. Cluster development that conserves open space and lowers high land consumption rates is consistent with the Township's desire to protect natural resources, support the agricultural industry and preserve the overall rural character.

Current zoning practices permit residential development on large lots throughout most of the Township, contributing to the potential for sprawl. Current options for clustering promote the protection of moderate amounts of open space. While certain design procedures in the Ordinance have the effect of limiting net density, such provisions still facilitate sprawl. The Township's future land use policies should discourage sprawl and direct development to appropriate areas, while simultaneously preserving open space, environmentally sensitive areas and agricultural lands. This may mean that small lots should be used in conjunction with community-based sewage disposal systems reducing the number of individual on-lot sewage disposal systems.

Many areas of the Township are used for agricultural purposes and some areas (the villages) are appropriate for mixed uses. Residential uses should be directed away from prime farmland and environmentally sensitive areas and towards areas that can provide adequate roadway access and will not involve the creation of more sprawl or environmental degradation. Flexible housing policies, such as those regarding cluster developments and the adaptive reuse of older dwellings, can expand the housing stock without (or minimizing) the construction of new buildings.

Due to the level of environmental constraints in West Pikeland, the Township must be very cautious when reviewing proposals to develop property on a lot-by-lot basis. Such incremental development is often conducted by landowners that do not wish to convey all of their holding at one time. This incremental development can result in the creation of long strips of house lots along the road frontages. Development without the benefit of a long-term plan can limit opportunities for improved design and can cause environmental damage. The Township should encourage development to occur with the benefit of a comprehensive site development plan.

#### **PLANNING IMPLICATIONS**

- ☐ West Pikeland has experienced significant growth pressure over the past ten years and this pressure is likely to continue to a certain degree, creating additional demand for housing.
- ☐ The average household size has been declining and is expected to decline further. This suggests that there may be an increased demand for dwellings for smaller families.

- ☐ The Township has, based on raw acreage figures, available acreage for additional development. The population density is also among the lowest of the municipalities in the region. An adequate amount of land area is available to accommodate the projected population.
- ☐ The median household income in West Pikeland is relatively high, suggesting that the population may continue to demand single-family detached dwellings as the preferred housing type.
- ☐ The Township has an obligation to provide for the opportunity for future growth and seeks to accommodate its future population in appropriate areas.

## Chapter Four

# ENVIRONMENTAL & HISTORIC RESOURCES INVENTORY

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Understanding natural resources and recognizing how they interact to form the environmental systems that exist in the community is necessary to effectively plan for future land use. Land, water, and biotic resources are interdependent and altering one will impact all others. These impacts often have long term and sometimes, far-reaching, effects. In addition to natural resources, the Township has many historic resources. It has a unique history that dates back to before the Revolutionary War. Its historic resources reflect the cultural development of the region and preserving the remaining physical evidence of this history helps preserve its unique character and sense of place. Carefully weighing the implications when evaluating potential development scenarios is important to ensuring a balanced approach to land use that protects vital environmental and historic resources yet also accommodates an appropriate level of development.

This chapter discusses the environmental resources of West Pikeland and defines their role in supporting the present and future population. It also presents an overview of historic and cultural resources and discusses how they intertwine to form the Township's unique character. This chapter ends with a series of planning concerns that relate to the use and protection of environmental and historic resources. These concerns will serve as the basis for the recommendations contained in the related plan element.

## LAND RESOURCES

Land resources include the geology, topography, and soils that are found in West Pikeland Township. The characteristics of the land resources, particularly the underlying rock formations, are indicative of the quantity and quality of water resources present and can also indicate the type of biotic resources that form. The land resources thus determine the types of land uses and level of development that can be sustained in a given vicinity, as well as the potential impact generated by their disturbance. Land resources are depicted on Map 4-1.

Land resources are first determined by geologic formation, which are categorized by physiographic provinces. Chester and Delaware Counties are geographically located within the Piedmont Province of the Appalachian Highlands, which consists of rolling uplands with low hills and moderate ridges. It has three main parts, the Piedmont Upland, the Triassic Lowland, and the Conestoga Valley each of which have a different bedrock composition. West Pikeland Township falls within the Piedmont Upland, which underlies a majority of the County. The bedrock of the Piedmont Upland is predominately schist, gneiss, quartzite and gabbro. The Triassic Lowland comprises the northern most area of the County and is underlain by shale and sandstone. The Chester Valley, a major geological feature underlain by limestone, traverses the County in a northeast-southwest manner and is found just south of the West Pikeland's southern border.

### Geology

The geology largely determines soil type, groundwater availability, and bedrock stability. Age, origin, composition, and qualities such as hardness and resistance to erosion describe the characteristics of the rock types that comprise the underlying geology. The erodibility and weathering of the underlying rock is responsible for the formation of hills and valleys. The degree to which groundwater is stored is determined by the porosity of the rock and the size and number of cracks and fissures it contains.

The geology of West Pikeland consists mostly of hybrid granitic gneisses, with graphitic gneisses found in the northern regions and granodiorite found in the south and southeastern regions. Hybrid granitic gneisses are metamorphic rocks that originally were both sedimentary and igneous. They tend to be quite hard, weathering to a moderate depth. Depending on local conditions, the elevations formed by the weathering of these rocks tend to be higher, with low valleys and steep stream banks. Because of their hardness, these formations are considered excellent foundations. However, because they are hard and dense, they tend to have fewer fractures to hold groundwater and are consequently poor water sources. Pickering gneiss, a specific type of graphitic gneiss found near the Pickering Creek, differs slightly from the general description in that it has a higher presence of graphite and tends to hold a somewhat larger supply of groundwater.

### **Topography**

West Pikeland's topography is fairly typical of the Piedmont Province. The relief varies depending on the underlying rock in a specific location and the elevation of the uplands relative to the base. The Pickering gneiss found in the northern quadrants of the Township forms hills with low to medium relief and gently rolling but stable slopes. The granodiorite underlying the southern regions is more highly resistant with only slight weathering and to shallower depths. Streams have cut deeper forming narrow stream valleys. The hills tend to be of a medium relief with steep, but stable slopes. Steep slopes are a particular environmental concern because inappropriate development and disturbance in these locations can result in uncontrolled storm water runoff and severe erosion. The slopes most susceptible to erosion are those 15 percent and over. The areas of steep slopes are delineated on Map 4-1.

### **Soils**

The weathering of the underlying rock forms soil as other natural processes have affected it. The characteristics of a given soil are the result of the physical and mineralogical composition of the parent materials, the climate under which the parent material formed and exists, plant and animal life in and on the soil, relief of the land and the length of time these forces have acted on the parent material. The main source of information on local soils in this region is the Chester and Delaware County Soil Survey (1963). It reports that the main soil association present in West Pikeland is the Glenelg-Manor-Chester association. This is the largest association in the County and is found in all regions. Soil associations are generally described as a pattern of soils containing a limited number of both major and minor soil types. These types are not necessarily uniform; in fact their characteristics can vary greatly. It is the pattern that is similar and leads to a specific association designation.

The Glenelg-Manor-Chester association range from level to steep with the most acreage sloping gently to moderately. The principal soil types found in the association are the Glenelg, Manor, and Chester, while Congraee soils are found on flood plains. The Glenelg and Chester soils have a surface layer of dark brown silt loam and subsoil of brown silty clay loam or silt loam. The Chester soils are deep and well drained while the Glenelg are shallower. This soil association is most appropriate for dairy farming and raising of livestock. Crops may be grown as well but they tend to be used mostly for livestock feed. In West Pikeland, much of the agricultural activity occurs on low to moderate slopes and erosion of the topsoil is a concern. Reducing the loss of topsoil through measures that prevent erosion and uncontrolled runoff is needed to support the future of the agricultural industry.

The Congraee soils are part of this association, but are considered hydric soils. Hydric soils form under anaerobic conditions and are considered a major indicator of wetlands. They are generally found in wetlands and floodplains of West Pikeland, as well as adjacent to the stream corridors. The soils tend to be deep and well drained. Despite some limitations, they can also support agricultural activities such as dairy farming and livestock production.

### **Agricultural Soil Classifications**

Soils are classified in different ways for different purposes. The U.S. Department of Agriculture classifies soils in terms of their suitability for various agricultural purposes. The soils are rated on specific characteristics and classified from I to VIII, with each soil class assigned a different set of values indicating its level of appropriateness for certain uses. Those that have the fewest limitations and the greatest range of uses are Class I soils, while those with the greatest number of natural limitations and the fewest uses are labeled as Class VIII. This information is made available to assist the agricultural community in making decisions on crop types and the probability of success. West Pikeland Township has a range of soil classes with scattered areas of mainly Class II and III soils found in all four quadrants of the Township. The presence of quality agricultural soils are substantiated by the number of farms that are still operating, as well as by the number of old fields that were recently farmed. Although the Township does not contain large areas of extremely poor soil, it does have areas of Class V soils which pose severe limitations for agricultural uses due to wetness, steepness, erodibility and stoniness.

Despite the number of farms still in operation, agriculture appears to be on the decline as indicated by aerial photography and field survey. Many areas that were once used for agricultural purposes have been developed as residential subdivisions and many more appear to be threatened. Farms are specifically targeted for subdivisions because the development cost is often lower than for non-farmed areas. The remaining farms should be protected from development pressure through measures that support the agricultural industry and facilitate the continued use of the Township's soil resources for agricultural purposes.

## **WATER RESOURCES**

The water resources present in a given region are defined by watershed. A watershed is an integrated system of surface waters (rivers, streams, and ponds), and subsurface waters (groundwater, springs, and wetlands), along with the drainage network that connects and transports the water. In Chester County, the surface and subsurface water systems are well connected with streams serving as drains for groundwater in some areas yet losing water to recharge groundwater in other areas. The watersheds of Chester County are located within two large drainage basins, the Delaware River Basin, which flows to the east, and the Susquehanna River Basin, which flows to the west. Six sub-basins are identified within the boundaries of the County, four of these, the Schuylkill, Delaware, Brandywine, and Clay are part of the Delaware River Basin and the remaining two, the Octoraro and Elk, are part of the Susquehanna River Basin. Water resources are indicated on Map 4-2.

### **Creeks and Streams**

West Pikeland Township lies completely within the Delaware River Basin, and more specifically, the Schuylkill sub-basin. This sub-basin is approximately 180 square miles in size and drains nearly 24 percent of Chester County. The major streams of this sub-basin draining West Pikeland are the Pine Creek and the Pickering Creek. The main branch of the Pickering Creek enters the Township just south of the Twin Hills development. Several smaller creeks drain mainly the west and a north quadrant of the Township and merge into the Pickering as it traverses the Township. The Pine Creek enters the Township near the southern tip and merges with a smaller tributary north of the Township boundary near Lower Pine Creek Road. Another tributary of the Pine Creek enters the Township from the west. The confluence of the Pickering and Pine Creeks is located in the vicinity of Chester Springs. The Pickering exits the Township and passes through East Pikeland and Charlestown Townships before emptying to the Pickering Creek Reservoir and the Schuylkill River just south of Phoenixville.

The Commonwealth of Pennsylvania has designed streams throughout Chester County as Special Protection Waters. Special Protection Waters are classified either as High Quality (HQ) or as Exceptional Value (EV). The Pickering and Pine Creeks, along with their tributaries, have been designated as High Quality Waters. To earn this designation, a stream or watershed must possess excellent quality water, or other environmental features that warrant protection. Title 25 of the Pennsylvania Code regulates wastewater treatment and discharge into streams and the HQ and EV designations invokes the application of a different set of standards when evaluating permit applications associated with new land development. The application process requires that development proposals that include a point source discharge to a High Quality stream show that the discharge is justified and that it will not effect the protected water uses. The applicant must also evaluate and show that alternative technologies are not feasible.

### **Floodplains**

A floodplain is the land adjacent to a creek, stream, or river that accommodates the overflow during periods of heavy rains. One of the many responsibilities of the Federal Emergency Management Administration (FEMA) is to encourage municipalities to regulate development in floodplains in order to reduce or prevent potential damage to private property and to allow floodplains to function as nature intended. The National Flood Insurance Program, administered by FEMA, serves as the incentive for these types of regulatory measures since municipalities must adopt such regulations in order for residents to participate in the insurance program. The standard established by FEMA to measure floods and flood potential is the 100-year flood. This translates to a one percent chance of a flood reaching a particular elevation in any given year. Floodplain maps prepared by FEMA are used to administer the national flood insurance program and to delineate floodways and floodplain elevations.

Both the Pine and the Pickering have extensive floodplains associated with their corridors. The FEMA maps indicate that studies have been undertaken on several sections of both creeks. Floodplain elevations are designated for the Pickering Creek from the western boundary to Pikeland Road. Elevations have not been established for the section extending from Pikeland Road to the Charlestown Township boundary. Floodplain elevations have been determined for the southern branch of Pine Creek from the southern boundary to Conestoga Road but no detail is available beyond that point. Neither is there information available on the northern branch of this creek. Elevations would need to be established in these areas in order to determine the impact of potential development. The Pigeon Run, which parallels the boundary within Charlestown Township, crosses into West Pikeland for a short distance. The floodplain of the Pigeon Run extends well into West Pikeland Township.

The maps produced by FEMA are important tools for municipalities in planning for future land use. Residential development in the floodplain should be severely restricted. Land uses permitted should be low intensity and not susceptible to extensive damage that may be caused by flooding. Construction of impervious surfaces should be limited. Any structures permitted should be highly regulated to ensure that they could withstand rising floodwaters and yet not hinder the floodplain function. The availability of detailed information on floodplain characteristics, including elevations, helps to ensure that new development does not inadvertently encroach on the floodplain and that mitigation requirements are adequately designed. If development is proposed for a corridor section that has not been the subject of detailed study, elevations must be determined prior to plan consideration.

### **Ponds**

Ponds are the small bodies of open water found throughout the Township. Many are quite shallow and no more than a few acres in size. They often form when naturally occurring depressions fill with water or are continually fed by springs. They can, however, be man-made and created to support livestock or to help manage stormwater runoff. In West Pikeland, some ponds are man-made and were constructed to support

agricultural operations while others help manage stormwater and provide a water source for wildlife. The mining activity once prevalent in the Township led to larger ponds. The mine pits and depressions filled with water once the mining operations ceased and the resulting ponds have become permanent landscape features.

Most of the ponds in the Township are owned either by an individual landowner or by a homeowner's association. The only pond owned by the Township is located in Pine Creek Park off Yellow Springs Road. The larger ponds in West Pikeland are privately owned and located in the southwest quadrant. One is located near Byers Road and a second is located off Messner Road. Most of the smaller ponds are located either within, or adjacent to, a stream corridor.

### **Groundwater**

All the geological formations in Chester County are considered aquifers; however, the extent to which they yield water is dependent on specific regional characteristics. The porosity and density of the bedrock, and the number and extent of cracks and fissures present, determines how much groundwater can be stored and how easily the water is accessed through a well system. The porosity and density of the bedrock also determines its ability to filter out pollutants since it is through the seepage of surface water into the bedrock, that the water is cleansed of pollutants. Pathogens die off and sediment and chemicals are trapped in the rock. Most of the bedrock in Chester County is effective in removing pollutants with the exception of the limestone formation that underlies the Chester Valley. Although limestone tends to yield high amounts of groundwater, it does not provide adequate filtration. Limestone is highly soluble and groundwater percolation forms large channels that can convey pollutants and result in groundwater contamination. The Chester Valley lies south of the Township and there are no areas in West Pikeland that are underlain by limestone.

The publication, Chester County Geology (1994), analyzes the hydrological aspects of geological formations underlying the County. As indicated in the previous discussion, graphitic gneiss in the north and granodiorite in the south and southeast underlie West Pikeland Township. These are hard, dense rocks that do not hold large amounts of groundwater. In general, the groundwater capabilities of West Pikeland's geology ranges from a low (1-10) gallons per minute to moderate (10-60) gallons per minute. It should be noted that wells drilled within relatively close proximity to one another have been found to produce dramatically different results. The groundwater seems to sufficiently support low density development, however, increasing the number of wells in any one location could reduce the potable water supply for a larger area. An evaluation of the groundwater supply should accompany all new development proposals located outside of the public water service area to ensure that the existing wells will not be adversely affected.

### **Springs**

Springs are flows of water that emanate directly from the ground and are most commonly found near the headwaters of creeks and streams. They were an important source of potable water particularly when the area was first settled. Many of the early farmsteads were located near springs as evidenced by the numerous spring houses still visible in rural areas including West Pikeland. They are still valued as a water source and commonly used for livestock. Some communities use them to supplement the public water supply.

Springs were important in the historical development of the Township. The village of Yellow Springs became a popular travel destination in the mid-eighteenth century following the discovery of sulfur springs in what is now West Pikeland Township. It was believed that these springs had healing properties and individuals from all over traveled to the area to bathe in these springs.



## **Wetlands**

Wetlands are areas that are flooded during a portion of the growing season. They are an important natural system that serves environmental purposes including storing storm water runoff, recharging groundwater, and filtering sediment and pollutants and providing wildlife habitat. Probably the least recognized but most important function of wetlands is flood control. Storm water runoff flows into wetlands and is naturally detained before being slowly released into adjacent rivers and streams. The capture and slow release of detained runoff reduces the soil erosion and allows sediment to filter out before reaching streams and rivers. Pollutants carried by runoff are also prevented from entering surface waters.

Wetlands are defined as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. They are further identified through the presence of three conditions: 1) the periodic presence of water or wet conditions, 2) the presence of hydric (wet) soils, and, 3) the presence of wetland vegetation. The U.S. Army Corp of Engineers is the agency responsible at the federal level for protecting wetlands and regulating any proposed development in them.

The U.S. Army Corp of Engineers finds wetlands in all quadrants of West Pikeland Township according to the National Wetlands Inventory Maps prepared. There are two main types of wetlands present in West Pikeland. The creeks and streams (both perennial and intermittent) that are less than two meters deep are termed “riverine” wetlands. The other wetland areas, usually located adjacent to the streams and creeks and commonly referred to as swamps, bogs and marshes, are classified as “palustrine” wetlands. Palustrine wetlands are characterized by trees, shrubs, and emergent plants such as cattails. Large areas of wetlands adjacent to the Pickering and Pine Creeks are considered to be forested palustrine wetlands, containing both evergreen and deciduous trees. Red maple and green ash are two common species often found in forested palustrine wetlands. Other types of wetlands found in West Pikeland include open water (the small lakes and ponds found in several locations) and emergent (the low, moderately wet areas of grasses, cattails and other narrow leaf plant species).

To ensure that wetlands continue to function as nature intended, they should not be used for any purpose that requires them to be filled or drained. They should be clearly delineated on all development plans to ensure that they are safeguarded from the negative impacts of adjacent development. The National Wetlands Inventory Maps may be used to determine the general location of wetlands; however, they should not be used in place of a detailed survey. Wetlands are regulated at both the federal and the state level and all necessary permits should be secured before land development proceeds. Wetlands in West Pikeland Township are illustrated on Map 4-2.

## **BIOTIC RESOURCES**

Biological resources include the vegetation and wildlife that naturally occurs in an area as the result of land, water, and climatic factors. The impact of settlement and influence of humans has a direct effect on biological resources since biotic resources can easily be altered and controlled. Early settlers were attracted to Chester County because of the quantity and quality of the biotic resources as exhibited by the settlement patterns.

## **Woodlands**

The Chester County Natural Areas Inventory (1994) describes the entire County as located in the Piedmont Section of the original Oak-Chestnut Forest Region which was dominated by the American Chestnut. Most

of the forests have been cleared and the new growth is now comprised of red, white, and black oak, often mixed with other species including tulip popular, red maple, and beech. Most of the forested areas that still exist in the County, including those in West Pikeland, are located on steep slopes, and in barrens and wetlands. Those located on moderately rolling uplands in prime soils were usually cleared for agricultural purposes.

Upon settlement, the West Pikeland region was heavily forested. Woodlands play a critical environmental role in stabilizing soils, absorbing excess storm water, absorbing carbon dioxide and moderating excessive heat. They also provide wildlife habitat. Most of the remaining woodlands in the Township are found on steep slopes and in wetland areas or those places generally unsuitable for other types of development. As the region developed, forests were cleared for agricultural activities and also to provide wood as fuel. The forests now present are relatively new, having grown only since the mid to the late nineteenth century when wood was no longer a primary fuel source. Some of the largest contiguous forested areas are located adjacent to the Pickering and the Pine Creeks.

Woodlands and forests are renewable resources that should be carefully managed in order to support growth and regrowth of native species. Despite the fact that timbering as an industry in northern Chester County has declined, many landowners with large amounts of woodlands do participate in selective cutting for economic gain. For instance, landowners that have large stands of black walnut trees may engage in selective cutting in order to profit from this particularly valuable wood. This type of cutting is an agricultural activity that should be encouraged as an economic incentive to conserve woodlands as well as a way to maintain a healthy stock. In Pennsylvania, information on woodland and forest management can be obtained through the Department of Conservation and Natural Resources, Bureau of Forests.

### **Pastures**

Although many cultivated areas in West Pikeland have been lost to new construction, some still remain. The horse farm in particular is an agricultural use prevalent in all quadrants. The land in the Township is well suited to raising livestock and the extensive amount of pastureland needed for this type of agricultural activity is still available. Pastures play an environmental role in providing habitat and moderating the negative impacts of adjacent development in terms of storm water runoff and groundwater recharge. Many large tracts of previously cultivated areas have been left fallow and natural communities are now beginning to evolve. Hedgerows, or linear stretches of small trees, shrubs and related plant materials, are also common features of these large tracts. Pastures provide habitat for many animal species, adding to the natural diversity of the region.

### **Sensitive Natural Areas**

The Chester County Natural Areas Inventory (1994) identifies and documents sensitive natural areas in Chester County. Produced by the Pennsylvania Science Office of The Nature Conservancy, this document is intended to provide the technical basis for municipalities to establish protective measures for these important natural communities. The document was compiled using several different resources and data collection methods. Information from the Pennsylvania Natural Diversity Inventory served as a key resource. In addition, The Nature Conservancy used maps, aerial photography, field surveys and data analysis to document, evaluate and prioritize the results of the Inventory.

Although many sensitive natural communities are located in proximity to Township boundaries, only one area, the Pigeon Run Wetland, is physically located within the Township. This area is defined as a locally significant wetland complex located on the floodplain of Pigeon Run. It is forested with red maple, white ash, pin oak, and American elm. The shrub layer and understory is diverse and although no rare species have yet been identified at this location, the potential exists. Maintenance of the forest cover is necessary to

preserve the site and to encourage propagation of native species. Any development proposed in proximity to the wetland should include mitigation measures designed to reduce potentially damaging impacts.

## **HISTORIC AND CULTURAL RESOURCES**

Preserving historic and cultural resources helps a community to retain its sense of place, sense of community and its overall quality of life. A community's identity can often be found in its historic resources and cultural landscape, and can help to explain the people and the place. Historic resources include the buildings, structures and objects that remain to tell the history of the area. The cultural landscape encompasses these resources, as well as the transportation corridors, settlement patterns and development traditions that comprise the contexts in which the Township grew and developed. Historic and cultural resources in the Township are indicated on Map 4-3. The prevalence of historic resources remaining is due, in part, to the fact that most residential development has taken place in the southern part of the Township and consequently, many of the farmsteads, hamlets and clusters have been spared. Recognizing and protecting the physical reminders of the Township's historical and cultural development is necessary if West Pikeland's rural character, and consequently its quality of life, is to continue.

The following describes the current state of historic and cultural resources in West Pikeland, and discusses the preservation activity that has been undertaken to date. Before the historic and cultural resources can be discussed, however, it is important to have an understanding of the Township's history. There are several key sources of information on the Township's historical development, these include key publications: 30,000 Acres: Vincent and Pikeland Townships 1686 to 1850 by Estelle Cremers (1989), The History of West Pikeland Township by Clifton Lisle (1981), and History of the Conestoga Turnpike by Stuart and Catherine Quillman (1987). In addition to the Chester County Historical Society, information on West Pikeland Township can be obtained through Historic Yellow Springs, Inc., the French and Pickering Creeks Conservation Trust, and the Chester Springs Library.

### **Historical Overview**

The following is an overview of West Pikeland's historical development. It is excerpted from the summary compiled by the Natural Lands Trust (1989), West Pikeland's Open Space, Recreation and Environmental Resources Plan (1992), and Comprehensive Plan (1973).

#### **Summary**

William Penn granted the region including West Pikeland to Joseph Pike, a merchant from Ireland, in 1703. The land area comprised 10,116 acres and was known as "Pikes-land" and initially included what are now both East and West Pikeland. Upon Pike's death, the land was passed to relatives and was gradually leased in small parcels to English and Welsh settlers. Tenants were to be given the option to purchase these tracts in twenty years time. Before this time period was up, however, the land including all tenant holdings was sold to a single individual. However, the failure of the new owner to make full payment resulted in a lawsuit in which all land reverted back. It was then resold at a sheriff's sale and all deeds in the Township reportedly date to 1789. The region known as Pikeland separated into East and West Pikeland in 1838.

Following settlement, much of the land was cleared for crops and livestock. Agriculture became the dominant industry and gristmills were constructed along the streams to process the grain. One of the most important of these local mills still stands at Anselma. It was built in 1747 and was the first grist mill on Pickering Creek. As the area grew so did the need for roads to accommodate travelers and transport crops. The first roads were actually Indian trails that mainly followed

streams. One of the most developed of the Indian trails was Route 401, which was originally called the Allegheny Path and then the Conestoga Turnpike. It linked Philadelphia and Carlisle, a community just west of Harrisburg. Route 113, the other major route through the Township, was built by settlers to accommodate travel between the communities now known as Phoenixville and Lionville. Horseshoe Trail was another historic route previously called the Nantmeal Road. It linked Philadelphia and the Warwick furnace.

The Township became an important travel destination following the discovery of sulfur springs. Although these springs were used extensively by the Native Americans, it was not until 1722 that they were discovered by European settlers. Recognized for their medicinal properties, people came from all over to bathe in the mineral waters. A log house was built in 1750 by the owner of the property and served as the first inn on the site. It was purchased in 1806 by James Bones and under his ownership; “Yellow Springs” grew into a well-known summer resort that attracted patrons from Canada to the West Indies. A small village initially named “Bath” was constructed in the area beginning in 1814. The name Yellow Springs persisted, however, and was used interchangeably with the newer name “Chester Springs”, the village that contained the nearest railroad station. Yellow Springs continued to grow with the addition of more hotels, and the area remained a very popular spa for many years. A newspaper was even started in the area in 1829 but was relocated to West Chester combining with an existing newspaper.

Yellow Springs was the site of a hospital during the Revolutionary War. The hospital was built by Dr. Samuel Kennedy and was used to treat the wounded of the Battle of the Brandywine and those that fell ill while at Valley Forge. It was the first military hospital in the county and served as a medical supply headquarters as well. Dr. Boda Otto, a prominent German physician, practiced at the site until the end of the Revolutionary War in 1781. Upon closure, the hospital continued to be used for many different purposes but burned down in the early 1960's. The foundation survived and is preserved as a medical herb garden in recognition of the hospital.

The Yellow Springs property continued to be a popular resort throughout most of the nineteenth century. The Civil War, the rise of Victorian society, and new medical discoveries all contributed to the decline in use of the Yellow Springs spa. The property was sold in 1869 to become the Chester Springs Soldier's Orphans' School and Literary Institute was established to care for the orphans of the Civil War. It operated in this capacity for nearly forty years. The property was sold again in 1916 to the Pennsylvania Academy of the Fine Arts and was used as a summer school. The school was closed permanently in 1951 and the site and buildings were sold to the Good News Productions an organization that produced motion pictures.

West Pikeland was part of the underground railroad system that operated before the Civil War. There were at least two sites in the Township, one at Pickering Pines farms near Chester Springs, and the other was located east of Pickering Mill, at a site now known as the Yellow Spring Nursery. The strong Quaker heritage of the area was responsible for the strong support for the Abolition Movement.

As the region continued to grow, and the iron and steel industry developed, rail lines were installed. In 1871, the Pickering Valley Branch of the Reading Railroad Company was constructed between Phoenixville and Byers. Dairy products and iron ore were the main products carried by this system. The train stopped to collect milk from a number of locations throughout the Township. The train also carried iron ore from the region, including West Pikeland, to the Phoenix Iron Company in Phoenixville.

Mining was another industry in the Township that developed in the nineteenth century. Shallow mines and ore pits are still evident in many areas. Before the rail line was completed, horses carried iron ore to the iron furnaces in Warwick and Coventry. With the development of the rail line iron was then carried into Phoenix. Graphite is quite prevalent and the largest concentration of the mineral in the entire region is found in West Pikeland. It was actively mined for use during World War II. The mine was located west of Horseshoe Trail and the pit is now a large pond. Kaolin, a white clay used for porcelain, was also mined.

Commercial and industrial activity declined in the twentieth century and mining ceased along with the operation of the rail line. The strong agricultural tradition continued, however, and West Pikeland still is recognized for its contribution to regional agriculture. It is known as the place where the nation's first commercial hay bailer was used. Farming takes place on a much smaller scale now. Fortunately, many of the early farmsteads with their stone houses, bank barns, springhouses, and outbuildings are still intact. Over the past three decades, many new residents have been enticed to the area by its scenic landscape and strong rural character.

### **Identification of Historic and Cultural Resources**

Chester County traces much of its three hundred year history back to the founding of Philadelphia by William Penn. The physical reminders of this history are found in both urban and rural areas, and the historical development of the area is exhibited in its settlement patterns. Because West Pikeland has remained an agricultural community and has not been inundated with the level of new development that has occurred in other municipalities, many historic resources still exist, contributing to the scenic landscape for which the Township is widely noted. Aside from the buildings and districts that have regional and in some cases, national significance, there are many farms and farmsteads remaining that speak of daily life as it existed in the eighteenth and nineteenth centuries.

#### **Chester County Historic Sites Survey**

A survey is the process of identifying and gathering data on a community's historic resources. The survey data is the raw data produced by the survey or the information gathered on each property investigated. The historic resources in West Pikeland Township were first documented through the Chester County Survey of Historical Structures, which was undertaken on behalf of the County through the French and Pickering Creeks Conservation Trust in 1981. The purpose of this survey was to identify the physical location and general condition of the Township's historic resources and to gain preliminary information needed to evaluate their historical significance. This survey resulted in a list of one hundred fifty sites, all of which have a photograph and preliminary information on file at the Chester County Historical Society. The information obtained included the approximate age and location of the property, current and historic use, associated outbuildings, building configuration, and architectural type. Several sites were the focus of additional research as required by the Pennsylvania Historic Resource Survey form.

The survey data gathered was evaluated and an inventory of significant sites resulted. The list included sites recommended for listing individually or as part of a district in the National Register of Historic Places, listing in the Pennsylvania Inventory (no longer existing), and those recommended for inclusion in a certified local historic district.

### **Villages and Hamlets**

The early commercial activity in the Township was concentrated in villages and hamlets. Villages can be defined as compact community oriented settlements within a rural landscape usually containing a mix of uses. They generally have a distinct sense of place. Hamlets are often considered to be the smaller form of a village, however, they are usually more residential in nature and only support one or two commercial uses, for example a general store.

Most villages and hamlets in West Pikeland are located at crossroads and historically served as commercial centers. Most of the villages and hamlets in the Township still contain buildings and structures reminiscent of earlier functions, however, the predominant use now is residential. Structures remaining include houses, barns, spring houses and other outbuildings, along with buildings that once served as mills, general stores, trade shops, or related purpose. Most of the villages have not experienced significant development in and around them and consequently, the historic context has largely been preserved. To preserve the rural character of the Township, these early settlements should be respected as part of the Township's evolution and new development should be carefully designed to ensure that it compliments the existing scale and character. A brief description of West Pikeland's villages and hamlets follows.

#### ***Yellow Springs***

This village developed following the discovery of sulfur springs in 1722 that were believed to have healing qualities. For the next one hundred and fifty years, Yellow Springs was a popular resort and spa that attracted visitors from all over the country. It was the site of a hospital established by Dr. Samuel Kennedy during the Revolutionary War. After the Civil War, the property was sold and used as a school for orphans and then as a school for the arts. Many of the buildings and nearly one hundred and forty acres are now owned and managed by the Historic Yellow Springs Foundation.

The village presently consists of approximately consists of several primary buildings and several privately owned residential structures clustered at the intersection of Yellow Springs and Art School Roads. The Chester Springs Library, the offices of the Historic Yellow Springs Foundation, the Yellow Springs Inn, and the Chester Springs Studio are all located in the heart of the village with the individual residences surrounding this core. The Yellow Springs spa was listed in the National Register of Historic Places in 1971. It has also been designated a certified local historic district.

#### ***Pikeland Village***

Located at the intersection of Pikeland Road and Route 113, Pikeland Village was once the location of several mills, including a grist mill, owned by Joseph Hartman. A spoke factory was located in the vicinity. The Pickering Valley Railroad paralleled Kimberton-Chester Springs Road (Route 113) near the village and a station was located to the south. There are a number of historic structures identified along Village Road adjacent to Route 113, several of which are clustered at the intersection with Pikeland Road. The Township's only general store is located at this intersection.

#### ***Rapps Corner***

Located at the intersection of Street Road and Yellow Springs Road, Rapps Corner contains a cluster of historic houses and related outbuildings. It was once the site of a general store owned by Joseph Rapp, as well as a Lutheran parsonage. The historic homes are occupied and well maintained. It is one of the most scenic of the rural hamlets with views of the countryside evident from several points.

#### ***Chester Springs***

This village grew around the railroad station located near the intersection of Route 113 and Yellow Springs Road. It was ultimate rail destination for those visiting the Yellow Springs spa. It

developed as a Victorian village and a number of homes in the vicinity dating from the late 1800's still contain architectural details from this period. Chester Springs is still viewed as a community focal point due to the two commercial uses, the municipal building and the post office all found near this intersection. Redevelopment of the historic structures in this vicinity could enhance this village's identity as the community commercial center.

#### ***Opperman's Corner***

The northwest corner of the intersection of Routes 113 and 401 was the site of a general store dating from 1871. It was owned by David Opperman and was known as the first store in the vicinity to carry ice cream. It operated until 1959 at which time it was demolished as part of a road improvement project. Opperman's Corner was also the site of a cooperative creamery that operated between 1882 and 1907.

Opperman's Corner will always be a focal point due to the intersection of the two largest roads through the Township. Minor commercial enterprises are located on three of the four corners and the historic buildings lining the north and east legs of the intersection provide an interesting context for additional uses.

#### ***Anselma Mill***

The first grist mill in the Township was constructed here in 1747. It developed as a commercial center and at one point supported the County's second largest creamery, as well as grist mills, a general store and post office, the Franklin Hall School, and a train station. The grounds of the general store were well known as the location of tractor sales events held during the 1930s and 1940's. The decline of the railroad led to the decline of the community and there is little left to give evidence to this once important commercial area. A grist mill, along with several key historic homes, still stand in this area and together they serve as important reminders of the Township's historical development. This village has also been designated a certified local historic district.

The Township is partnering with other agencies in protection of this site. Preservation of the mill may be viewed as a key step in protecting the entire village area potentially as an historical park.

### **Historical and Cultural Preservation Measures**

Historic preservation can take many forms and should not be limited to any one approach. Historic and cultural resources can be protected through the use of federal and state preservation programs, through private efforts, and through local planning and regulatory techniques. West Pikeland Township has pursued several approaches and as a result, many key resources are subject to some level of protection. Education and citizen involvement are key components to the success of most approaches since awareness of the cultural significance is a necessary first step. The following is a brief description of preservation approaches used to protect West Pikeland's resources.

#### **National Register of Historic Places**

The National Register of Historic Places is a comprehensive listing of districts, sites, buildings, structures and objects of historical or cultural significance. The National Park Service maintains the National Register at the federal level but the program is administered largely at the State level through the Pennsylvania Historical and Museum Commission, which serves as the State Historic Preservation Office. Listing in the National Register is honorary and does not affect the rights of the property owner. Use or alteration of the property is not limited or hindered in any way. A property listed in or determined eligible for the National Register is afforded some level of protection from federally funded projects through the Section 106 review process.

The properties listed on the National Register of Historic Places in West Pikeland Township are as follows:

***Clinger-Moses Mill Complex*** listed July 17, 1980  
(located north of Lower Pine Creek Road just north of Horseshoe Trail)

***Fagley House*** listed May 3, 1976  
(located off Art School Road just south of the Township boundary)

***Good News Buildings (Yellow Springs Spa)*** listed May 27, 1971  
(located at the intersection of Yellow Springs and Art School Roads)

***Johannes Hench Farm (Rice-Pennypacker)*** listed on August 21, 1986  
(located on Clover Mill Road just south of the Township boundary)

***Lightfoot Mill*** listed on April 13, 1973  
(located on Route 401 at Anselma)

These historic resources, along with those determined to be eligible for inclusion in the National Register by essentially meeting the evaluation criteria, should constitute much of the focus of preservation efforts. Although listing in the National Register does provide some measure of protection from federally funded projects, it does not hinder private actions and to protect these sites from major alterations or demolition, local action should be taken. Historical preservation can take many forms and the Township should consider a range of measures that foster the protection of important sites.

#### **Certified Local Historic District (Act 167 District)**

Certified historic districts are those established by local ordinance under the auspices of Act 167, the Historic District Act (1961) and “certified” by the Pennsylvania Historical and Museum Commission. Certification means that the district has been determined eligible for the National Register of Historic Places and authorization has been given to protect the character of the district through regulatory means. Act 167 enables municipalities to regulate the erection, reconstruction, alteration, restoration, demolition or razing of buildings within the district boundaries. Only properties in historic districts established in accordance with the provisions of Act 167 and certified by the Pennsylvania Historical and Museum Commission can be the subject of this type of review. An historical and architectural review board (HARB) must be established and contain at least five members comprised of a registered architect, licensed real estate broker, the municipal building inspector and at least two others with interest or knowledge of local history or historic preservation.

West Pikeland Township has two certified local historic districts. The Chester Springs Historic District was established July 11 of 1973 and the Anselma Mill Historic District was established May 1, 1985. West Pikeland Township’s historical and architectural review board is responsible for reviewing requests for alterations and modifications of buildings within these districts and advising the Board of Supervisors on the appropriateness of proposed construction activity. Certified local historic districts are an important means of protecting historic resources and should be supported by the Township.



### Private Preservation Efforts

Private, non-profit organizations can play an important role in protecting historic and cultural resources. They serve as repositories for information, sources of technical assistance, and administrators of grant funds, advocates for historic preservation and in many cases, own and manage natural lands and historic properties. The three organizations most prominent in West Pikeland Township are the French and Pickering Creeks Conservation Trust, Inc., Historic Yellow Springs, and the Natural Lands Trust. These organizations are responsible for preserving sites of environmental and historical importance and the Township should continue to support their efforts.


There are also many private landowners in the Township that have exhibited a high commitment to protecting historic resources through the preservation of their own properties. Many of the landowners have been diligent in preserving the facades and overall architectural character of the homes and outbuildings. In many cases, this high degree of commitment has resulted in the sale or donation of conservation easements that permanently protect historic and natural features. The use of conservation easements is an important preservation tool and the Township should encourage its use, with the help of conservation organizations.

## PLANNING IMPLICATIONS

- ☐ The natural and environmental qualities of West Pikeland Township are recognized and valued throughout the region. The rolling hills and forests, along with scenic farmsteads and hamlets, create a rural character that is quite rare in suburban areas. Protecting these unique characteristics through regulatory measures that prioritize the protection of the Township's natural and cultural resources, should be the focus of future zoning updates.
- ☐ The natural and environmental resources of West Pikeland Township, specifically the geology and topography, limit to a significant extent, the type of development that can be sustained. Although the underlying geology can certainly support development, the steep slopes found throughout the Township limit the density. Future land use must be carefully considered and new development should be directed to those areas where it will have the least amount of environmental impact.
- ☐ The underlying bedrock is hard and dense, and consequently does not yield large supplies of groundwater. As development continues, the Township needs to ensure that adequate potable water remains available to serve present residents and that new development does not create excessive demands that cannot be met. New development should be directed to those areas served by public facilities and specifically designated as growth areas.
- ☐ Despite the rapid decline of the agricultural industry in the Township over the past two decades, crop farms, dairy farms and horse farms are still operational. To support the continuation of this historically important industry, and to retain the open space created by cropland and pastureland, the Township should consider agricultural zoning.
- ☐ Both the Pickering and the Pine Creeks are currently designated as High Quality waters by the Commonwealth of Pennsylvania and may eventually be eligible for designation as Exceptional Quality waters. Monitoring the water quality of these creeks should be an on-going activity of the Township in order to prevent the irreversible loss of these valuable natural and scenic resources.
- ☐ Many physical reminders of West Pikeland's early settlement patterns still remain and many of these historic structures are still found within their original contexts. To prevent the gradual loss of these key resources, the Township should survey and document the remaining resources, and use the information as the foundation for a village preservation program.

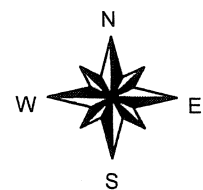
- ☐ The type and extent of environmental and historic resources present in any given area should be key considerations in the formation of the future land use plan and map. The Township's growth boundary should serve to protect fragile resources and direct growth to locations where natural systems can support such development.
- ☐ West Pikeland has adopted a certified local historic district ordinance to preserve the villages of Yellow Springs and Anselma. The designation of local districts can be a powerful tool in the protection of historic areas and this tool should be used to its maximum extent to obtain full benefit.
- ☐ The historic farmhouses, outbuildings and other remnants of the cultural landscape that contribute to the Township's rural character are being lost to new residential development. The regulatory mechanisms available through the subdivision and land development ordinance and zoning ordinance should be used to protect these resources and encourage their incorporation into development plans.

## Map 4-1 Land Resources

-  Agricultural Soils (Classes I, II and III)
-  Areas of Steep Slope (15 to 25%)
-  Areas of Very Steep Slope (+25%)
-  Developed Land

***West Pikeland Township***







Comprehensive Plan



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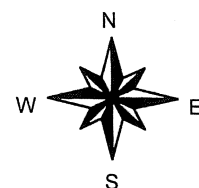
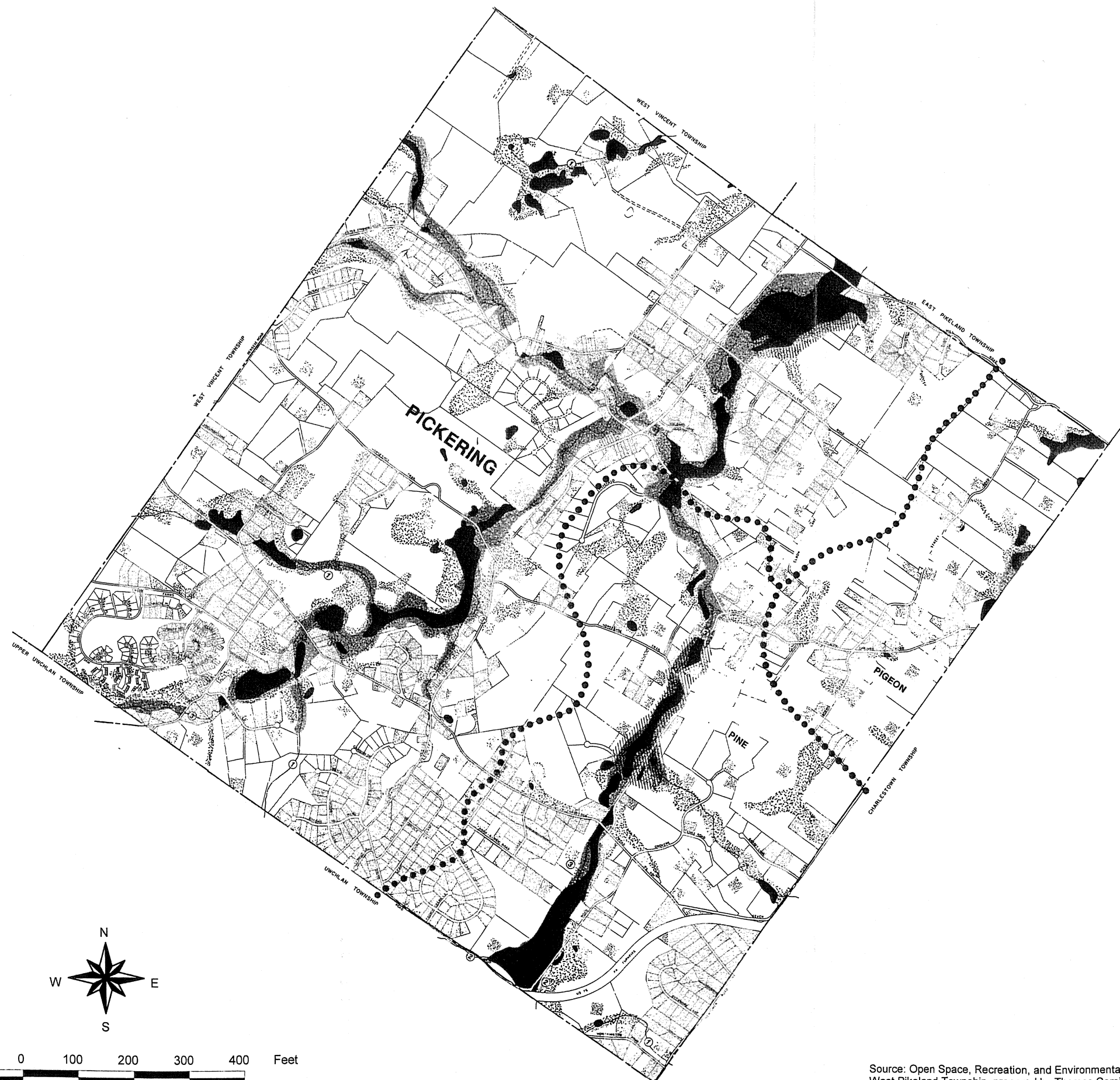
Source: Open Space, Recreation, and Environmental Resources Plan,  
West Pikeland Township, prepared by Thomas Comitta Associates, Inc.  
December 16, 1992.

## Map 4-2 Water Resources

-  Local Recharge Area
-  Minor Watershed Boundary
-  Stream Order Classification
-  100 - Year Floodplain
-  Wetlands
-  Hydric Soils
-  Developed Land

*West Pikeland Township*









Comprehensive Plan



100 0 100 200 300 400 Feet

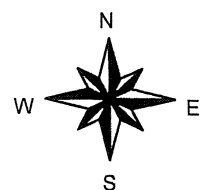
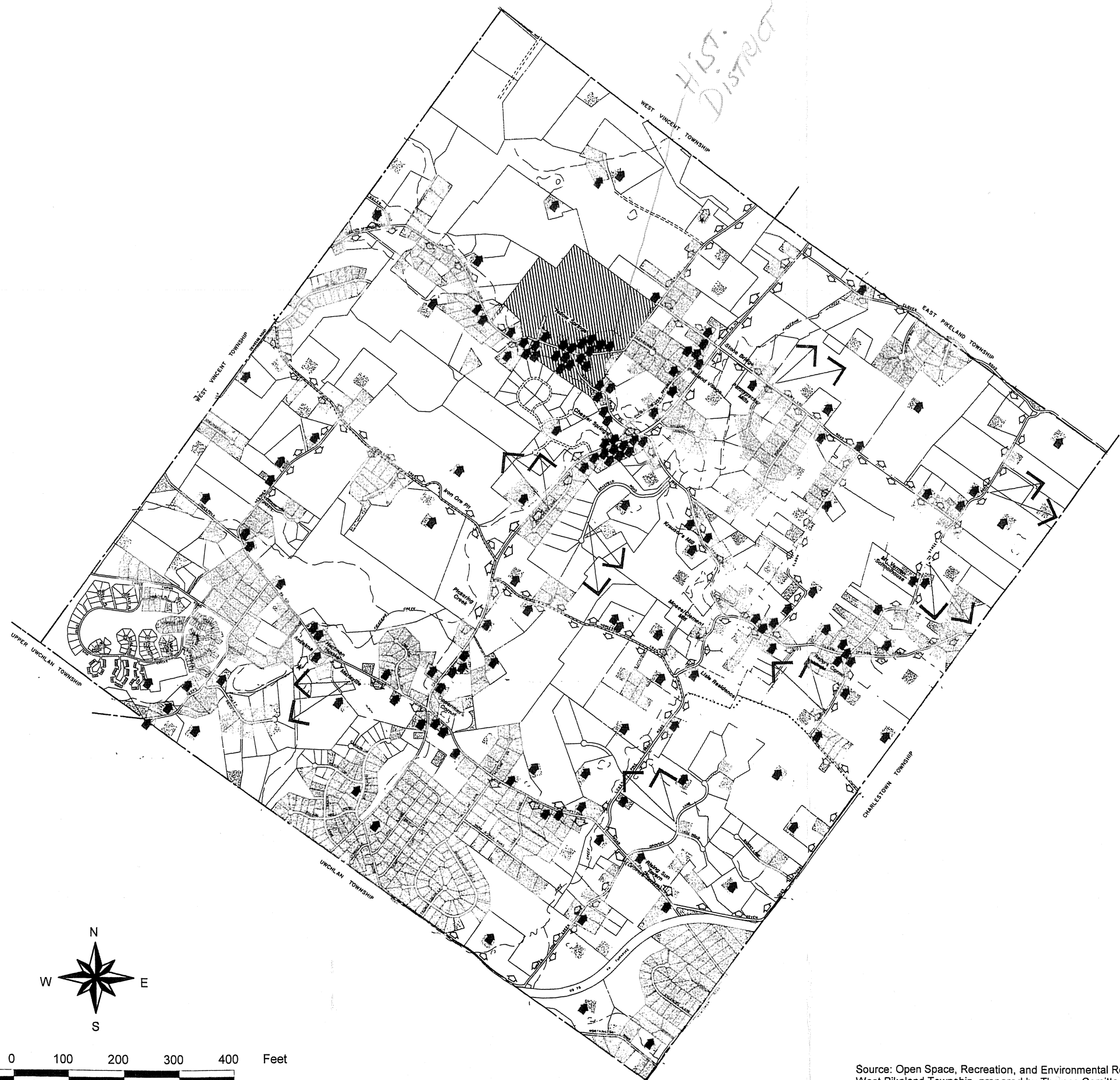
Source: Open Space, Recreation, and Environmental Resources Plan,  
West Pikeland Township, prepared by Thomas Comitta Associates, Inc.  
December 16, 1992.

# **Map 4-3** **Historic and Scenic Resources**

-  Site Listed on National Register of Historic Places
-  Other Historic Site
-  Historic District
-  Horseshoe Trail
-  Scenic Arterial Road
-  Scenic Local Road
-  Scenic View
-  Developed Land

***West Pikeland Township***

**Comprehensive Plan**



100 0 100 200 300 400 Feet

Source: Open Space, Recreation, and Environmental Resources Plan, West Pikeland Township, prepared by Thomas Comitta Associates, Inc. December 16, 1992.



## Chapter Five

# TRANSPORTATION AND CIRCULATION CONDITIONS

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There is a distinct correlation between land use and transportation planning. The efficient use of land as well as the local quality of life is highly dependent on an effective circulation network. In order for the network to adequately serve residents, it must be continually monitored as new development occurs. Different types of land uses require different road characteristics, and meeting future transportation needs is dependent on understanding the current network.

This chapter documents the transportation and circulation system as it presently exists in West Pikeland Township and analyzes the various factors that influence the system. The elements discussed include the following: Circulation System, Functional Classification of Roads, Traffic Volumes and Levels of Service, Roadway and Bridge Conditions, Alternative Forms of Transportation, Scenic Road Preservation

### CIRCULATION SYSTEM

West Pikeland Township contains very close to 10 square miles of land area, is rural in character, and has approximately 34 miles of roads. The role of West Pikeland's road network in transporting people and goods was historically important to the County's development. Several of the earliest roads (like Horse Shoe Trail and Conestoga Pike) established in the County, as well as in the State, traverse the Township. The road system in West Pikeland evolved from the network of trails established by the early settlers in the area.

The scenic qualities of the Township, along with its proximity to the Pennsylvania Turnpike, Route 30 bypass, and Route US 202, have helped to transform the primarily agricultural community into a residential community, one that serves residential needs but not necessarily employment needs. The 1990 Census estimated about 10 percent of the residents remain in the Township for employment purposes, the majority work in other communities.

The 1990 Census data indicated that approximately 82 percent of the Township residents rely on the automobile for travel between home and work, with only about 8 percent using public transportation or other forms of transport (such as walking and biking), and about 10 percent working at home. In 1990, over 75 percent of Township's residents drove alone between home and work, while less than 7 percent carpooled. The average number of vehicles per household in the Township in 1990 was 2.23, compared to 1.89 for Chester County.

Overall the commuting patterns discussed above for the Township reflect that of the County. The only notable difference is in the use of public transit: 11 percent of the County residents use public and other forms of transportation, whereas only five percent of the Township residents rely on non-automobile transportation. As indicated by the average number of vehicles per household, it is clear that the Township's residents continue to rely on the automobile as the dominant mode of transportation between home and work, with a large majority driving alone.

Due to this dependency on motorized transportation systems, roadways become a vital component of everyday living. Table 5-1 shows the road mileage and density of roadways within municipalities adjacent to West Pikeland. Of the close to 300 total miles of publicly owned roadway in the area, almost 209 (70%) miles are owned and maintained by the local municipalities and little over 91 (30%) miles are owned and maintained by the State. PennDOT has been in the process of transferring state owned

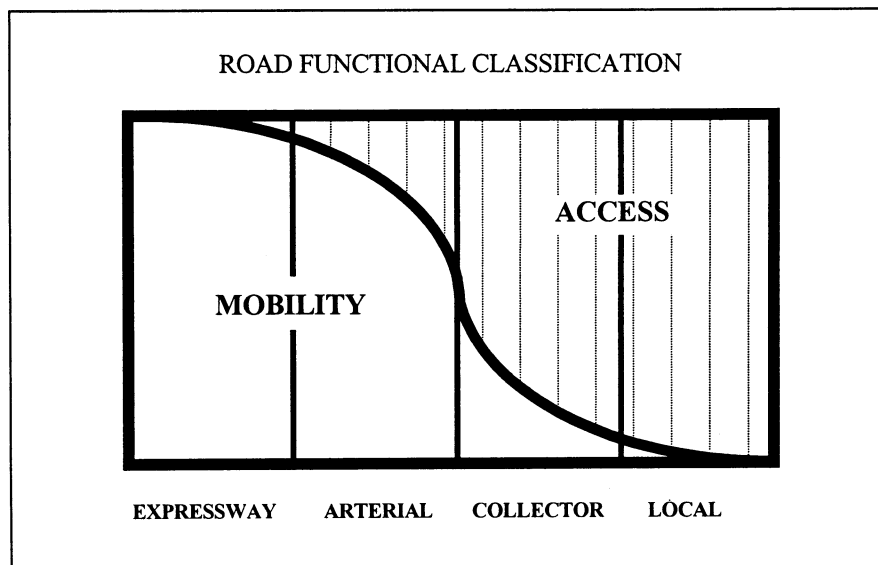
Road functional classification is based on the analysis of the following six factors.

- Traffic volumes
- Existing design of a roadway or its ability to carry traffic volumes
- Relationship to other roads in terms of the availability of another, more appropriate route
- Directness of route between major traffic generators
- Perceived average trip length
- Accommodation of accessibility or mobility

The West Pikeland Comprehensive Plan (1989) does not include any discussion on functional classification of roadways. The Comprehensive Transportation Study (Draft - 1989) prepared by Pennoni and Associates, Inc. designated functional classifications to major Township roads. This study was not adopted by the Township due to its aggressive recommendations. The study recommended extensive roadway and bridge improvements, that would have potential impacts that would not support the overall goal to maintain the unique rural character of West Pikeland. Selected inventory information included in the 1989 Transportation Study is used in this chapter.

One of the most important concepts in terms of functional classification is that of mobility versus access. Mobility is defined as the ability by which a road can move traffic between points, while access is defined as the ease by which traffic can enter and exit roadways. Traffic can move more efficiently and safely at higher speeds if access is limited, and conversely, traffic should move slower on roads that have many access points. These two measures inherently conflict, illustrating the need to identify the main purpose of each road. Identifying the function of the road in terms of access and mobility helps determine the types and intensity of land uses for those parcels adjacent to the road and leads to identification of the functional classification. Figure 5-1 illustrates this concept relative to different functional classifications.

**FIGURE 5-1  
RELATIONSHIP OF MOBILITY TO ACCESS**



Source: Chester County Planning Commission, Highway Needs Study (1986)

Roads are generally classified as expressways, arterials, collectors or local roads. Depending on the degree to which a road meets the criteria, another level may be warranted in the classification system such as "major" or "minor". The Chester County Circulation Handbook (1994) suggests an "urban" and "rural" standard be considered as well.

**TABLE 5-2**  
**COMPARISON OF FUNCTIONAL CLASSIFICATION DESIGNATIONS**  
**West Pikeland Township**

<b>ROAD/ ROAD SEGMENT</b>	<b>Comprehensive Transportation Study</b>	<b>Chester County Highway Needs Study</b>	<b>PennDOT</b>
PA Turnpike	No designation	Expressway	Interstate Highway
PA Route 113 (north of Rt. 401)	Arterial	Principal Arterial	Major Collector
PA Route 113 (south of Rt. 401)			Minor Arterial
PA Route 401 (west of Byers Road)	Arterial	Major Collector	Major Collector
PA Route 401 (east of Byers Road)			Minor Arterial
Byers Road	Collector	Minor Collector	Minor Collector
Newcomen Road	Collector	No designation	No designation
Clover Mill Road	Collector	Minor Collector	No designation

Source: Comprehensive Transportation Study (Draft – 1989), Chester County Highway Needs Study (1986), PennDOT Highway Functional Classification Map (1995)

The table above indicates that there are some inconsistencies between the designations for the same road by different entities. This is because the roads are designated at a larger regional perspective by the County and State, whereas the Township study designations reflect a local perspective. These inconsistencies are discussed and resolved in arriving at a unified, recommended Future Functional Classification map in Chapter Nine, Transportation and Circulation Plan.

### TRAFFIC VOLUMES AND LEVELS OF SERVICE

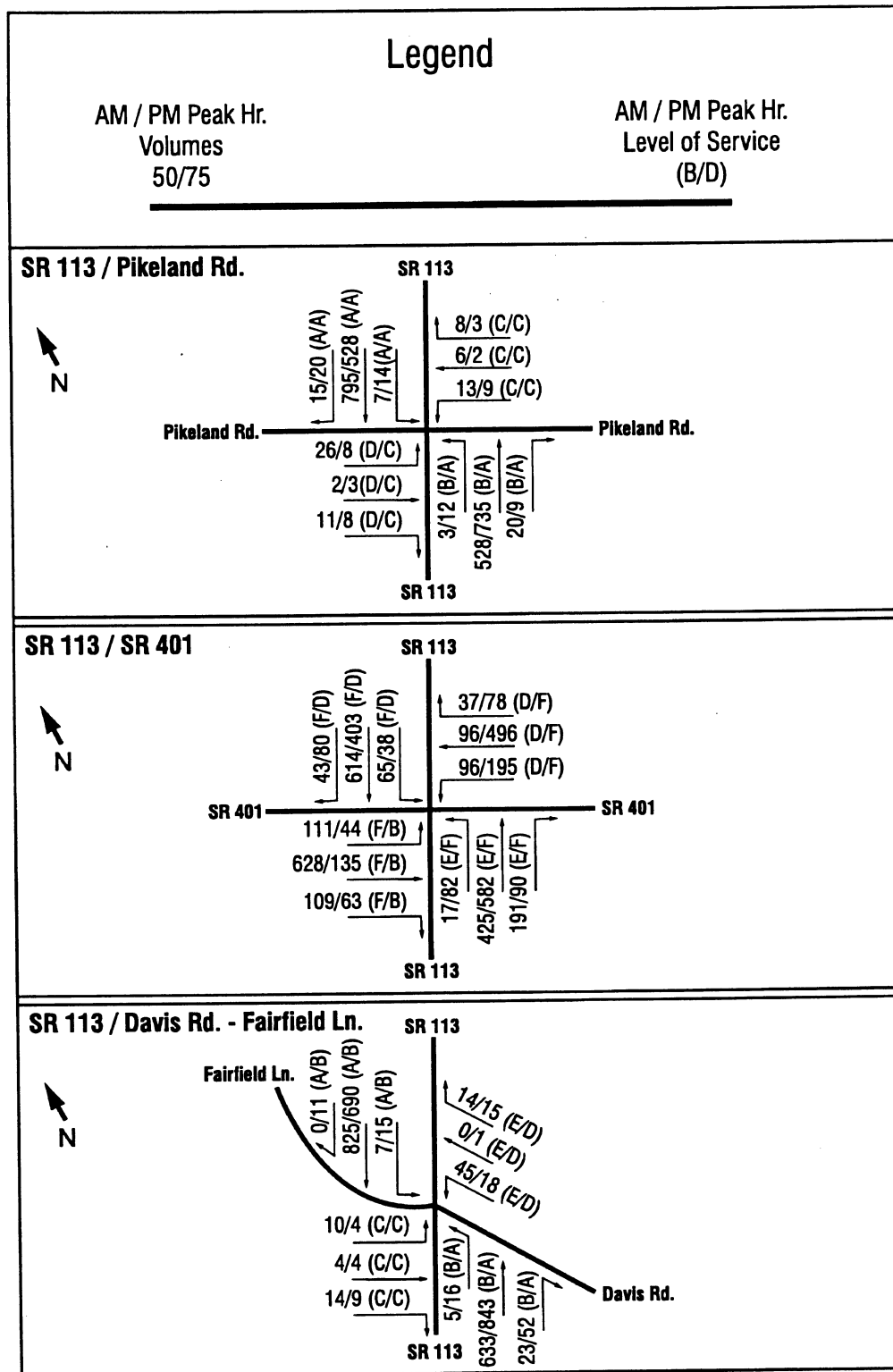
Two key factors that determine road network effectiveness are safety and traffic congestion. Traffic congestion generally results when traffic volumes on a road segment exceed the capacity of that roadway or when heavy volumes of conflicting traffic movements occur at the intersection of two or more roads. To determine the current effectiveness of the road network, both traffic counts and intersection level of service analysis are useful tools.

Traffic volumes play a key role in determining function, design, and appropriate improvements. Traffic volume data helps determine the potential for capacity problems. Roads that are not used for the purpose for which they were intended can experience capacity problems. This is particularly evident in areas experiencing a significant amount of new development without concurrent upgrades in the transportation corridors.

Although West Pikeland is sparsely populated with only 232 people per square mile, capacity on Township roads is influenced by traffic originating from outside the borders. The two roadways most likely to experience capacity problems are PA Routes 113 and 401. Both of these roads are carrying local as well as regional traffic, and experiencing increasing volumes. No significant improvements have been made to these roadways in recent years.



**FIGURE 5-2**  
**INTERSECTION TRAFFIC VOLUMES AND LEVELS OF SERVICE**



Source: Chester County Planning Commission (1999).

volumes on more locally oriented Township roads in the coming decades, which are likely to be affected more by development within the Township than by regional trends in traffic growth.

### **Intersection Levels of Service**

The concept of “Level of Service” (LOS) was developed by transportation engineers as a way of “grading” how well a given intersection is functioning. Factors that determine the LOS at a given intersection include traffic volumes, roadway capacity, the number and configuration of lanes entering and exiting the intersection, traffic volumes on conflicting travel movements, signal timing (where signals exist), the makeup of traffic using the intersection (percentages of cars and trucks), etc. Level of Service is expressed in six designations that are analogous to a scholastic grading system, with “A” meaning excellent and “F” meaning failure. Table 5-4 explains these designations more specifically.

**TABLE 5-4  
LEVEL OF SERVICE CATEGORIES**

LOS “A”	Little or no delay for travelers / 40 percent or more reserve capacity.
LOS “B”	Short traffic delays / 30-40 percent reserve capacity.
LOS “C”	Average traffic delays / 20-30 percent reserve capacity.
LOS “D”	Long traffic delays / 10-20 percent reserve capacity.
LOS “E”	Intersection approaching failure condition with very long delays / less than 10 percent reserve capacity.
LOS “F”	Intersection in failure condition with extremely long traffic delays / no reserve capacity (intersection already at or above capacity).

In many communities, a peak hour LOS of “C” or “D” at signalized intersections is considered acceptable. Some urban communities find LOS “E” to be an acceptable peak hour condition. For non-signalized intersections with two-way stop signs, it is not uncommon for the controlled movements (those forced to stop) to be at LOS “D” or “E” during the peak hour. Since there is only one intersection with traffic signals in West Pikeland, it is this latter type of intersection that is most important to this analysis. At such intersections, through movements (non-turning) and right turn movements on the uncontrolled approaches to the intersection tend to function very well, while the efficiency of uncontrolled left turns and all controlled movements depends on how heavy volumes are on the uncontrolled movements. Low volumes on the uncontrolled movements result in relatively unconstrained turns and movements from the intersection approaches controlled by stop signs. High volumes on the uncontrolled movements, on the other hand, result in very short “gaps” through which opposing left turns or controlled movements can pass, resulting in longer wait times and poorer level of service.

Based on the 1999 peak hour traffic counts discussed above, intersection LOS was analyzed for a total of three intersections. The results of this analysis can be seen on Figure 5-2. A brief discussion of each intersection follows:

#### **Intersection of Route 113 and Pikeland Road**

This is a traditional four way intersection with unconstrained movements on Route 113 and stop sign controlled movements on Pikeland Road. Because of heavy traffic volumes on Route 113 and relatively low volumes on Pikeland Road, levels of service for motorists on the Pikeland Road approaches to this intersection were bad. During the morning and evening peak hour, the overall movement from both sides of Pikeland Road were LOS “C”. All movements on Route 113 were at LOS “A”.

There were 81 reported accidents during the five-year period. These accidents have been grouped into two categories - intersection and mid-block accidents. Five accidents involved “major” injuries, with seven people sustaining major injuries. Another 29 accidents involved “minor” injuries, with 43 people sustaining minor injuries. Over the five-year period, no reported accidents resulted in fatalities. The majority of accidents involved no injuries or “moderate” injuries. Four accidents involved drivers under the influence of alcohol, and another five accidents involved deer or other animal in the roadway.

The general location of accidents in West Pikeland Township, compiled by PennDOT for years 1993-97, is shown on Map 5-2. The majority of the reported accidents occurred along the corridors of Routes 113 and Route 401. Accidents occurring along these routes may be expected due to the amount of traffic coupled with the amount of development that is established along the corridors.

## **ROADWAY AND BRIDGE CONDITIONS**

### **Roadways**

Based on a reconnaissance survey done in January 1999, a majority of the roads in the Township are in reasonably good condition and do not have significant safety problems. Due to the rural nature of many of the roads, however, there are a number of intersections with limited sight distances and a few roads with very narrow cartways. These limitations are not a problem on local farm roads and in fact contribute to the rural character of the Township. Such conditions would, however, be a safety hazard on collectors or other roads that carry significant traffic. Roadway surfaces are generally in good condition. Conditions potentially affecting traffic safety include access management problems, intersection alignment, limited sight distance, roadway surface condition, and sharp curves. Other features, such as steep grades, structures close to roads, and steep adjacent terrain can have an adverse effect on traffic safety, yet add to the scenic character and aesthetic value of those roads. Within most of the suburban residential subdivisions in the Region, roads have been engineered to standards that ensure reasonable traffic safety, yet do not continue the character of the rural roads from which they are accessed.

Safety concerns are evident at those locations within the circulation system that may pose hazards due to factors mentioned above. These factors can create hazardous conditions that can slow traffic and cause congestion, potentially leading to accidents. One of the problem areas in the Township is the intersection of Route 113 and Yellow Springs Road where they are poorly aligned. This intersection also sees a variety of turning movements within a relatively short road segment. Topographical conditions in the northern reaches of the Township can also result in safety problems. Steep roads, sharp curves, and heavy vegetation adjacent to the cartway are all potential safety concerns.

Map 5-1 illustrates roadway conditions that could affect safety and the general condition of roads.

According to the 1997 BMS inventory, there is one County bridge, one bridge owned by the PA Turnpike Commission, 14 State bridges and no Municipal bridges in the Township. These include bridges over waterways, roads, and railroads. Some bridges are “posted” with weight limitations to use the bridge for safety purposes. There are two posted state owned bridges in the Township. They are the bridge on Yellow Springs Road over Pickering Creek, with a posting of 25 tons, and the bridge on Clover Mill Road over Pickering Creek, with a posting of 35 tons. There are no closed bridges listed for the Township.

### **Capital Improvements**

Capital improvements are scheduled by the state for highway, bridge, and transit networks. This schedule of improvements takes the form of the PennDOT Twelve Year Program. Each even-numbered year, PennDOT submits recommended projects for the next twelve fiscal years to the State Transportation Commission. After a public review process, the Commission adopts a list of projects, which includes a description of each project, estimated cost of the project, and time frame of project in the next twelve years. Project priorities in the Program are defined by the state, and in part on input from legislators, counties, transit operators, and municipalities.

The Chester County Highway Improvements Inventory is a capital improvements program, which includes County highway and bridge projects that have been recommended to the County by legislators, municipalities, and regional planning commissions. This inventory serves as the County’s input to PennDOT in the development of their Twelve Year program as described above.

Table 5-6 lists those highway and bridge projects included in the adopted PennDOT 1999 Twelve Year program. The tables also indicate the timing of the projects in the PennDOT program, and Chester County Planning Commission’s recommendation for their phasing.

**TABLE 5-6  
1999 PENNDOT TWELVE YEAR PROGRAM  
Proposed Projects in West Pikeland Township**

PROJECT	TYPE OF IMPROVEMENT	TIMING	
		CCPC*	PennDOT**
Intersection of PA 113 and PA 401	Safety Improvements	1 to 4 year	1 to 4 year
Yellow Springs Road bridge over Pickering Creek	Replacement	5 to 8 year	Not on program
Clover Mill Road bridge over Pickering Creek	Replacement	5 to 8 year	Not on program
Intersection of PA 401 and Messner Road	Realign intersection	9 to 12 year	Not on program
Byers Road near Pickering Creek	Realign and widen	9 to 12 year	Not on program

\* Suggested timing for Engineering, Right-of-way and Construction phases as recommended by the Chester County Planning Commission in 1998 to PennDOT.

\*\*Proposed phasing for the project according to the adopted 1999 Twelve Year Program.

Source: Chester County Highway Improvements Inventory (1998); PennDOT 12 Year Program (1999).

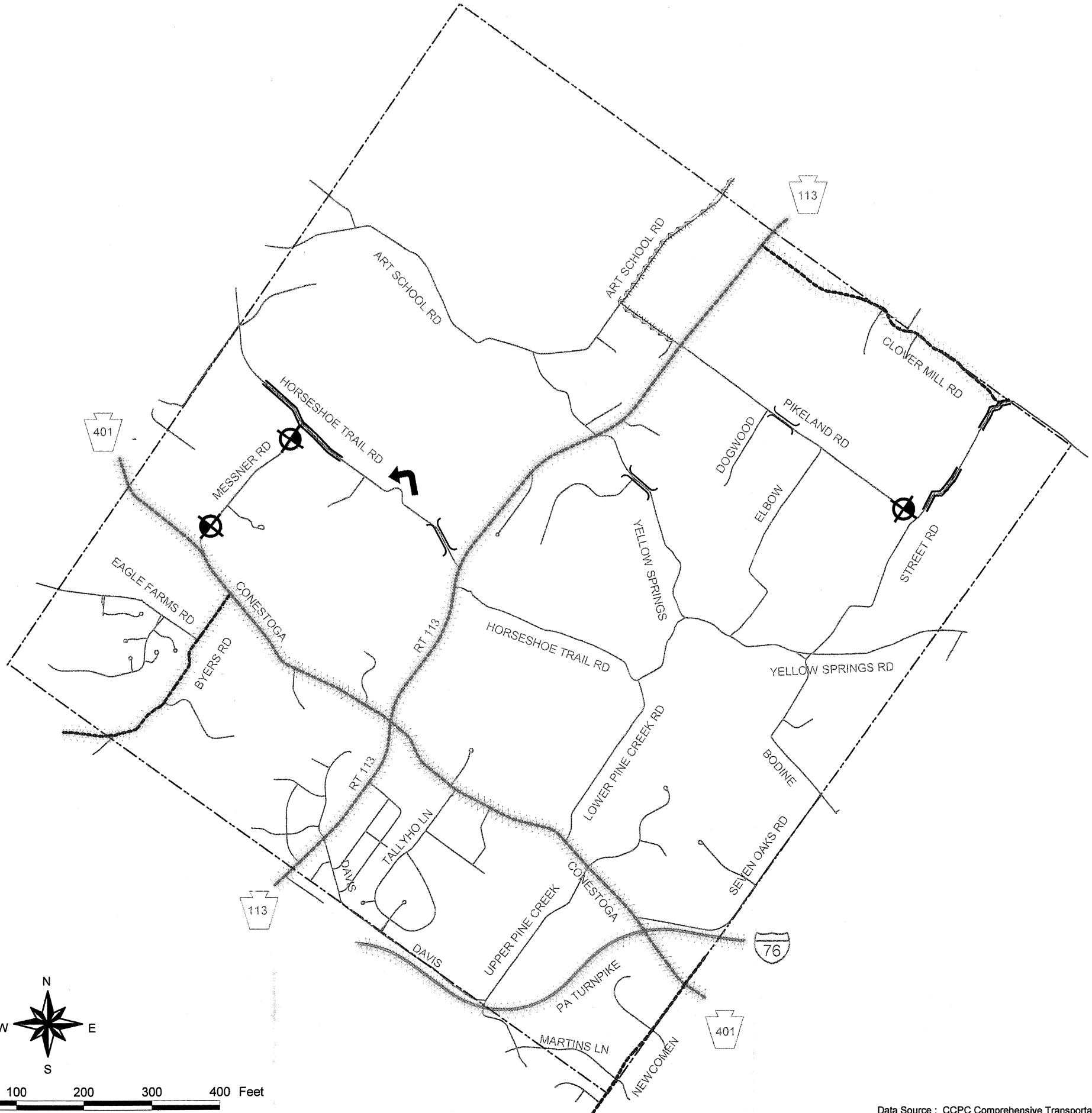
While making recommendations for improvements, the impacts of bridge and roadway improvements to the Township should be considered. With improvements made to the existing bridges posted with weight limitations, truck and heavy vehicle traffic may increase. The roadway improvements will promote economic development and provide safety and access, whereas increased heavy vehicle traffic may effect the much desired quality of life.

The very features that give a road its scenic character also often detract from its safety as a transportation corridor. This is not a conflict under current conditions for many of the Township's lightly traveled rural roads, but could become a key issue if traffic volumes increase on these roads. A challenge for the Township is balancing these competing values as development continues in the Township and volumes increase on roads that are currently lightly traveled and rural in character. When establishing functional classes and design and development guidelines, the scenic quality of the roads should also be taken into consideration. This will help enhance the driving experience and promote safe driving conditions.

<b>PLANNING IMPLICATIONS</b>
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- ☐ Future land use and transportation planning for the Township should be coordinated, due to their strong influence on each other. Plans for each need to be interrelated in order to maintain the Township's rural road network, while accommodating increasing traffic volumes.
- ☐ When establishing functional classes and design, and development guidelines, the scenic quality of the roads should also be taken into consideration. This will help enhance the driving experience and promote safe driving conditions.
- ☐ The classification of higher functioning roads must be evaluated to ensure that they are improved to the standards appropriate for the type of traffic they carry.
- ☐ There is a need to identify important pedestrian connections and bike routes within and out of the Township. This can help in preparing an interconnected pedestrian trails and bike routes plan, linking destinations within and in the immediate vicinity of the Township.
- ☐ The Route 113 Corridor Study should be implemented and periodically updated to incorporate current trends, impacts, and future projections.
- ☐ Population growth will continue to put pressure on the existing circulation network, which will require the Township to plan for increased road maintenance and improvements.
- ☐ Access management techniques should be implemented to reduce negative impacts of frontage development, particularly on higher functioning roads.
- ☐ West Pikeland has a high number of road miles that are in relatively good condition, consistent with its rural character. Continual monitoring and safety improvements are required to ensure safe travelling conditions on all Township roadways.

**Map 5-1:  
Roadway Conditions and  
Functional Classification**



— Municipal Boundary

**ROADWAY CONDITIONS**

- Restrictive Width (Bridge)
- Sharp Curve (Horizontal)
- Sight Distance Obstruction
- Steep Grade
- Surface in Disrepair

**FUNCTIONAL CLASSIFICATION**

Comprehensive Transportation Study, 1989

- Arterial
- Collector
- Local Roads

Chester County Highway Needs Study, 1990

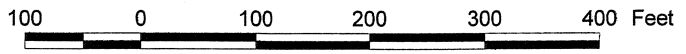
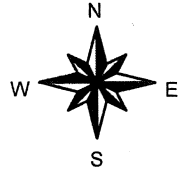
- Expressway
- Principal Arterial
- Major Collector
- Minor Collector
- Local Roads

PennDOT, 1995

- Interstate Highway
- Minor Arterial
- Major Collector
- Minor Collector
- Local Roads

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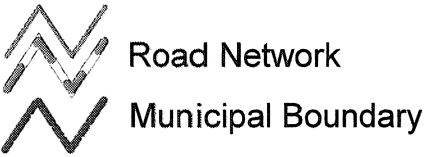
Data Source : CCPC Comprehensive Transportation Study Draft, 1989;  
Chester County Highway Needs Study, 1990;  
PennDOT Highway Functional Classification Map, 1995.

**West Pikeland Township**

**Comprehensive Plan**



# **Map 5-2: Traffic Volumes and Road Safety Information**



## **TRAFFIC VOLUMES**

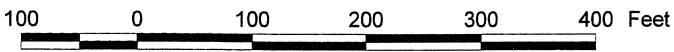
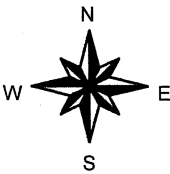
- 1995
- 1996
- 1999

## **MIDBLOCK ACCIDENTS ( 1993 - 1997 )**

- ⇄ 1-3
- ⇄ 4-7
- ⇄ 8-11

## **INTERSECTION ACCIDENTS ( 1993 -1997 )**

- \* 1-3
- \* 3-4
- \* 5-6
- \* 7-8



Data Source : PennDOT, 1998; Chester County Planning Commission, 1999.  
Note: Contact PennDOT Road Safety Division for detailed accident information.

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**West Pikeland Township**

**Comprehensive Plan**







## Chapter Six

# COMMUNITY FACILITIES AND SERVICES INVENTORY

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Community facilities are the buildings and structures owned and operated by governmental or quasi-governmental entities for various public purposes. Community services include activities ranging from police and fire protection to libraries and recreation programs that are intended to address local needs and protect the health, safety and welfare of residents. The extent to which community facilities and services are available in a particular municipality depends on factors such as population, tax base, regional amenities, and overall demand.

Community services can be provided in a number of ways. Municipalities can directly fund and provide necessary services, contract with private or quasi-public entities to provide the services, or cost-share with other municipalities. The option of contracting with outside entities or providing services through cooperative arrangements with neighboring municipalities is a particularly attractive alternative for rural municipalities with lower populations.

The purpose of this chapter is to describe community facilities and services existing in West Pikeland Township and to identify present and future needs. The planning implications of the following analysis are found at the end of this chapter.

### TOWNSHIP GOVERNMENTAL ORGANIZATION

West Pikeland Township is a township of the second class as defined by the Commonwealth of Pennsylvania. The Commonwealth provides for two classes of townships, with those of the first class defined as having at least 300 persons per square mile. All others, with the exception of home-rule townships, are townships of the second class, and are thus subject to the provisions of the Second Class Township Code (Act 60 of 1995). A board of three supervisors generally governs townships of the second class. The electorate may increase the number of supervisors from three to five upon approval. The term of office for a supervisor is six years.

The Second Class Township Code charges the board of supervisors with general governance of the township including fiscal management, maintenance of records, maintenance of property and equipment, and the administrative power to secure the health, safety and welfare of the residents. The board of supervisors is authorized to appoint a secretary and a treasurer, to hire staff and to appoint boards and commissions to act in an advisory capacity.

#### **Board of Supervisors**

West Pikeland Township is governed by a board of three supervisors, one of whom serves as chair. As authorized, they have appointed both a secretary and a treasurer to serve on a part-time basis. The secretary also serves as a general administrator. The board of supervisors is required to meet at least monthly. Meetings are subject to notice as stipulated by the Sunshine Act (Act 84 of 1986). The powers vested with the board of supervisors include adoption of ordinances, by-laws, rules, and regulations necessary for the effective administration of the Township. One of the most critical of these powers is the authority to plan for land development through comprehensive planning, zoning, and subdivision and land development regulations as authorized by the Pennsylvania Municipalities Planning Code (Act 247 of 1968).

## **Advisory Bodies**

The Second Class Township Code (Act 60 of 1995) grants the board of supervisors the authority to appoint boards and commissions to act in an advisory capacity. West Pikeland Township has established the following boards and commissions to assist in administering the specific functions defined. In addition, the board of supervisors is authorized to establish ad-hoc committees to undertake special activities for the Township. The task force to prepare the Open Space, Recreation, and Environmental Resources Plan (1992) was established under this authority, as was the task force to update the Comprehensive Plan.

### **Commissions**

Planning Commission: Primary responsibilities include developing and maintaining the comprehensive plan, preparing zoning, and subdivision and land development ordinances and amendments, reviewing subdivision and land development proposals and preparing recommendations for the board of supervisors. The planning commission consists of seven members that serve four-year terms. It meets once a month.

Parks and Recreation Commission: Responsibilities include overseeing the administration of the parks system and advising the Board of Supervisors on implementing the Open Space, Recreation, and Environmental Resources Plan. The Parks and Recreation Commission consists of seven members that serve four year terms. It meets once a month.

### **Boards**

Historical Architectural Review Board (HARB): Primary responsibilities include making recommendations on the appropriateness of construction, alteration, restoration or demolition proposed for historic resources located in the Chester Springs Historic District. The historical architectural review board currently consists of three members that serve five-year terms. It meets on an as-needed basis.

Zoning Hearing Board: Primary responsibilities include hearing challenges to the zoning ordinance, make determinations on requests for variances and special exceptions, and reviewing, as needed, the interpretations issued by the zoning officer. The zoning hearing board is judicial and decisions are not subject to the approval of the board of supervisors. The zoning hearing board is a three member, quasi-judicial board with one alternate. Members serve for three-year terms. It meets on an as-needed basis.

Library Board: Primary responsibility is to oversee the general operation of the Chester Springs Library. The Library Board consists of nine members each serving three-year terms. Of the nine members, three are appointed by the West Pikeland board of supervisors. It meets once a month.

## **Municipal Administration**

Since West Pikeland Township is rural in nature with a low population density, the number of staff is quite limited. The supervisors themselves perform many of the administrative functions of the Township. The Township secretary serves as a general administrator, but on a part-time basis. The zoning officer and building inspector are part-time positions contracted on an annual basis. The Township contracts with two engineering firms to review subdivision and land development applications, and to advise on Township sponsored maintenance and infrastructure improvements. Legal assistance is contracted as well. West Pikeland also employs a part-time police force.

## **Municipal Finance**

The collection and expenditure of municipal revenues are specified in the Second Class Township Code. A Township of the second class may collect a maximum of 14 mills. Both real estate and earned income taxes may be collected and townships have broad authority as to the allocation and expenditure of these revenues. If no specific authority is given for the payment of costs incurred in the exercise of any power contained in the act, the expenses may be paid from the general fund. Expenditures vary according to the population, level of services, and extent of infrastructure.

### **Revenues**

In 1998, the Township millage rate in West Pikeland Township was 0.125 mills and the County rate was 2.348. The assessed valuation of real estate for 1999 as reported by the Chester County Assessment Office was \$319,789,940. Although the method of tax assessment in Chester County changed in 1998, the actual tax assessed in West Pikeland has remained unchanged for over two decades. The Township charges a real estate tax, an earned income tax, and a real estate transfer tax. As expected, the largest percentage of revenues is obtained from earned income and real estate transfer taxes. This income category increased between 1993 and 1998 due likely to the increase in population. The 1993 budget relies on a reserve, but also shows a transfer to a Township improvement fund. Other income categories remained consistent.

It should be noted that not all intergovernmental revenues are indicated in these budgets. The liquid fuels funds, which are distributed to all municipalities by formula based on population and number of municipal miles, are not included in this line item. These funds may only be used for road and bridge maintenance and improvements, and for equipment and service costs associated with these activities. Revenue sources as contained in West Pikeland Township's 1998 budget are found in Table 6-1.

**TABLE 6-1**  
**GENERAL FUND INCOME**  
**Percentage of the West Pikeland Township Budget (1993 and 1998)**

<b>ACCOUNT TITLE</b>	<b>1993 BUDGET</b>	<b>1998 BUDGET</b>
Taxes (Real Estate)	7%	4%
Taxes (Local Enabling)	76%	88%
Cable TV/Road Encroachment	1%	1%
Fines	1%	1%
General Fund Interest	1%	1%
Intergovernmental Revenues	1%	1%
Charges for Services	9%	4%
Reserve	4%	----
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

Source: West Pikeland Township Budget (1993 and 1998)

### Expenditures

The 1993 and 1998 budget expenditures are found in Table 6-2. In comparing the two time periods, the overall percentages appear to be consistent with no large shifts shown. The Legal, Engineering, Police and Fire Protection line items were slightly higher in 1993 than in 1998, probably because these line items are professional services and thus fixed costs. The only line item that increased substantially between 1993 and 1998 was highway maintenance. This was likely due to the significant increase in road miles as a result of new development. Variations in annual snowfall also impact this line item. The Township increased its financial support to the Chester Springs Library in 1998 to help support a one-time capital improvement. This type of support for libraries is important due to the overall lack of other funding sources for library operations. Both 1993 and 1998 show an excess transferred to a Township improvement fund.

**TABLE 6-2**  
**GENERAL FUND EXPENDITURES**  
**Percentage of the West Pikeland Township Budget (1993 and 1998)**

ACCOUNT TITLE	1993 BUDGET	1998 BUDGET
General Government	4%	5%
Tax Collection/Financial Administration	2%	3%
Legal	8%	4%
Secretary-Treasurer	5%	3%
Engineering	10%	7%
Township Building	1%	1%
Police/Police Cars	15%	10%
Fire Protection/Ambulance	8%	5%
Code Enforcement	3%	2%
Planning and Zoning	2%	*
Emergency Mgt./Snow/Ice Removal	7%	7%
Health and Welfare	1%	1%
Traffic Signals/Signs	1%	1%
Highway Maintenance	15%	28%
Library/HARB/Open Space/Recreation	2%	5%
Transfer to Township Fund	16%	18%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

\* Less than 1%

Source: West Pikeland Township Budget (1993 and 1998)

### Reserves

The Township has no debt and is in sound financial condition. It has a significant reserve on-hand for Township improvements. Most of this reserve is informally earmarked for acquisition of open

space and development of the park system. Several key parcels have been either acquired or developed in the past decade. A Capital Improvements Plan (CIP) would allow the Township to effectively plan for such acquisition and development while maintaining emergency reserves.

### **Municipal Buildings**

West Pikeland Township owns and maintains the municipal building located on the east side of Route 113 south of the intersection with Yellow Springs Road. It is physically located next to the West Pikeland post office. The Township purchased the present municipal building for a nominal amount in 1964. It has been used for municipal purposes since that time. Improvements were made in 1998 at a cost of \$25,000. The main floor contains two offices and a meeting room that seats approximately fifty. Large meetings may be held at the Montgomery School. The upper floor is devoted to police offices. In addition, the Township owns two barns, two houses and a concrete outbuilding. These buildings are located on land the Township has acquired for park purposes. They are not used for municipal purposes at this point but do have the potential for such use in the future. The Township does not own a garage or maintenance building since services such as road maintenance and snow removal, are contracted to outside entities. The location of the Township Building, along with other community facilities is indicated on Map 6-1.

## **SOLID WASTE DISPOSAL**

The Solid Waste Management Act (Act 97 of 1980), provides for the planning and regulation of solid waste and requires municipalities with a population density of over 300 people per square mile to prepare and submit solid waste management plans. A second law, the Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101 of 1988) was passed to supplement Act 97 in an effort to promote recycling and reduce the volume of solid waste. It requires that a source separation and collection program be established in Townships that have at least 5,000 in population and a density threshold of 300 persons per square mile. West Pikeland Township does not presently meet these thresholds since the 1990 census reports the Township population at 2,323 with a density of approximately 232 persons per square mile. The 1996 population, estimated at 2,660, is still below the threshold. This number will likely increase when the next census is completed. At present, however, the Township is not subject to the requirements of these laws and has not drafted a plan. There are no recycling drop off centers located in the Township, however, several waste haulers do offer curbside pick-up of recyclables.

Each household is responsible for contracting for solid waste collection. West Pikeland does not require that haulers be licensed at the municipal level to operate in the Township. Waste haulers are, however, required to meet minimum criteria and to be licensed at the County level in accordance with Chester County's Flow Control Ordinance. The licensing requirement is applicable to haulers of household waste as well as those that haul construction and demolition debris. In 1998, Chester County licensed approximately eighty-three (83) private contractors. Of these, an estimated thirty (30) contract for household waste pick-up. York Disposal, Browning-Ferris (BFI), KDI Disposal and Blosenski Disposal are the haulers that serve the most significant percentage of the Township.

## **WASTEWATER FACILITIES**

Each municipality in the Commonwealth of Pennsylvania is required to plan for sewage disposal needs in accordance with the Pennsylvania Sewage Facilities Act (Act 537 of 1966). The purpose of the plan is

to identify future sewage disposal needs based on growth projections, and to delineate policies to address these needs. The same policies contained in the Sewage Facilities Plan should be reflected in the comprehensive plan and vice versa, in order to avoid conflict in terms of future land use and development expectations. The planning mandated by the Sewage Facilities Act may be met by adopting an individual Sewage Facilities Plan (typically referred to as the 537 Plan), or by adopting the Countywide plan when it is not feasible to prepare a municipal plan. Planning modules are required to be submitted when new development is proposed.

West Pikeland Township does not have an individual Sewage Facilities Plan but instead operates in accordance with the Chester County Master Sewer Plan (1970). At the time this plan was developed, sewage disposal in West Pikeland was envisioned to be addressed by on-lot systems. Developing a municipal sewage disposal plan would allow the Township to develop a hierarchy of preferred methods and to direct new development to locations that can environmentally support those methods.

### **Inventory**

The method of sewage disposal used for a development type is dependent on factors such as population, density, and individual site characteristics. Municipalities, municipal authorities or private entities including individuals, corporations, or homeowners associations, can own and operate sewage disposal facilities. In Chester County, sewage disposal facilities and systems can be classified in four ways:

**Public Systems** are centralized systems for sewage collection and treatment. These are commonly referred to as public sewers and these can be either publicly or privately owned, with most being public facilities.

**Community Package Plants** are smaller facilities that usually serve only one development or commercial facility. Treatment takes place through a mechanical or chemical process with the final step dependent on stream discharge.

**On-Lot Systems** are individual systems that are built to accommodate a single dwelling unit. These systems vary, ranging from simple to highly engineered, based on soil characteristics at the site. On-lot systems designed to accommodate one or more dwelling units are known as community on-lot disposal systems. These systems can serve multiple dwelling units (such as a mobile home park) or commercial or industrial type flows. Most on-lot systems are privately owned.

**Spray Irrigation Systems** are a disposal technique in which treated sewage effluent is sprayed on fields as the final step in the treatment process. Primary and secondary treatment is accomplished through lagoons or through mechanical or chemical means. These systems usually serve a single development and can be either publicly or privately owned.

All of West Pikeland Township is served by individual on-lot sewage disposal systems with the exception of two locations that rely on community disposal facilities. Both systems are privately owned and are further described in Table 6-3.

**TABLE 6-3**  
**PUBLIC AND COMMUNITY SEWAGE TREATMENT FACILITIES**  
**West Pikeland Township**

SYSTEM NAME AND /OWNER	TYPE OF SYSTEM	TYPE OF FLOW	CONNECTIONS
<b>Twin Hills</b> Twin Hills Homeowner Association	Aerobic Tertiary Treatment with Drainfields	100% Residential	250 (Residential)
<b>Historic Yellow Springs</b> Property Owners Assoc.	Septic Tank with Drainfields	60% Residential 40% Commercial	10 (Residential) 4 (Commercial)

Source: Chester County Sewage Facilities Inventory (1991), Chester County Health Department (1998), West Pikeland Township (1999)

### WATER FACILITIES

The County's water supply is obtained from both surface sources and from wells. Water facilities consist of private domestic wells, community and non-community water supply systems and public water supply systems. These systems vary in size and can be either publicly or privately owned and operated. The largest water supply company in Chester County is the Philadelphia Suburban Water Company (PSW). It is continuing to expand through the purchase of both private and municipal systems. It is the only public supplier serving West Pikeland Township. The PSW purchased the previous supplier, Uwchlan Township Municipal System, in December of 1992.

#### **Inventory**

With the exception of three residential developments, all of West Pikeland is reliant on domestic wells for its potable water supply. The groundwater yields in West Pikeland so far have been sufficient to accommodate the low-density development that has occurred to date. The water supply is a concern; however, because the Township's underlying geology may not yield sufficient groundwater needed to support higher (gross) density development. A thorough analysis of the groundwater availability may need to accompany all new development proposals submitted to the Township, particularly if they propose higher (gross) density development. Thus far, the incidence of dry wells has not been prevalent but dry wells have been reported sporadically throughout the Township. Since some areas Township have experienced water supply reductions, new development should be focused in those areas that are not constrained in terms of groundwater supply or those areas served by public systems with expansion capability.

Three residential developments and several commercial and institutional facilities rely on some form of privately owned public water system. A public water system is defined as one that provides 15 connections or serves 25 persons for at least 60 days per year. A public water system is further classified as either a community or non-community water systems. These are defined as follows:

**Community Water Systems** provide for 15 connections or serve 25 persons on a regular basis throughout the year. This can include water companies, authorities, multi-family complexes, and certain institutions.

**Non-community Water Systems** are classified as non-transient, non-community systems consisting of 25 of the same persons at least six months per year and include facilities such as schools and campgrounds. Other systems such as those providing services to restaurants, businesses, and churches would also qualify as non-community water systems.

The public and community water systems are identified in Table 6-4.

**TABLE 6-4  
PUBLIC WATER SYSTEMS  
West Pikeland Township**

<b>WATER SYSTEM</b>	<b>DEVELOPMENT NAME</b>	<b># DOMESTIC CONNECTIONS</b>	<b>#COMMERCIAL / INSTITUTIONAL CONNECTIONS</b>
Philadelphia Suburban Water Co.	Twin Hills Development	250 Connections	
Philadelphia Suburban Water Co.	Fairfield Development	71 Connections	
Philadelphia Suburban Water Co.	Bridlewood Development	62 Connections	
Private/non-community	Gourmet Productions		1 Commercial
Private/non-community	Montgomery School		1 Institutional
Private/non-community	Bean and the Bakers		1 Commercial
Private/non-community	Cullens Country Cupboard		1 Commercial
Private/non-community	Inn at Yellow Springs		1 Commercial

Source: Chester County Water Facilities Inventory (1991), Chester County Health Department (1996), Philadelphia Suburban Water Company (1998), West Pikeland Township (1999)

## **STORMWATER MANAGEMENT**

The Pennsylvania Stormwater Management Act (Act 167 of 1978) delineates stormwater management responsibilities. Provisions addressing stormwater management should be adopted at the municipal level to control runoff and reduce soil erosion. Municipalities throughout Chester County are updating existing stormwater management ordinances to emphasize a more environmentally sensitive approach that promotes the use of natural site features as opposed to the use of man-made structures. This is often accomplished by incorporating Best Management Practices into municipal ordinances. The publication entitled Pennsylvania Handbook of Best Management Practices for Developing Areas provides important guidance in this area and includes a sample municipal ordinance.

West Pikeland Township addresses stormwater management in its subdivision and land use development ordinance. It requires that there be no increase in quantity or velocity of stormwater runoff as the result of new development. Although standards are not specified in the ordinance, calculations illustrating compliance must be submitted as part of the land development process. The ownership of existing stormwater management systems varies among the Township, individual landowners, and homeowners.



associations. Effective stormwater management provisions are becoming an increasingly critical component of subdivision and land development process, particularly in municipalities such as West Pikeland that have a more varied topography. Ensuring that stormwater management is addressed as part of the land development review process can help prevent environmental degradation in the future.

## **PARKS AND RECREATION**

Parks and recreational facilities are developed and administered by different governmental entities based on their function and purpose. State and regional parks are usually large in scale and draw from a wide area, while community and neighborhood parks are smaller and intended to serve local needs. The West Pikeland Township Open Space, Recreation and Environmental Resources Plan (OSRERP) (1992) describes this hierarchy of parks and recreational facilities and discusses each type in detail. The following section identifies the general facilities available but does not attempt to reiterate the inventory contained in the OSRERP. More information, including a description of each facility, can be found in that document.

### **Regional Parks**

Regional parks are large scale and usually extend beyond municipal boundaries to serve regional populations. They include park and recreational lands provided by federal or State governments and generally promote passive use. The Chester County Open Space and Recreation Study (1982) (CCOSRS) suggests that regional parks be at least 1,000 acres in size. It further suggests that 20 acres of regional parks be available for each 1,000 individuals within 30 miles. Regional parks include Marsh Creek State Park and Valley Forge National Historical Park. Additional information on regional parks can be found in the West Pikeland Township OSRERP.

### **Sub-regional Parks**

Sub-regional parks tend to be large tracts of open space at least 400 acres in size and are intended to fill the gaps between regional and community parks. They are usually parks provided by a county government and provide for both active and passive uses. The CCOSRS suggests 8.5 acres of sub-regional parklands for 1,000 in population with a 7.5 miles service radius. According to the Township's OSRERP, there are no sub-regional parks serving West Pikeland Township, however, Warwick County Park is located just outside the suggested service area.

### **Community Parks**

These parks tend to be municipal parks at least 20 acres in size accommodating both active and passive uses. They often have specialized facilities such as tot lots, handicapped trails, or event facilities. A service radius of 2.5 miles is suggested by the CCOSRS. The Township owns several parcels of land, most of which are in a natural state and currently undeveloped. Ballfields comprise a portion of the West Pikeland Park located off Route 113 and other parcels may be developed as well. The Township's newly formed Park and Recreation Commission in accordance with the OSRERP is undertaking planning for present and future parks. Community parks in West Pikeland are listed in Table 6-5.

### **Neighborhood Parks**

Also municipal parks, neighborhood parks are intended to serve residents within a half-mile radius. Although they are usually designed for active recreational activities and provide ball fields, jogging trails

and play apparatus, they may be more passive as well. It is suggested that 6 acres of neighborhood parks be provided for each 1,000 in population. In West Pikeland, the neighborhood parks are those set aside as part of the subdivision development. These parklands are owned and managed by the homeowners association. Neighborhood parks in West Pikeland are listed in Table 6-5 and indicated on Map 6-1.

### **Recreational Facilities and Programs**

Recreational facilities include the ballfields, swimming pools, tennis courts and similar facilities designed for active recreational pursuits. Recreational programming is usually done at the municipal or county level and is the process of organizing and leading recreational activities or events. One of the most important regional facility that passes through West Pikeland Township is the Horseshoe Trail. It traverses the north central region of the Township for three, uninterrupted miles. More information on the trail, as well as on other recreational facilities and programs that serve West Pikeland Township can be found in the OSRERP.

**TABLE 6-5**  
**PARKS AND RECREATIONAL FACILITIES**  
**West Pikeland Township**

<b>PARK/RECREATIONAL SITE</b>	<b>OWNERSHIP</b>	<b>ACREAGE</b>	<b>PRIMARY FACILITIES</b>
Pine Creek Park	Township	73 Acres	Multi-Purpose Field, Picnic Areas, Tot Lot
Ostrander Natural Area	Township	17 Acres	Natural Area
West Pikeland Fishing Park	Township	86.4 Acres	Passive Recreation
Dunsinane Hill Natural Area	Township	31.9 Acres	Natural Area
Pine Creek Road Natural Area	Township	53.9 Acres	Natural Area
Davis Road Natural Area	Township	5.1 Acres	Natural Area
Sycamore Lane Natural Area	Township	24.5 Acres	Natural Area (no access)
Meadow Creek Natural Area	Township	20.2 Acres	Natural Area
Montgomery School	Private	43.9 Acres	Multi-Purpose Fields
Twin Hill Open Space	Private	100.0 Acres	Natural Area
Fairfield Open Space	Private	19.6 Acres	Natural Area
Popular Hill Open Space	Private	7.0 Acres	Natural Area

Source: West Pikeland Open Space, Recreation, and Environmental Resources Plan (1992), West Pikeland Township (1999)

The West Pikeland Township Open Space, Recreation and Environmental Resources Plan contains a full inventory of land, facilities and programs, along with an analysis of future needs. The Plan also contains a full set of recommendations to address needs. Implementing the Plan is a priority of the Township as evidenced by the creation of the Parks and Recreation Commission.

## EMERGENCY SERVICES

Emergency services consist of police, fire, and ambulance services. West Pikeland Township has its own part-time police force. Fire protection is handled by three volunteer fire companies, and ambulance service is provided by three emergency services companies.

### Police Protection

West Pikeland Township's police force consists of six police officers. The chief of police administers the force with the assistance of the corporal. All officers are part time and each average sixty to eighty hours per month. There is one officer assigned per shift and two, eight-hour shifts per day. Coverage equates to approximately sixteen to eighteen hours per day, seven days per week. The State Police provide back up from the Embreeville location. In 1998, officers responded to 1,544 calls, issued 229 citations (traffic and non-traffic), and made arrests for activities ranging from DUI to assault.

The police force is physically located in the Township municipal building. It owns and operates two vehicles, a 1995 and a 1998 Ford Crown Victoria. All are equipped with radios and on-board computer systems. An average of 3,400 miles per month is logged for the two vehicles.

### Fire Protection

Three fire companies serve the Township. Lionville Fire Company provides service to the southern region. It is located on Village Avenue in Lionville and is supported by approximately 60 active fire fighters. The Kimberton Fire Company serves the northern region of the Township. It is located on Kimberton Road in Kimberton and is supported by approximately 40 active fire fighters. The line between the two main service areas roughly parallels Yellow Springs Road. Ludwigs Corner Fire Company serves a small section of the west central half of the Township. This company is located in Glenmoore and consists of approximately 20 active fire fighters. The current inventory of fire fighting equipment is shown in Table 6-6.

**TABLE 6-6**  
**FIRE FIGHTING EQUIPMENT**  
**Regional Fire Companies**

LIONVILLE FIRE CO.		KIMBERTON FIRE CO.		LUDGWIGS CORNER FIRE CO.	
Equipment	Capacity	Equipment	Capacity	Equipment	Capacity
1994 Pumper	1,500 GPM	1987 Pumper	1,500 GPM	1974 Pumper	1,000 GPM
1985 Pumper	1,250 GPM	1976 Pumper	1,250 GPM	1984 Pumper	1,250 GPM
1977 Autocar	35,000 Gal.	1968 Pumper	750 GPM	1980 Tanker	4,000 Gal.
1988 TeleSquirt	55 Ft. Ladder	1970 Pumper	7,000 Gal.	1974 Brush Truck	
1997 Field Truck		1977 Rescue Unit		1984 Squad Truck	
1998 Rescue Unit		1972 Field Truck			

Source: Lionville Fire Company (1999), Kimberton Fire Company (1999), Ludwigs Corner Fire Company (1999)

West Pikeland Township also participates in mutual aid fire services, whereby municipalities that require assistance with fires can contact nearby communities for such services.

### **Emergency Medical Services**

The provision of ambulance service in Chester County is undergoing changes. Until 1997, municipal officials assigned ambulance response areas. Due to changes in Title 28, the Pennsylvania Health and Safety Code, pertaining to the provision of emergency medical services, this responsibility was shifted to the newly established Regional Emergency Services Councils. In Chester County, the Regional Emergency Services Council operates at the County level. Most municipalities believe, however, that designation of these territories is a municipal responsibility authorized by the Second Class Township Code and as a consequence, the implementation of the new law is under challenge.

Three entities provide ambulance service to West Pikeland Township. The West End Fire Company is located in Phoenixville and services the northern region of the Township, the Uwchlan Ambulance Corps is located in Uwchlan Township and provides service to the southern region while East Whiteland Fire Company, located in Frazer, serves a small region in the eastern part of the Township. The Uwchlan Ambulance Corps has expressed concern about the traffic on Route 113 as it effects response times. These concerns should be evaluated to determine if changes need to be made. Although the West End and East Whiteland companies provide both fire and ambulance service, they provide only ambulance service to West Pikeland Township. Most medical emergencies are directed to the Phoenixville, Brandywine, Paoli, and Chester County hospitals.

<b>EDUCATION</b>
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There are thirteen school districts in Chester County. West Pikeland Township is part of the Downingtown Area School District which encompasses the central area of the County and incorporates the Borough of Downingtown and the Townships of East Caln, East Brandywine, Wallace, Upper Uwchlan, Uwchlan, West Bradford and West Pikeland. The district is administered by an elected School Board consisting of nine members. The total district enrollment for 1998-1999 is 10,083. Facilities include nine elementary schools, two middle schools, a ninth grade center and one senior high school. Data pertaining to individual schools is found in Table 6-7.

**TABLE 6-7**  
**DOWNINGTOWN SCHOOL DISTRICT**  
**School Size and Enrollment (1999)**

<b>PUBLIC SCHOOL</b>	<b>LOCATION</b>	<b>ENROLL- MENT</b>	<b>CAPACITY</b>	<b>GRADES</b>	<b>PROFF. STAFF</b>
Beaver Creek Elementary	Downingtown Borough	534	600	K-5	37
Bradford Heights Elementary	West Bradford Township	551	650	K-5	39
Brandywine-Wallace Elementary	Wallace Township	570	600	K-5	37
East Ward Elementary	Downingtown Borough	573	650	K-5	39
Lionville Elementary	Uwchlan Township	607	700	K-5	35
Pickering Valley Elementary	Upper Uwchlan Township	512	500	K-5	32
Shamona Creek Elementary	Uwchlan Township	623	650	K-5	36
Uwchlan Hills Elementary	Uwchlan Township	540	675	K-5	36
West Bradford Elementary	West Bradford Township	543	600	K-5	36
Downingtown Middle School	Downingtown Borough	1,222	1,439	6-8	96
Lionville Middle School	Uwchlan Township	1,102	1,439	6-8	95
Ninth Grade Center	Downingtown Borough	723	NA	9	61
Downingtown High School	Downingtown Borough	1,983	1,604	10-12	148

Source: Downingtown School District Administration (January 1999)

As indicated by the table, there are no public schools physically located in West Pikeland Township. Students in West Pikeland attend Pickering Valley, Lionville and Uwchlan Hills Elementary Schools, and the Lionville Middle School. All public school students in the district attend the ninth grade center and then the Downingtown High School.

One independent school, the Montgomery School, is located in the Township. The 42-acre facility is located on Route 113 north of Route 401. It offers traditional, structured educational programs for grades K-8. A pre-school program is available as well. The Montgomery School was established in 1915 as a boy's preparatory school serving grades 1-12. It became a co-educational elementary and middle school in 1943. It was originally located on Montgomery Avenue in Wynnewood, Pennsylvania and derived its name

from that first address. It relocated to West Pikeland Township in 1988.

### **Libraries**

There are seventeen libraries in the Chester County Library System. This includes the Chester Springs Library located in West Pikeland Township. Libraries are associated with the County on a contractual basis and this affiliation allows patrons to access all resources and materials available within the system. Four other libraries, Downingtown, Chester County (Exton), Phoenixville and Spring City, are located within a ten mile radius. Through the County system, residents have access to materials in other libraries in Pennsylvania through a statewide access program available at any of the facilities.

The Chester Springs Library is located on Art School Rd. near the intersection of Route 113 and Yellow Springs Road. It was established in 1976 and along with West Pikeland, serves West Vincent and East Nantmeal. It houses 13,000 volumes including a substantial children's collection. The Library emphasizes programming for children. There are three part-time employees, one of whom is a librarian. Staffing of the Chester Springs library is heavily supplemented by a corps of approximately 40 dedicated volunteers serving in various capacities. Volunteers log an average of 200 hours a month. Circulation is not yet automated; however, the collection is currently being prepared for automation.

<b>HEALTH CARE</b>
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West Pikeland Township residents have access to a wide range of medical facilities within the region. There are nine major health care facilities in Chester County. According to the Community Facilities Inventory (1988), these facilities consist of five public hospitals, one private hospital, one federal veteran's hospital and two medical centers. In addition, there are private health care facilities, clinics, and offices in proximity to population concentrations. A wide range of human service facilities is available as well.

### **Hospitals and Medical Centers**

Four hospitals are located in Chester County within thirty miles of West Pikeland Township. Residents are also in proximity to the major health facilities in other parts of Chester County, Montgomery County, Wilmington, Delaware, and the greater Philadelphia metropolitan region. There are several medical centers, outpatient facilities, and medical offices located throughout central Chester County. The hospitals located in Chester County within thirty miles of the Township are listed in Table 6-8.

**TABLE 6-8  
REGIONAL HOSPITALS  
Size and Location**

<b>FACILITY</b>	<b>LOCATION</b>	<b>NUMBER OF BEDS</b>
Brandywine Hospital and Trauma Center	201 Reeceville Road Downingtown, Pennsylvania	215
Chester County Hospital	701 Marshall Street West Chester, Pennsylvania	234
Paoli Memorial Hospital	255 West Lancaster Pike Paoli, Pennsylvania	208
Phoenixville Hospital	140 Nutt Road Phoenixville, Pennsylvania	147

Source: Brandywine Hospital and Chester County Hospital (1996), Paoli Memorial Hospital (1997), Phoenixville Hospital (1999)

### PLANNING IMPLICATIONS

- ☐ Police, fire and ambulance services appear to be adequate in light of the current level of population. These services should continually be monitored by the Township to ensure that coverage continues to be sufficient and that the quality of service is high. Concerns should be investigated about possible delays experience due to traffic on Route 113. The sharing of personnel and resources through multi-municipal efforts should also be explored.
- ☐ Recycling is an important component of an overall waste reduction effort. Although the Township is not required to recycle at this time, supporting a drop off center could encourage recycling among residents. Sponsoring other recycling events, such as a hazardous waste collection, could also be considered to reduce the potential for environmental contamination resulting from illegal dumping, a common problem in rural areas.
- ☐ Stormwater management is a critical issue that is regulated by the subdivision and land development ordinance. The current regulations appear to be minimal and could be strengthened to provide more direction to developers in designing stormwater management systems. The Best Management Practices philosophy for stormwater management planning should be considered for incorporation into existing regulations.
- ☐ The underlying geology of the Township does not yield substantial amounts of groundwater. Each new development proposal should be carefully evaluated to ensure that there is sufficient water available to accommodate the new units proposed without jeopardizing existing wells.
- ☐ The Chester Springs Library is not only a community facility, but an important cultural resource as well. The Township recognizes the Library's unique role as one of the few community facilities in the Township and provides important financial support. The Township should continue this assistance and through the Library Board, explore ways to further support the activities of the Chester Springs Library.

- ❑ The Township currently relies on the County's Sewage Facilities Plan to meet the planning obligations associated with sewage disposal. With development increasing, the Township should consider developing its own Sewage Disposal Plan to define preferred system types and locations. Consideration should also be given to providing educational information on maintaining on-lot systems.
- ❑ The Open Space, Recreation and Environmental Resources Plan (1992) contains an inventory, analysis and recommendations for developing the Township's park and open space system. The newly established Park and Recreation Commission should use this document to guide park development. Implementing the Open Space Plan will also help the Township to address resource protection goals as well.



Map 6-1:  
Community Facilities and  
Services

- Municipal Boundary
- Parcels

COMMUNITY FACILITIES

- Bell Atlantic
- Cemetery
- Chester Springs Library
- Church
- Montgomery School
- Post Office
- Township Building & Police

Community Parks

- A West Pikeland Park
- B Dunsinane Hill Natural Area
- C Pine Creek Road Natural Area
- D Davis Road Natural Area
- E Sycamore Lane Natural Area
- F Meadow Creek Natural Area

Neighborhood Parks (Private)

- 1 Twin Hills Open Space
- 2 Fairfield Open Space
- 3 Poplar Hill Open Space
- 4 Montgomery School Fields

Horseshoe Trail

COMMUNITY SERVICES

- Pumping Stations
- Historic Yellow Springs
- Uwchlan

- Community On-Lot Disposal Systems
- Historic Yellow Springs
- Twin Hills

Water Lines

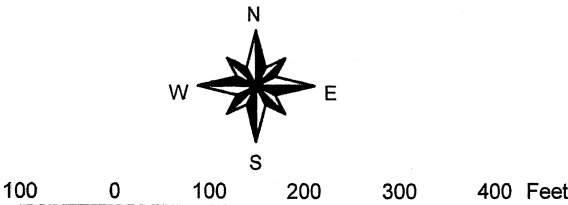
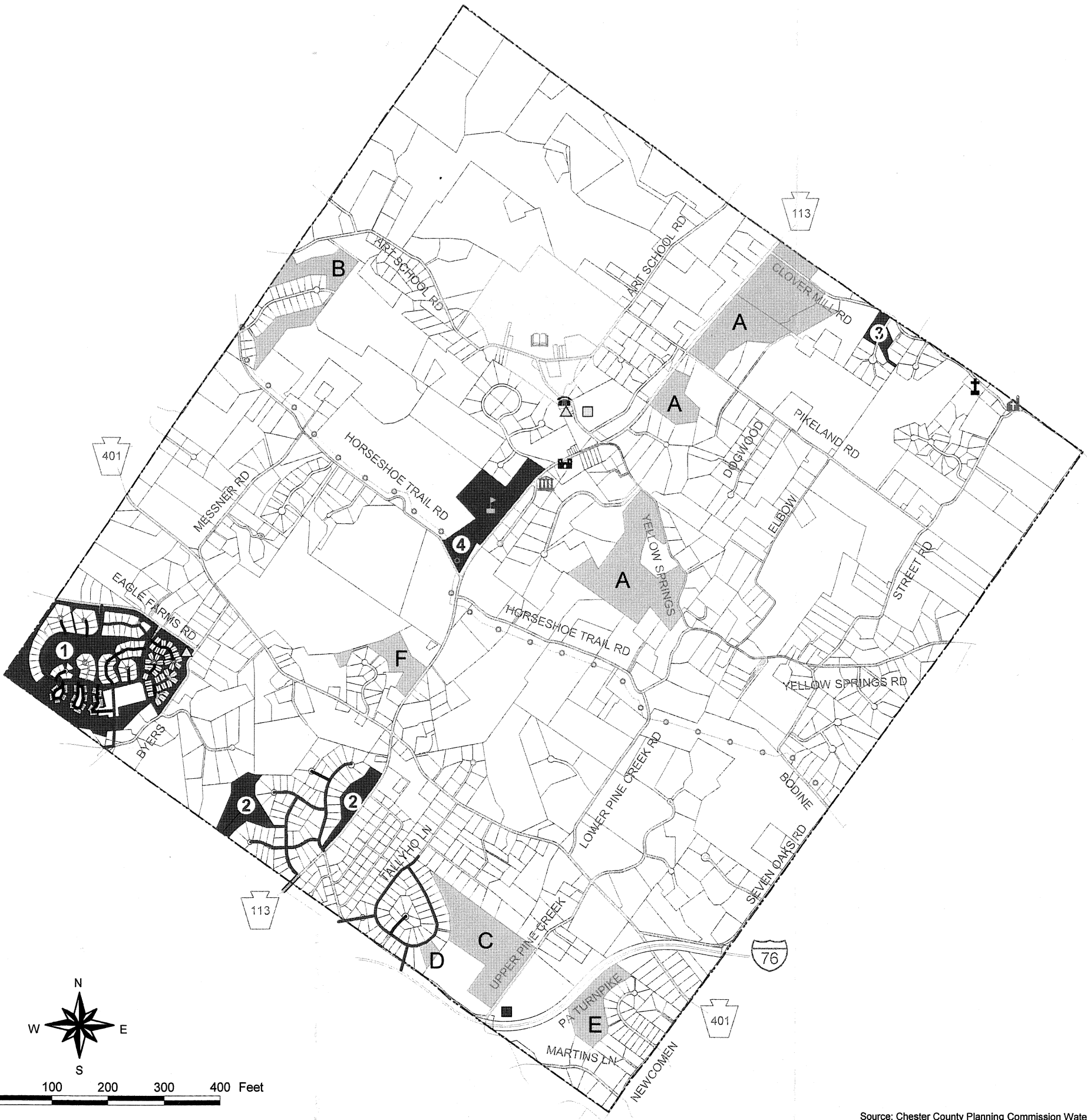
- 4 Inch
- 8 Inch
- 12 Inch

This map was digitally compiled for internal maintenance and developmental use by the County of Chester. Pennsylvania provides an index to parcels and for other reference purposes. Parcel lines do not represent actual field surveys of premises. County of Chester, Pennsylvania makes no claims as to the completeness, accuracy or content of any data contained hereon, and makes no representation of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied or inferred, with respect to the information or data furnished herein.

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West Pikeland Township

Comprehensive Plan



Wed Jul 14 11:20:30 1999

Source: Chester County Planning Commission Water Facilities Inventory, 1991;  
W. Pikeland Open Space Plan, 1992;  
W. Pikeland Comprehensive Plan, 1989-1991.

## Chapter Seven

### LAND USE INVENTORY

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This chapter discusses the land uses as they exist in West Pikeland Township in 1998, and describes the factors that have specifically influenced the Township's development to date. A description of each existing land use and an estimate of the amount of land currently found in each category is provided. Proposed development, as determined by subdivision and land development applications, is discussed by type. The number of units proposed by these applications is then compared to the actual number of building permits issued in order to discern the extent of development pressure being experienced by the Township. All combined, the analysis in this chapter is used to identify development trends. These trends are an important component in formulating the future land use plan for West Pikeland Township. The planning implications listed at the end of the chapter highlight the results of the following analysis and identify the issues that must be addressed by the Plan.

#### EXISTING LAND USE (1998)

West Pikeland Township is a sparsely populated community with a land area of 9.9 square miles. It is widely recognized for its rural character and scenic features, and for its numerous historic resources. The Township, due in part to land characteristics that are not conducive to construction, has not experienced the same level of development pressure experienced by many neighboring municipalities, and retains many of the qualities that contribute to its unique character. Preserving these qualities, while providing the necessary opportunities for future development, serves as the basic premise for this Plan Update.

West Pikeland supports a mix of land uses consisting primarily residential, agriculture and open space. Several small commercial sites and community facilities are scattered throughout the Township. With the exception of several historic clusters located at major crossroads, development is not concentrated to any great extent. Although traversed by two regional thoroughfares, Route 113 and Route 401, the level of new construction of any type was insignificant prior to 1980. The doubling of the Township's population between 1980 and 1990, however, signaled that change was eminent. The rural character was determined at risk, as agricultural/open space land began to gradually give way to low density residential subdivisions.

The 1989 Comprehensive Plan documented the changes that occurred in the Township's land use since the 1973 Comprehensive Plan and set forth many policies to focus future development to a greater extent and preserve the more rural characteristics. Many key policies have yet to be implemented, however, and the sporadic development pattern initially identified has continued to expand throughout this past decade. One of the most important policies contained in the 1989 Comprehensive Plan was the need to focus future development west of Route 401. This region was determined to be the best suited to residential development and was clearly designated in the future land use plan. The Township was quite successful in directing new planned residential development to this vicinity, but the lack of disincentives to develop outside of the designated growth area, ultimately resulted in a continuation of sprawl patterns.

The existing land use profile is presented in Table 7-1 and depicted on Map 7-1. The table lists both the estimated acreage and percentage of land in each use category. This information was obtained by updating the land use maps contained in the 1989 Comprehensive Plan and the 1992 Open Space, Recreation and Environmental Resources Plan using 1998 assessment data, 1998 tax maps, aerial photographs, and field survey. A narrative description and a map of the existing land uses follow the Table.

**TABLE 7-1**  
**EXISTING LAND USE (1998)**  
**Acres and Percentage of Land in West Pikeland Township**

LAND USE CATEGORY	ACRES	PERCENTAGE OF LAND IN TOWNSHIP
Residential (Low-Density)	1,669	26.2 %
Residential (Medium-Density)	287	4.4 %
Commercial/Office	29	0.4 %
Community Service/Facilities	69	0.9 %
Protected Open Lands	255	4.0 %
Recreation	499	7.8 %
Agriculture	1,054	16.5 %
Open Space/Undeveloped	2,243	35.2 %
Utilities/Transportation	269	4.2 %
<b>TOTAL</b>	<b>6,374</b>	<b>100.0%</b>

Source: Chester County Tax Assessment Maps (1998), Aerial Photography (1995), Field Survey (1998), Open Space, Recreation and Environmental Resources Plan (1992)

#### **Residential (Low Density)**

**1,669 Acres / 26.2 Percent of Land**

Low density residential uses are considered for purposes of this inventory to be units on lots of one acre or more. This land use category encompasses a broad range of lot sizes since many single family detached units in the Township are surrounded by landscaped grounds, and support outbuildings and accessory uses. Many low density residential uses are surrounded by extensive open space, some of which is permanently eased for conservation purposes. This land use category consumes the largest land area in the Township. These units are generally served by on-lot wells and individual sewage disposal systems.

In West Pikeland, low density residential development is found in conventional subdivisions, on single parcels fronting on local roads, along cul-de-sacs, and within estate size parcels. Conventional subdivisions are more prevalent in the southern half of the Township that planned residential development located west of Route 401. Frontage development appears to be increasing along major roadways, with cul-de-sac development found throughout the Township. Most low density residential development outside of the planned developments are served by on-lot wells and individual sewage disposal systems.

#### **Residential (Medium Density)**

**287 Acres / 4.4 Percent of Land**

Medium density residential uses are considered to be those units found on lots of less than one acre. They include both detached units and attached units. In West Pikeland, medium density residential uses are found throughout the Township but some notable concentrations do exist. These concentrations are located at the historic crossroads, the villages of Yellow Springs and Chester Springs, and the Twin Hills planned development. The majority of medium density residential depends on individual well and septic systems with the exception of Yellow Springs and Twin Hills both of which rely on community sewage disposal facilities. The Uwchlan Township Municipal Authority serves the Twin Hills development.

### **Commercial/Office**

**29Acres / 0.4 Percent of Land**

The overall population density does not warrant extensive commercial or office uses and only a limited number of local scale commercial uses are present in the Township. These include gas stations/convenience stores, a restaurant, auto repair/garage, minor offices uses and the Yellow Springs Inn. The retail and service needs of residents are met through facilities outside of the Township in community or regional commercial and employment centers.

The commercial uses are located along Route 113 and Route 401 with a minor concentration at the intersection of these two roads. One of the more historically important concentrations is in the village of Yellow Springs. The Township promotes certain complementary uses in this area through a special “historic business” zoning district. This is the location of the Yellow Springs Inn, a historical site that attracts patrons on a regional basis.

### **Community Facilities/Service**

**69Acres / 0.9 Percent of Land**

The West Pikeland municipal building and the Montgomery School (private) are the most visible facilities due mainly to their location on Route 113. There are no other governmental facilities in West Pikeland, nor are their fire stations physically located in the Township. One library facility is located in the village of Chester Springs. Religious institutions constitute another type of community facility, and one such facility, St. Peters church and cemetery is located at the northeast boundary. Another small cemetery is located in the southern part of the Township near Route 113.

### **Recreation**

**499 Acres / 7.8 Percent of Land**

Recreational uses in West Pikeland consist of areas designed for both active and passive uses. Pine Creek Park contains fields for active recreation. The Township also owns five other parcels near the park that provide for passive recreational pursuits. The Montgomery School is the only private organization that contains facilities for active recreation. Homeowners associations own and maintain several private parks designed to meet neighborhood needs. The Horseshoe Trail, an important regional recreational opportunity, extends three miles through the Township. Indian Springs camp is a private camp located in the eastern part of the Township near the Charlestown boundary.

### **Agriculture**

**1,054Acres / 16.5 Percent of Land**

Agriculture continues to be an important land use in West Pikeland. Although Class II soils are found throughout West Pikeland, farms are more prevalent in the northern two thirds of the Township. This category includes a wide range of land uses including crop production, dairy farming, livestock production and fallow land.

### **Protected Open Land**

**255 Acres / 4.0 Percent of Land**

This land use category includes lands purchased for conservation purposes. The parcels identified are permanently protected from future development. Since they are protected in perpetuity, they can be included in the Township’s inventory of open space even though privately owned and managed.

### **Open/Undeveloped Land**

**2,243 Acres / 35.2 Percent of Land**

A large percentage of the land area in West Pikeland Township is held in open space or considered vacant due, in part, to the topography and resources of the Township. The steep slopes, stream valleys, rock outcroppings and extensive woodlands, pose constraints to most types of development. A large percentage of the open space in the Township can be attributed to a prevalence of large, estate-size parcels. Residential uses are found only on a small percentage of these parcels with the remaining land area considered to be open space. In most cases, there is nothing that would prevent these parcels from being developed at some future point.

**Utilities/Transportation****269Acres / 4.2 Percent of Land**

Transportation facilities in West Pikeland consist mainly of the road network, which, with the exception of the Pennsylvania Turnpike, which traverses the southern corner of the Township, is not extensive. There are no other transportation facilities such as rail lines or airports found in the Township. There are no utility corridors or easements such as underground gas lines or corridors with overhead electric lines that pass through the Township. A small lot containing a transmission facility is found near Chester Springs along Route 113.

**PROPOSED DEVELOPMENT ACTIVITY**

The proposed construction activity, as indicated by subdivision and land development applications, helps to assess the level of development pressure in West Pikeland. Since approval of subdivision and land development applications is required prior to construction, these applications can denote the type and location of construction that will take place in the near future. It is extremely important to note, however, that not all applications are approved, nor do all proceed to construction. Monitoring the number of applications received can help the Township to gain some insight into market demand and development pressure. These figures must be evaluated in conjunction with municipal approval data, as well as building permit statistics, in order to obtain a valid perspective on development pressure.

The Pennsylvania Municipalities Planning Code requires that municipal subdivision and land development applications be reviewed by the county planning entity, in this case the Chester County Planning Commission. Applications are tracked on a municipal level in order to gain county-wide information on development trends. The number and type of proposals received by West Pikeland Township since 1990 is illustrated in Table 7-2. The applications that went on to receive municipal approval are indicated in Table 7-3.

**TABLE 7-2**  
**PROPOSED SUBDIVISION AND LAND DEVELOPMENT**  
**West Pikeland Township (1990 - 1997)**

<b>YEAR</b>	<b>Total Acreage in Proposals</b>	<b>Residential/ Agricultural Units/Lots</b>	<b>Multi-Family/ Mobile Home Units/Lots</b>	<b>Commercial/ Industrial Units/Lots</b>	<b>Total Number Units/Lots</b>
1990	225.03	46	0	0	46
1991	123.10	23	0	0	23
1992	300.54	69	0	0	69
1993	165.53	64	0	0	64
1994	67.29	16	0	0	16
1995	181.14	18	0	0	18
1996	141.12	80	0	0	80
1997	192.72	7	0	0	7
<b>TOTAL</b>	<b>1,396.47</b>	<b>323</b>	<b>0</b>	<b>0</b>	<b>323</b>

Source: Chester County Planning Commission Act 247 Referrals Subdivisions, Land Development, and Zoning (1990-1997)

The figures in Table 7-2 state that a total of 1,396.47 acres were proposed for some level of development between 1990 and 1997. These numbers should be viewed only as general indicators since many of these proposals never proceed to the final approval stage. It should also be noted that one application may be submitted for review on more than one occasion, further skewing the numbers. With this in mind, the applications submitted to Chester County Planning Commission for review from 1990 through 1997 proposed the creation of 323 single family units and/or agricultural lots. No new multi-family, commercial or industrial development was proposed for the Township during this time frame. Just as important as the total number of units proposed, is the land consumption rate of proposed developments. Between 1990 and 1997, the proposals averaged one unit per approximately 4.3 acres. It should be noted, however, that this figure does not deduct farm or open space land. This trend is important to monitor because it is indicative of increasing land consumption and thus a sprawl development pattern.

**TABLE 7-3**  
**APPROVED SUBDIVISION AND LAND DEVELOPMENT**  
**West Pikeland Township (1990 – 1997)**

<b>YEAR</b>	<b>Municipal Approvals</b>	<b>Total Acreage in Approved Applications</b>	<b>Residential/ Agricultural Units/Lots</b>	<b>Multi-Family/Mobile Home Units/Lots</b>	<b>Commercial/ Industrial Units/Lots</b>	<b>Total Number Units/Lots</b>
1990	3	54.67	7	0	0	7
1991	2	108.60	15	0	0	15
1992	3	69.69	22	0	0	22
1993	1	123.00	58	0	0	58
1994	6	402.64	93	0	0	93
1995	3	43.83	5	0	0	5
1996	3	23.34	7	0	0	7
1997	1	3.90	3	0	0	3
<b>TOTAL</b>	<b>22</b>	<b>829.67</b>	<b>210</b>	<b>0</b>	<b>0</b>	<b>210</b>

Source: Chester County Planning Commission, Subdivision and Land Development Review Records (1990-1997)

Table 7-3 indicates that of the subdivision and land development activity proposed, twenty-two (22) applications were approved by the Township between 1990 and 1997. All proposals involved the creation or modification of either single family residential or agricultural lots. A total of 210 units/lots were approved for development by the municipality as compared to the 323 that were proposed during the same time period. There were no applications submitted or approved proposing non-residential development. The total combined acreage of the applications approved for development was approximately 830, as compared to 1,396 acres proposed for development. These comparisons clearly illustrate that not all subdivision and land development proposals progress to the final approval stage. Not all applications that are approved by the municipality actually proceed to construction.

### **Construction Activity**

Although reviewing the amount and type of proposed subdivision and land development activity could provide insight into the extent of development pressure facing a municipality, the applications do not reflect construction levels. Actual construction activity is determined through building permit data. The number

of building permits issued by type from 1990 through 1997 is indicated in Table 7-4.

**TABLE 7-4**  
**RESIDENTIAL BUILDING PERMITS BY UNIT TYPE**  
**West Pikeland Township (1990 – 1997)**

YEAR	Single Family	Apartments	Townhouses	Mobile Homes	Total
1990	18	0	4	0	22
1991	8	0	29	0	37
1992	8	0	52	0	60
1993	36	0	0	0	36
1994	46	0	0	0	46
1995	57	0	13	0	70
1996	56	0	0	0	56
1997	25	0	0	0	25
<b>TOTAL</b>	<b>254</b>	<b>0</b>	<b>98</b>	<b>0</b>	<b>352</b>

Source: Chester County Planning Commission Residential Building Permits Planning Data Sheet #50 (1996), Residential Building Permits Planning Data Sheet #54 (1998)

The number and type of building permits issued has varied throughout the past decade. As expected from the type of subdivision and land development proposals submitted, 72 percent of the permits issued since 1990 were for single family detached residential units. Twenty-eight percent of the permits issued were for attached units. In 1991 and 1992, the number of townhouse building permits outnumbered the single family detached building permits. This was probably due to the construction phasing of the Twin Hills planned residential development that includes attached housing.

### CURRENT LAND USE REGULATIONS

The purpose of comprehensive planning process is to reach consensus on a common vision for the future land use of the Township. The resulting future land use plan should, through text and maps, illustrate how the residents envision the Township in twenty years time. A comprehensive plan typically includes recommendations on how to achieve the future vision, with most recommendations implemented through a form of land use regulation. One of the most important ways implementation occurs at the municipal level is through the zoning ordinance, and subdivision and land development ordinance. Together, these two ordinances provide the framework through which nearly all development occurs by outlining the regulations with which all development must comply. A key element of the existing land use inventory is a review of current regulations because they are largely responsible for the existing land use patterns. Provisions of the West Pikeland zoning and subdivision and land development ordinances are summarized as follows.

## **Zoning Ordinance**

### **Conservation Residence District**

West Pikeland's zoning ordinance was first adopted in 1976 and includes updates through October of 1995. The overall purpose of the zoning ordinance is to designate the type of development that can occur and where it is to be located in the Township. The West Pikeland zoning ordinance contains only one primary district, termed the "CR" conservation residence district. It generally provides for farming, conservation and low density land uses. Agricultural and residential uses are permitted by right with some institutional and recreational uses are permitted by special exception. There is a two-acre minimum lot area for uses in this district. Since the CR district is designated throughout the Township, nearly all land in West Pikeland is zoned and available for residential development. There are no cluster standards in the zoning ordinance and since the lot averaging standards are vague, there are no mechanisms currently in place to focus development and protect open space. Construction of low-density, sprawling residential developments is mandated by the ordinance and these zoning provisions are responsible for the sporadic development pattern that has occurred during the past decade.

### **Conservation Residence Alternative Overlay District**

In 1993, the Township's zoning ordinance was amended to include the "CROA" conservation residence alternative overlay district. This district essentially provides for cluster development and alternative design options that result in a more varied, innovative and efficient development pattern. It is intended to facilitate the preservation of critical natural and historic resources, as well as to conserve open space. Uses permitted in the CROA district include agriculture, single family detached, and attached residential to a maximum of three units. Not less than fifty percent of the net area of the tract must remain in open space and restricted from further development. Minimum lot size for single family detached dwellings is 8,000 square feet. Design standards are included in the district regulations. Proposals using this development option are subject to the conditional use provisions.

### **Planned Residential District**

A "PR" planned residential district is included in the ordinance and permits a variety of housing forms, encourages unified design and mandates at least thirty percent open space. Three areas are designated on the zoning map for PR planned residential, two of which are under development. Opportunities for mobile home park development are linked to the planned residential use in the eastern part of the Township. All three planned development districts are located west of Route 401 in the vicinity designated by the 1989 Comprehensive Plan as appropriate for residential development. Although the planned residential development provisions are important in providing an alternative to conventional development, the gross density is quite low at one unit per one and one-half acres. A density bonus provides some incentive for higher net densities. The standards could be strengthened to mandate a higher net density and thus protect more open space. The provisions stating that steep slopes, wetlands and other environmental features be "netted-out" of the calculations are necessary to ensure that these features are protected.

### **Business District**

Four locations are included in the "B" business district. This designation allows for very limited commercial development in terms of type and location. The 1989 Comprehensive Plan contains important policies relating to commercial development, however, these policies should be revisited to ensure that the convenience commercial needs of residents are being met.

### **Historic Business District**

To further protect the historic character of the Township, a "HB" historic business district regulates development in the vicinity of Chester Springs (and historic Yellow Springs). Protecting historic resources is a high priority in the Township and enforcing land use regulations that protect historic districts is a



necessary element of the ordinance. West Pikeland has many types of historic resources, one of the most important is the Chester Springs historic district. This district has been designated as a certified local historic district under the provisions of Pennsylvania Act 167 of 1961 to protect the historic Yellow Springs Spa, listed in the National Register of Historic Places as the “Good News Buildings.” Modifications to historic buildings, as well as the construction of new buildings in a certified historic district is subject to review by the Township’s historical architectural review board. The Anselma Mill has also been designated as a certified historic district and likewise, is subject to the provisions of Act 167.

### **Overlay Districts**

Additionally, the Township’s zoning ordinance contains regulatory measures that address resource protection, specifically an “FH” flood hazard district and a steep slope conservation district. Both are designed to conserve environmentally sensitive areas but should be reviewed for effectiveness.

### **Subdivision and Land Development Ordinance**

West Pikeland’s subdivision and land development ordinance was updated in 1989 and includes amendments through May of 1996. The intent of this ordinance is to define how development is to occur. It contains the procedures, processes and development standards that all applicants must meet in order to obtain the necessary approvals.

The West Pikeland subdivision and land development ordinance addresses all basic elements including the application procedures, review process, and minimum standards. It contains development and design standards for the physical development of a site, specifications for public improvements, and regulations for mobile home park development. Although the basic requirements are addressed, provisions pertaining to storm water management, natural and historic features, recreational facilities, and landscaping could be enhanced. Strengthening design standards helps to ensure quality development and clearly sets the Township’s expectations in terms of site development.

## **TRENDS IN LAND USE PATTERNS**

Development trends are key to effective comprehensive planning because they help explain current development patterns and help gauge future demand for different land uses. Analyzing the changes in major land use categories can help in planning for future land use by ensuring that new development is appropriately located. The following discussion compares existing land uses with the land use inventory and analysis contained in the 1989 Comprehensive Plan.

### **Residential**

The 1989 Comprehensive Plan states that most land in the Township was either used for agricultural purposes or considered open space. The existing land use inventory, however, indicates that agricultural land and open space have been converting to residential uses. The 1989 Comprehensive Plan contained a policy directing new residential development west of Route 401, as this area was designated the Township’s primary growth area. During the last ten years construction of the Twin Hills planned residential development was undertaken in the growth area in compliance with the Plan. This project consists of single family detached and attached units in various configurations. The attached housing constructed as part of the Twin Hills development project provides important housing opportunities, also a Township policy.

Most of the new residential construction, with the exception of the attached housing in the Twin Hills

planned development, has been single family detached units. Although this development has occurred at a smaller scale, it has been scattered throughout the Township. Single cul-de-sac subdivisions with a limited number of lots have been built off major roadways, houses have been constructed on vacant lots in existing subdivisions, and new single lots fronting on minor roads are being developed. This type of random development is contributing to an overall sprawl pattern now evident in all quadrants of the Township. The zoning ordinance does not provide for cluster/open space development, nor does it direct residential development to specific locations, but instead permits it throughout the Township. Unless land use regulations are modified, the sprawl pattern created by two acre residential subdivisions will continue.

### **Commercial**

Virtually no new commercial sites have developed in the Township within the past decade. Based on a review of assessment records in conjunction with the existing land use maps in both the 1989 Comprehensive Plan and the 1992 Open Space, Recreation and Environmental Resources Plan, commercial development remains at the same level. The villages of Yellow Springs and Chester Springs continue to be focal points for some concentration of commercial uses, with minor concentrations at Route 401 and Route 113 as well.

### **Recreational Uses**

Recreational land uses, primarily land for passive pursuits, appear to be increasing in the Township. The planned residential developments constructed within the past decade contain recreational land and open space designated for neighborhood use. New parcels have also been acquired by the Township throughout the past decade supplementing the Township park system. Requiring the dedication of land when new residential projects are developed helps to satisfy recreational and open space needs at the neighborhood level. Providing a fee-in-lieu of dedication option could provide some of the funding needed to acquire other sites designated in the Open Space, Recreation, and Environmental Resources Plan.

### **Protected Open Space**

Protected open space includes those parcels that have been secured into perpetuity as permanent open land. Within the past decade there have been several parcels within the Pickering Creek corridor acquired by conservation organizations for resource protection purposes. Several are owned and managed by non-profit organizations focused on protecting environmental and historic resources. An important historic resource is the Yellow Springs Inn in the village of Yellow Springs. The historic district includes several buildings and the surrounding open space. It is a key resource that encompasses nearly one hundred twenty acres in the northwest quadrant of the Township. Acquisition of select parcels by conservation organizations will likely continue and the Township can expect that open space will continue to be preserved in this manner.

### **Transportation and Utilities**

The transportation network in West Pikeland has expanded over the past decade with the addition of several new roads. Most of the additions are associated with the two planned residential developments constructed west of Route 401. New cul-de-sac roads have also added to the increase in transportation land use. Only one property designated as utility is located in the Township and there have been no additions in the last decade. As residential uses continue to develop, transportation and utilities can also be expected to increase as well.

## **Agriculture**

A considerable percentage of the Township was actively farmed according to the existing land use map contained in the 1989 Comprehensive Plan. Development occurring in the early 1990's changed the agricultural landscape with several large parcels converting to residential uses. The largest parcels to be converted were located west of Route 401. Land converting from active farmland to a vacant status is another trend that appears to be occurring. This seems to be particularly evident in the northwest quadrant. Land that was once farmed is now either fallow and considered vacant and undeveloped. This change could indicate a landowner's intention to sell the parcel for development purposes.

Land is farmed in smaller parcels in the northeast quadrant and most of the parcels previously identified as farms are still classified as agricultural. Splitting individual lots off agricultural parcels is a common practice throughout Chester County and one that can, if not properly controlled, hinder effective planning by causing traffic congestion, access problems and increased storm water runoff.

## **RELATIONSHIP TO LANDSCAPES**

Chester County's comprehensive policy plan, *Landscapes*, promotes focusing future development in locations where it can best be accommodated in terms of infrastructure, and correspondingly, to preserve the County's open lands, and its natural, environmental and historic resources. The future land use plan contained in *Landscapes* identifies most of West Pikeland Township as a Rural Landscape, a land pattern comprised mainly of farms, agricultural lands, and rural villages. The area west of Route 401 is identified as a Suburban Landscape, a land pattern consisting of well-designed residential neighborhoods, buffered by open space, and community-oriented commercial and employment centers. The land use in West Pikeland is thus far consistent with these designations, however, if not regulated, sprawling residential development could jeopardize the Rural, and Suburban Landscapes envisioned. The growth boundary delineated in the 1989 Comprehensive Plan should continue to be supported by the Township through land use policies that focus development appropriately and protect sensitive lands.

## **PLANNING IMPLICATIONS**

- ☐ West Pikeland Township experienced a 50% increase in population between 1980 and 1990 and is expected to increase by another 25% between 1990 and 2000. This translates to a significant number of new housing units, each requiring a two-acre lot minimum according to current zoning regulations. Modifications in existing land use regulations are needed to protect the Township's unique rural character and preserve natural and historic features in light of new development.
- ☐ Other than a minimal open space requirement contained in the planned residential development (PR) zoning district regulations, there are no land use regulations facilitating the protection of open space. There is a need for ordinance provisions that allow the natural, scenic and historic resources of the Township to be permanently protected through cluster development containing significant open space.
- ☐ Nearly all new development is in the form of low density single family residential. With land use regulations requiring two-acre minimum lot size and no cluster/open space provisions, a high land consumption rate results. Sprawl development patterns are evident throughout the Township and future development should be contained if the rural character is to be conserved.

- ☐ Land use trends indicate that farms are being lost to sprawling residential development. Measures that protect existing farms and encourage continuation of this important industry in the Township should be evaluated.
- ☐ Land use regulations that serve to focus new developments are needed. The “CR” conservation residence zoning district encompasses nearly the entire Township thereby facilitating residential construction in areas that might be unable to support such an use. Land use regulations focus new development in areas where it can best be supported.
- ☐ A limited amount of land is planned and zoned for commercial/office/industrial use. Though it is recognized that the present and future population of the Township is not sufficient to support large-scale commercial uses, expanding the opportunity for commercial development in one or more appropriate locations should be considered. Providing for a limited amount of commercial/office development on a local level can reduce road trips and the resulting traffic congestion.
- ☐ There is a concentrated effort on the part of many conservation and preservation organizations to protect the unique natural, environmental and historic resources in the Township. West Pikeland should support these efforts through land use policies that supplement such efforts.

## Map 7-1: Existing Land Use



Road Network



Municipal Border

### EXISTING LAND USE CATEGORY



Low Density Residential  
(Less than 1 unit/acre)



Medium Density Residential  
(More than 1 unit/acre)



Commercial



Community Facility/Service



Protected Open Land



Recreation



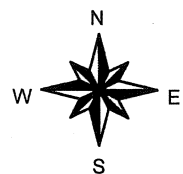
Agriculture



Open Space/ Undeveloped Land



Utility



100 0 100 200 300 400 Feet

Thu Sep 02 11:43:48 1999

Source: Chester County Planning Commission, 1998.

This map was digitally compiled for internal maintenance and developmental use by the County of Chester, Pennsylvania to provide an index to parcels and for other reference purposes. Parcel lines do not represent actual field surveys of premises. County of Chester, Pennsylvania makes no claims as to the completeness, accuracy or content of any data contained herein, and makes no representation of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied or inferred, with respect to the information or data furnished herein.

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## West Pikeland Township

### Comprehensive Plan



GEOGRAPHIC INFORMATION SYSTEM  
Chester County Planning Commission



## Chapter Eight

# ENVIRONMENTAL AND HISTORIC RESOURCES PLAN

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West Pikeland Township is widely noted for its extensive scenic landscapes of green pastures, wooded stream valleys, historic villages and farmsteads. It is the collection of these resources that defines the unique rural character so valued by the Township residents. Because West Pikeland is not directly accessed from Route 30 and Route 100, the major transportation corridors through the region, it has been spared the intense development pressure that municipalities in closer proximity to these corridors have faced. Although a significant amount of new development has occurred during the past two decades, it has not yet obliterated West Pikeland's rural landscapes. The Township recognizes that in order to protect the environmental and historic resources as development occurs, regulatory measures that prioritize their protection, and the preservation of historic context, must be adopted and enforced.

This plan element presents a series of recommendations that addresses the protection of environmental and historic resources while simultaneously allowing carefully planned new development to occur. The recommendations in this chapter are intended to complement those contained in Chapter 11, Future Land Use and Housing Plan, and to encourage the use of growth boundaries to focus new development in locations where it can be supported, thereby preserving key environmental resources.

The goals and objectives identified in this comprehensive plan, along with the analysis of the applicable inventory data, form the foundation for the policy recommendations that follow. The Township's environmental and historic resource protection goals and objectives are:

### **RESOURCE PROTECTION GOAL:**

***Protect those natural, scenic and historic resources that contribute to the unique character of the Township.***

### **Objectives**

- Evaluate the Township's environmental and historic resources protection regulations to ensure they are effective.
- Facilitate preservation of environmental and historic resources through public and private initiatives that limit development.
- Encourage the use of easements, buffers, setbacks and other land use controls that protect sensitive environmental resources while allowing for some level of development to occur.
- Protect natural resources including flood plains, steep slopes, productive agricultural soils, wetlands, and woodlands by allowing only for low intensity uses with minimum disturbance.
- Preserve existing development patterns including historic villages, hamlets, and farmsteads when considering future land uses.

**RESOURCE PROTECTION GOAL:**

*Use innovative land management techniques to facilitate the preservation and protection of the environmental and historic resources.*

**Objectives**

- Protect historic villages by permitting certain forms of non-residential use and the adaptive reuse of existing structures that complement the scale, architecture, and site characteristics of each village.
- Review regulations intended to protect sensitive environmental features and implement changes where needed.
- Consider the use of development incentives as a means of protecting critical natural and historic site characteristics.
- Provide for development alternatives that are designed to protect natural and historic features such as cluster provisions.
- Ensure that all new construction complies with State and Township development regulations.
- Provide education to increase the sensitivity toward the natural and historic resources of the Township.

To organize the presentation of recommendations associated with these goals and objectives, this chapter is divided into two main sections. The first section focuses on the environmental resources while the second focuses on historic resources. Each recommendation describes how the proposed action addresses the planning issues identified in the inventory and subsequently, the goals, and objectives. Implementation measures are included as well.

<b>ENVIRONMENTAL RESOURCES</b>
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The recommendations pertaining to the protection of environmental resources were based upon the issues identified through analysis of the inventory data and the resulting planning implications. They are not prioritized in this chapter; however, they are grouped into general categories. Each will be assigned a priority in Chapter 12, Implementation Strategies.

⇒ **Recommendations for Natural Features Protection**

- ***Adopt a “Net-Out” provision as part of the zoning ordinance update.***

The Township should consider zoning provisions that require sensitive resources to be deducted from the total tract area before density is calculated. This can help ensure that resources such as wetlands, steep slopes and flood plains are not lost or encroached upon during development and can continue (to the extent possible) to function as nature intended. These functions include groundwater filtration, storm water management, soil, and slope stabilization, air purification and habitat preservation.

Net-out provisions are typically part of the zoning ordinance and should be applied across all districts. The resources subject to these requirements must be defined in the ordinance and the extent of the net-out specified. This requirement may be supported by the subdivision and land development ordinance through the requirement that these resources be surveyed and shown on a conservation plan. In this way the Township can ensure that the provisions of the ordinance are indeed being met. This recommendation is linked to the need for comprehensive site analysis requirement, which is discussed in Chapter 11, Future Land Use and Housing Plan.

- ***Ensure that the open space specified in development proposals is protected in perpetuity from further development or re-subdivision.***

The overall population density in West Pikeland Township is relatively low due to the large lot sizes, a high number of estate size parcels (including horse farms) and a significant percentage of environmentally constrained lands. Most of the residential uses located outside of the planned residential developments in the southern part of the Township have occurred on large lots. However, the zoning is such that some of the larger parcels could be re-subdivided. As part of the subdivision and land development process, the Township should seek to ensure that as new development is approved, restrictions are in place to prevent the subdivision of remaining open space or the re-subdivision of existing lots. These conditions should be stipulated on development plans, in developer agreements and as deed restrictions.

The ownership and maintenance of all open space should be clearly identified prior to final site plan approval. It may be owned and maintained by the Township, by homeowners' associations, or by non-profit conservation organizations as specified in the Township's subdivision and land development ordinance. Provisions should be included in the maintenance agreement that reserves the Township the authority to intervene if the open space is not maintained as specified.

In addition, subdivisions and land developments that include large "outlots" or undeveloped areas should be required to show, at least preliminarily, a future use. If the project is not phased, this helps the Township to evaluate the relationship between potential land uses and the effectiveness of the proposed circulation system.

- ***Facilitate private efforts to protect natural and historic resources through the purchase or donation of conservation easements.***

Many areas in West Pikeland Township are protected through conservation easements. This can be a very effective means of protecting natural and historic resources, and open space. A conservation easement is a legal agreement between the owner of a property and another party, usually a non-profit organization, which provides for the permanent protection or the transfer of certain "rights" associated with a property. The sale or donation of most conservation easements results in the protection of a parcel of land as open space, permanently protecting it from future development. It remains the property of the original owner, only the development right (one right in a bundle of rights) is lost. The entity that either purchases or accepts donation of the easement is then responsible for ensuring that the terms of the agreement are honored. Conservation easements must be secured into perpetuity and recorded on the property deed.

A conservation easement should be considered a viable alternative when a property owner is more interested in somehow preserving his or her land than in selling it for the maximum profit. There are tax benefits associated with donating or selling conservation easements that can make it an attractive alternative for landowners. The Township can encourage the preservation of open space by providing information on conservation easements to large landowners, by sponsoring meetings



or educational forums on this topic, or by serving as a liaison between land owners and conservation organizations.

- ***Reduce soil erosion and stream sedimentation, and promote groundwater recharge, through storm water management techniques that emphasize the use of Best Management Practices.***

Storm water management is a particularly critical issue in West Pikeland due to the extensive steep slopes, stream banks, and the potential for runoff to carry sediment into the Pickering and Pine Creeks. The subdivision and land development ordinance regulates storm water management by requiring that there be no increase in the quantity or velocity of surface water runoff following development. These regulations should be expanded to incorporate a hierarchy of Best Management Practices into the ordinance that provide more guidance on the Township's objectives related to infiltration and groundwater recharge, as well as an overall management system preferences and approaches. The storm water management plan submitted with each development application should emphasize the use of existing site features and include the control of smaller storms as a way of facilitating recharge and reducing the size of the larger facilities.

A new publication entitled, Pennsylvania Handbook of Best Management Practices for Developing Areas was developed as a site planning tool and BMP selection guide for those involved in planning, designing and reviewing development projects. It was produced by the Pennsylvania Association of Conservation Districts, Inc. in cooperation with the Pennsylvania Department of Environmental Protection. Use of this reference should be encouraged by the Township in its ordinances. This publication summarizes storm water management alternatives by defining the purpose and application of various techniques and offers design criteria that can be tailored to site conditions. Emphasizing the use of BMPs in accordance with the specifications in the Handbook will give better direction in managing storm water and result in a more environmentally sensitive approach to controlling storm water runoff and reducing the potential for erosion.

- ***Ensure that storm water management facilities are properly inspected and that long-term maintenance is addressed.***

The subdivision and land development ordinance should outline inspection requirements for storm water management facilities to ensure that they have been constructed in accordance with approved plans. The Township's current policy is to mandate private ownership of all facilities. Through the inspection process, potential problems can be identified at the outset, before the facility is conveyed to the owners. This could also reduce the possible involvement by the Township at a later point.

Inspecting for the proper management of storm water runoff should also take place as part of the building inspection process for new construction on individual lots outside of subdivisions. Improper site grading can affect runoff onto neighboring lots and adjacent roadways and these conditions can be difficult to address once certificates of occupancy have been issued. The subdivision and land development ordinance should clearly specify not only storm water management standards, but the inspection process as well. A long term maintenance plan outlining specific requirements and designating responsible parties should be submitted prior to final plan approval.

⇒ **Recommendations for Vegetation Protection**

- ***Protect existing vegetative cover by incorporating a vegetation management component into the conservation plan requirement of the subdivision and land development ordinance.***

The flora throughout West Pikeland includes a wide variety of species. Aside from contributing to the Township's scenic qualities, these vegetative resources serve environmental purposes including cleansing the air and water, stabilizing soil, reducing storm water runoff, and providing wildlife habitat. The subdivision and land development ordinance requires that a conservation plan accompany both preliminary and final subdivision proposals. It must note trees and tree masses of over a four inches in caliper on the site. If these trees are proposed to be cleared, the reasons for the clearing is to be provided. The ordinance stops short, however, of imposing any additional requirements.

The Township should use the conservation plan as a tool to protect a wider range of vegetation. It could also be revised to incorporate more specific preservation standards, for example, requiring one for one replacement of trees over a certain caliper, requiring the protection of tree masses of a certain type or size, and requiring equitable replacement for the removal of individual trees of a certain caliper. Adopting these types of standards helps to prevent clear cutting and the loss of critical vegetative resources, and encourages site design that prioritizes the protection of mature, native vegetation.

- ***Require the use of native species when landscaping new subdivisions or land developments.***

The use of native species should be encouraged as part of the land development process. The use of native species reduces losses because these species are already adapted to the regional climate, are less susceptible to local insect and disease problems, and they support the biological processes of native plants and animals. The use of non-native species can have unexpected results that in some cases, can dangerously affect the ecological balance. The unfortunate result of the indiscriminate planting of the non-native species commonly known as multi-flora rose can be seen in many areas throughout Chester County. This shrub, originally introduced to stabilize stream banks following restoration projects, has overtaken many natural areas crowding out the native species resulting in a severe reduction in diversity.

The use of native species in landscaping new development can be required through both the Township's zoning ordinance and its subdivision and land development ordinance. Provisions that require replacement of vegetation lost as part of the development process can also specify the use of native species. Providing a list of acceptable plants is recommended. Most break down plants in several categories of deciduous and evergreen trees and shrubs providing the information needed to determine suitability for a particular site or purpose. A list can be included as an appendix. Planning Bulletin #51, Native Plants, published by the Chester County Planning Commission addresses this topic and is available for use as a resource.

- ***Encourage sound forest management techniques among property owners that own significant stances of woodlands.***

Many parcels of land in West Pikeland Township include extensive wooded areas. Woodlands also cover the steeper hills and the stream valleys and serve many environmental purposes. The Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, is responsible for the protection of forest lands and one of its responsibilities is to provide

management advice to the owners of private woodlands. The Township should encourage the use of state resources for the information and educational material on woodland management and refer questions as needed. Additionally, the Township can regulate clear cutting and monitor the thinning of woodlands through the zoning ordinance provisions that require permits for activities that could lead to excessive storm water runoff and soil erosion. The planned residential development zoning ordinance provisions appear to regulate the clearing of woodlands to some extent; these provisions should be expanded to apply to all districts.

- ***Expand the landscaping requirements contained in the Township's ordinances.***

Landscaping standards are needed in both the zoning ordinance and subdivision and land development ordinance to ensure that vegetation lost during the construction process is replaced. Currently, landscaping requirements in the zoning ordinance appear to be limited to planned residential developments and mobile home parks and there are only limited requirements for development that does not fall into one of these two categories.

The subdivision and land development ordinance currently includes some measures aimed at regulating clear cutting as part of the development process, along with a set of criteria on selecting vegetation to retain. These regulations should be designed to supplement regulations addressing the clearing of wooded areas in the zoning ordinance.

⇒ **Recommendations for Water Resource Protection**

- ***Promote the designation of the Pickering and Pine Creeks as “Exceptional Value” streams.***

The Pickering and Pine Creeks have been designated by the Commonwealth of Pennsylvania as Special Protection Waters, specifically as High Quality streams. This designation requires that certain standards be met for any new development proposed that might impact the water quality, and in particular, sewage treatment facilities. The Exceptional Value designation evokes an even higher degree of regulation, thereby protecting streams to a greater extent. The Township supports Exceptional Value designation and should work cooperatively with other entities such as the French and Pickering Creek Conservation Trust, Inc., the Green Valleys Association, Trout Unlimited, and neighboring municipalities in investigating and promoting this designation.

- ***Clarify the percentage of flood plain that may be included in a residential lot area calculation.***

The Township amended its zoning ordinance in 1983 to include greater restrictions on the types and extent of uses permitted in the flood plain. The uses permitted include those mainly associated with agriculture and recreation; buildings may only be constructed under very limited conditions. Land uses that could hinder the flood plain function are permitted only as conditional uses, while those that restrict its function are not permitted. The zoning ordinance was further amended in 1986 to only 25% of the land area lying within a flood hazard be permitted as part of an overall density calculation. This key provision could be further enhanced by applying the same principal to lot area calculation. A percentage of land as determined by the Township could be excluded from the minimum lot area requirement permitted in that zoning district. The lot may still include flood plain, however, the majority would need to be unconstrained to provide a safe building envelope. As a result, a proposed lot would be required to have a minimum of one acre (for example) free and clear of flood plain soils.

- ***Incorporate zoning ordinance provisions aimed at protecting wetlands.***

Wetland protection laws regulating the filling of wetlands of over one-half acre are in place at both the state and federal level. When properly identified on development plans and the appropriate permits sought through the responsible agencies (the U.S. Army Corps of Engineers or the Pennsylvania Department of Environmental Protection), these wetland regulations have been quite effective in preventing the further losses. Greater protection could be provided, however, through regulations and procedures specified at the municipal level that ensure that wetlands are in fact properly identified and appropriate permits obtained.

Presently, the Township requires that a conservation plan be submitted as part of the development application process, but there is no clear requirement that wetlands be identified. Tracts proposed for development should be surveyed for wetlands and the results shown on the conservation plan. In addition, wetlands should be defined in both the zoning and the subdivision and land development ordinance. Proof of review and approved permits can be required prior to final site plan approval.

The Township could adopt a requirement that wetland areas be excluded or “netted out” of lot area calculations. This would help to protect wetlands and ensure that any construction permitted on a lot can be completed without disturbing these sensitive areas. Additional measures include protecting the area surrounding the actual wetland (the fringe or buffer area) by requiring setbacks.

- ***Consider a water withdrawal ordinance as a way of monitoring ground water supply and demand.***

The continued availability of adequate groundwater to provide potable water to existing residents should be monitored by the Township. The geology of West Pikeland is such that groundwater resources may not be sufficient to support a high level of new development yet still provide for existing residents. Adoption of a water withdrawal ordinance should be considered as a way to evaluate the effect of proposed development on groundwater supplies to determine possible effects on neighboring properties. A key component of this type of ordinance is generally the requirement that a water withdrawal impact statement be prepared and submitted for review when new development is proposed. These types of ordinances are new and have yet to be used extensively at the municipal level, however, they do have the potential to assist in protecting the water supply for residents dependent on groundwater.

- ***Adopt a scenic overlay district for the Pickering Creek stream corridor.***

Both the Pickering and the Pine Creeks are critical resources in the Township. They have been recognized for their unique characteristics at the state level and local protection that complements this recognition should be considered at the municipal level through a scenic overlay district. A scenic overlay zoning district designation can be used to impose a higher degree of local regulation within the stream corridor (beyond restrictions imposed by flood plain regulation) such as buffer requirements, additional setbacks, mandatory cluster development and reduced density.

A scenic overlay district can also be used to help link greenways and facilitate trail development or other types of recreational use by giving the municipality a higher degree of control over adjacent development. The High Quality waters designation could potentially be used as a foundation for this type of designation and the Township can build upon the recognition to develop additional protective measures tailored to local objectives.

## HISTORIC RESOURCES

Protecting historic and cultural resources is a high Township priority as indicated by the Resource Protection goals and objectives. Historic resources are considered a critical component of the Township's rural landscapes and preserving these historic features, along with natural features, maintains balance by recognizing the effect of settlement and its impact on the land. In certain respects, the Township has been quite aggressive in protecting its historic resources as it is one of the few municipalities to have adopted two certified local historic districts (Yellow Springs Historic District and Anselma Mill Historic District) in accordance with the provisions of Pennsylvania Act 167 of 1961, the Historic District Act.

A certified historic district designation, adopted in accordance with the provisions of Act 167, provides for an indepth review of alterations and modifications to historic buildings in the district before a building permit is issued. The review is undertaken by the historical architectural review board (HARB) which in turn presents its recommendations on the appropriateness of proposed changes to the Board of Supervisors. The board then makes the final decision on issuance of the permit. The Township has also established an historic business district in its zoning ordinance to protect the existing businesses in the vicinity of Yellow Springs and facilitate the development of complementary uses.

The following recommendations are an outcome of the analysis of issues and concerns identified in the inventory chapter, and review of the associated goals and objectives.

### ⇒ **Recommendations for Historic Resources Protection**

- ***Emphasize preservation of remaining historic resources when developing a Village Protection Overlay District.***

The remnants of historic villages and hamlets are found at six intersections in West Pikeland and protecting these remaining resources will help preserve the Township's history and early settlement patterns. A policy that would address both of these objectives is one that encourages low level of new development to be focused in and around these areas. This policy could be accomplished (in part) through a village protection program and corresponding overlay zoning district that emphasizes protecting the size, scale and related characteristics of the village or hamlet, and promotes adaptive re-use and infill. Any new development occurring in these areas should be restricted to only those services intended to meet local needs. Any new construction should be designed to complement the village context and respect the Township's overall rural character.

The Township generally supports this type of approach as exemplified by the certified historic district designations for Yellow Springs and Anselma Mill, and by the historic business zoning district that addresses commercial development in the vicinity of Yellow Springs. The historic village preservation concept could be used to provide for a variety of uses as determined appropriate for each individual village or hamlet. Separate districts, each including specific design standards focused on maintaining the unique characteristics of each village, would serve to preserve the existing built environment while also ensuring that new development is complementary in terms of building coverage, lot size, setbacks, and signage.

Another consideration when planning for land use in and around villages is protecting key viewsheds from the village roadways through lot sizes, buffer provisions, and open space requirements that prevent scenic views from being obscured by new development. Protecting viewsheds is particularly important when planning for Yellow Springs, Rapps Corner, and

Anselma. Other aspects of the historic village preservation concept is discussed in Chapter 11, Land Use and Housing Plan.

- ***Complete a comprehensive survey of historic resources that builds upon the information contained in the Chester County Historic Sites Survey (1981).***

An historic resources survey is the way in which information on historic resources is both gathered and organized. The Chester County Historic Sites Survey was the first gathering of information on historic resources undertaken in the County and provided the basis for most preservation efforts that have occurred to date. A comprehensive survey is more detailed and in addition to field observation, includes research into the property's historical records. A comprehensive survey is intended to provide the data needed to appropriately evaluate the resource and make a determination as to whether it is worthy of further protective measures.

All comprehensive surveys should be undertaken in consultation with the State Historic Preservation Office (Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation). The PHMC can provide technical advice as well as supply the necessary guidelines and forms. It also offers matching funds for surveys, as well as a wide range of other historic preservation activities. One of the primary grants offered, the Historic Preservation Grant is specifically for local preservation projects including historic resources surveys.

The National Park Service is another source of information on both planning and undertaking a comprehensive survey. It has developed several publications that address this topic and copies may be obtained by contacting the regional office.

- ***Update the historic resources inventory based on the existing survey data.***

An inventory of historic resources is a listing of significant resources that meet a defined criteria. An inventory is prepared once all historic resources are surveyed and evaluated, it then is used to provide the basis for determining municipal actions. Preservation activities designed to protect those resources included in the inventory can be developed. One of the most important uses of the comprehensive survey and updated inventory is to provide a basis for an historic overlay district that protects historic resources located outside of districts or clusters.

- ***Consider an historic overlay district as part of the zoning ordinance update.***

In Pennsylvania, historic resources can be protected through a certified local historic district established under the auspices of Act 167, the Historic District Act, or through Act 247, the Municipalities Planning Code. The Township has used the approach enabled through Act 167 to preserve the architectural characteristics of both the Yellow Springs and Anselma Mill historic districts, however, there are no regulatory measures in place to preserve the individual historic structures prevalent in the Township's rural landscape. Act 247, the Municipalities Planning Code, enables protection of these types of historic resources through an overlay district that incorporates use, area and bulk regulations.

An historic overlay district can protect resources by allowing for additional uses, requiring setbacks that protect the context of the site, preventing inappropriate additions and offering incentives for maintaining historic facades. A delay of demolition provision may also be included to prevent demolition prior to a full review of all possible alternatives. Unlike a certified historic district enabled through Act 167, an historic overlay district established under the auspices of Act 247 cannot specifically provide for architectural review, however, it can facilitate historic preservation

through the application of carefully designed zoning regulations. An overlay district also has the added advantage of facilitating communication between the Township and prospective developers on the treatment of any historic resources located on the site.

- ***Continue to support the efforts of organizations such as the West Pikeland Municipal Land Trust, Historic Yellow Springs, French and Pickering Creeks Conservation Trust, Anselma Mill Trust, and Natural Lands Trust in protecting historic resources.***

West Pikeland Township's strong working relationship with area land trusts and preservation organizations that has enabled the protection of historic resources, within their contexts, without vast expenditures of Township funds or extensive regulatory measures. In this instance, the public and private sectors have each recognized the particular role that they are each able to play in preservation and have thus been able to complement the efforts of one another. This effective public-private partnership has resulted in the protection of historic resources and their contexts. These relationships should be nurtured through periodic meetings at which information is shared and issues of mutual concern addressed. Each should strive to support the activities and endeavors of the other that promote mutual historic preservation objectives.

⇒ **Recommendations for Developing a Municipal Historic Preservation Program**

- ***Consider appointing a Historical Commission to advise on general historic preservation issues in the Township.***

A historical commission differs from a historical architectural review board in that a commission is usually given broad responsibility for the local preservation program while a HARB is authorized specifically to make recommendations on architectural alterations and modifications proposed for certified local historic districts. A historical commission should be established by resolution of the Board of Supervisors and specific duties and responsibilities may be assigned at that time. The overall purpose of a historical commission is generally to monitor preservation in the municipality and advise the Board on issues of historical importance. It is also usually assigned the responsibility to carry out the Township's historic preservation program.

- ***Encourage the preparation of "multiple resource" National Register nomination to recognize and document scattered rural resources and clusters.***

Several sites and districts in West Pikeland Township have been listed in the National Register of Historic Places, the nation's official list of historic resources. They are described in Chapter 4. Listing is largely honorary, but it does provide for some protection through provisions that require that all federally funded projects and actions be reviewed for their potential impact on properties both listed and determined eligible for inclusion. The owners of National Register properties are also eligible to apply for certain grants and take advantage of preservation tax credits.

Multiple resource nominations are a type of National Register nomination that could be especially applicable in West Pikeland. It offers a way of recognizing diverse rural historic resources that may not necessarily be in proximity to one another. A thematic nomination recognizes rural resources that are similar in nature, but not all located in one area. The comprehensive survey and the updated inventory can form the basis for determining which properties should be considered for nomination.

- ***Encourage the protection of historic resources through education.***

One of the most important elements of a historic preservation program is education. Conservation easements, tax credits, maintenance, adaptive reuse and rehabilitation are examples of topics that can be addressed in an educational program. Providing information serves the dual purpose of generating support for Township sponsored preservation measures such as adoption of a historic overlay district or development of a historical park, while also encouraging private preservation measures.

- ***Sponsor activities such as house tours, educational seminars, preservation workshops, and local recognition programs as part of a historic preservation program.***

Historic preservation extends beyond protecting architecturally important buildings from demolition. Informational programs and community activities that teach about local history, the importance of preserving the built environment and need to protect what remains of the past can increase interest in historic preservation and lead to support for more comprehensive programs. West Pikeland Township is fortunate to have within its borders, both the Yellow Springs and the Anselma Mill historic districts, both of which can potentially be used as venues for various preservation activities.

- ***Develop a comprehensive Historic Preservation Plan for West Pikeland Township using Chester County's Historic Preservation Planning Grant Program.***







West Pikeland has several types of historic resources located within its borders ranging from villages with several buildings, to individual structures on relatively small lots. Each type of resource requires a slightly different preservation approach. For example, preserving the historic resources found in a village will differ from the approach taken to protect a farmstead, which in turn differs from preserving an individual structure. A comprehensive historic preservation plan is a technique that allows the municipality to design a program specifically suited to its own goals and to identify and discuss implementation measures in greater detail. It provides for a higher degree of specificity than that typically found in municipal planning documents. The Chester County Planning Commission offers grants to municipalities interested in developing a historic preservation plan. A manual outlining the recommended approach is also available.

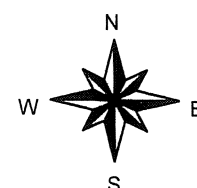
## CONCLUSION

Protecting the environmental and historic resources that creates West Pikeland's unique rural character is a high priority. Much of the policy contained in the recommendations presented emphasizes identifying these resources at the time new development is proposed to ensure that they are considered, and protected, before the development plan is finalized. To accomplish this, changes are needed to the Township's regulatory documents, specifically the zoning ordinance and subdivision and land development ordinance. Many considerations are offered to guide the implementation of this policy as these ordinances are updated. Other recommendations fall outside the purview of these regulatory documents and require separate action. Achieving the Township's goals and objectives necessitates adherence to an overall policy that provides for flexibility in land use and site design, in exchange for resource protection.



# **MAP 8-1: Environmental Resources Composite**

-  Wetlands, 100 - Year Floodplain, & Areas of Very Steep Slope
-  Historic District
-  Site Listed on National Register of Historic Places
-  Other Historic Site
-  Hydric Soils & Local Recharge Areas
-  Areas of Steep Slope (15-25%) & Agricultural Soils
-  Significant Wooded Areas
-  Developed Land



100 0 100 200 300 400 Feet

Source: Open Space, Recreation, and Environmental Resources Plan, West Pikeland Township, prepared by Thomas Comitta Associates, Inc. December 16, 1992.

***West Pikeland Township***

**Comprehensive Plan**

## Chapter Nine

# TRANSPORTATION AND CIRCULATION PLAN

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A direct correlation exists between land use planning and planning for transportation networks in West Pikeland Township. Transportation opportunities or limitations frequently determine the location and appropriateness of different land uses. This interdependency has been considered in the formulation of the transportation and land use plan recommendations.

The Transportation and Circulation Conditions (Chapter Five) outlined the transportation trends, including modes of transportation, circulation system, existing functional classifications of roadways, roadway and bridge conditions, scenic road preservation, and alternative forms of transportation impacting the Township. Techniques and strategies are recommended in this chapter to address the identified planning implications.

Consistent application of these recommended strategies would most effectively achieve the Township's overall goal and objectives identified for Transportation and Circulation:

### ***TRANSPORTATION AND CIRCULATION GOAL:***

***Provide for a safe and effective circulation system that minimally impacts the Township's rural character, open space and scenic roadways.***

### **Objectives**

- Facilitate road safety improvements that comply with the Township's functional classification system.
- Identify and improve circulation system deficiencies on an on-going basis and coordinate road improvements with new development.
- Work cooperatively with state and federal officials in identifying, planning, and implementing roadway improvements.
- Develop an access management program to reduce roadway conflicts and provide safe and efficient access to the road network.
- Maintain the rural and scenic character of selected roadways.
- Identify and improve non-vehicular circulation networks.

The following recommendations address the issues and implications raised in the Chapter 5, Transportation and Circulation Conditions, and the goals and objectives stated above. A summary of these recommendations is located in Chapter 12, Implementation Strategies. Recommendations for Transportation and Circulation Plan are provided under the following categories: Future Functional Classification System of Roadways, Road Improvements and Funding Opportunities, Non-Vehicular Circulation, Access Management, Scenic Road Preservation, and Regional Issues.

## FUNCTIONAL CLASSIFICATION SYSTEM

As discussed in Chapter 5, the Functional Classification System organizes roads and road segments in a hierarchy based on the function they serve, according to the following criteria:

- Average traffic volumes;
- Roadway design or design capacity (the traffic volumes that a road or road segment was designed to handle);
- Spatial relationship of the road segment to other nearby roads;
- The perceived average trip length; and
- The function of the road segment (access or mobility).

Chapter 5 also discusses, the functional classification designations assigned to major roads by the County and State are inconsistent with the designations assigned by the Comprehensive Transportation Study For the Official Map of West Pikeland Township (Draft), done by Pennoni Associates Inc. in August 1989. This gives rise to potential inconsistencies in roadway design, carrying capacity, and level of service. These inconsistencies need to be resolved to achieve efficient access and mobility functions.

### ⇒ **Recommendation for Future Functional Classification of Roadways**

- ***Adopt a unified, township wide, future Functional Classification of Roadways, and a set of design standards to relate directly to each class of roadways, to achieve the Township's goal to maintain the rural character.***

For the purposes of this Plan, the future roadway functional classification system for the Township will consist of:

- Expressway,
- Principal and Minor Arterials,
- Collectors, and
- Local Roads.

Map 9-1: Future Functional Classification of Roadways, shows the different designations assigned to major roadways in the Township.

The majority of Township roads are assigned as Local Roads, as their main function is providing access to adjacent properties. Local roads need to be further divided into more distinct classes – primary and secondary distributors and local access roads. This recommendation is a significant departure from existing classifications assigned by the State and County (see Chapter 5).

- ***Local Roads should be further classified to accommodate the diverse functions of local roadways.***

Commonly, all roads with lower functions than collectors are classified as local roads, but there are significant differences in these roads that should be recognized. For example, a residential cul-de-sac serving five to six lots functions very differently than a long rural lane that carries some through traffic in addition to providing access to adjacent properties. Because, existing

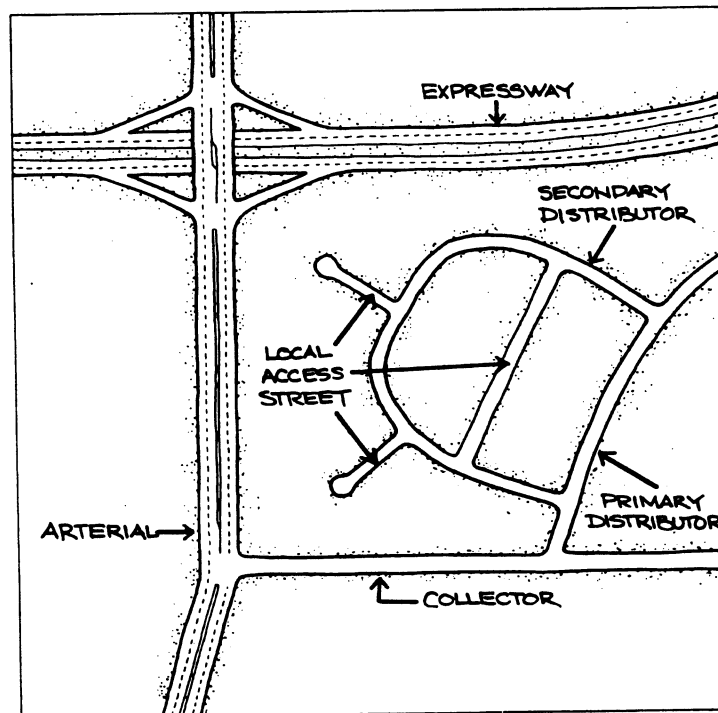
classification systems do not differentiate these functions, they are commonly over-classified to higher functioning roads, such as Collectors. Therefore, there is a need to further classify local roads as described below and depicted in Figure 9-1. The other reasons to further classifying local roads are to maintain their preferred road design, and assign priority related to class for maintenance and snow removal.

Primary Distributor – These roads primarily serve an access function, but may be relatively long and may connect two higher functioning roads. A farm lane that provides access to adjacent properties, but that may have some mobility component, and which has a few developments feeding into it is an example of a primary distributor. Roads designated as Primary Distributors are Davis Road, Bodine Road, Horseshoe Trail Road north of Route 113, and Art School Road going southeast to northwest.

Secondary Distributor – Although these roads serve almost exclusively as local access, some may have other smaller local access roads feeding into them and serve a minimal mobility function in addition to the access function. An example of such a road is a rural road that is of some length and could be used for mobility purposes, but that rarely serves trips other than local access trips. Roads designated as Secondary Distributors are Pikeland Road, Yellow Springs Road, Street Road, Horseshoe Trail Road south of Route 113, Eagle Farms Road, Lower and Upper Pine Creek Roads.

Local Access – These roads are the lowest functioning of all roads and serve as direct access to properties. Most roads within individual residential subdivisions are local access roads. Examples include Dunsinane Hill Road and Elbow Road.

**FIGURE 9-1  
FUNCTIONAL CLASSIFICATION OF ROADS**



Source: Chester County Planning Commission, 1993.

Table 9-1 contains recommended criteria for all of the classifications ranging from Local Access to Expressways. In developing these criteria, a priority was placed on establishing consistency within each classification and a linear relationship among each classification within each type of criteria. For example, travel distances are longest on expressways and short on local access, with a linear progression in travel distances for the classifications between these two extremes. The criteria discussed for each classification are:

- Type of travel generally served;
- Mobility/access orientation;
- Travel distance;
- Travel speeds;
- Level of access control; and
- Traffic volumes (discussed in Chapter 5)

**TABLE 9-1**  
**FUNCTIONAL CLASSIFICATION CRITERIA**

CATEGORY	EXPRESSWAY	ARTERIALS		COLLECTORS	LOCAL ROADS		
		Principal Arterials	Minor Arterials		Primary Distributor	Secondary Distributor	Local Access
<i>Type of Travel Generally Served</i>	Serves inter-regional and through trips, with emphasis on through trips	Serves inter-regional and through trips	Serves inter- and intra-regional trips; very few through trips	Serves mostly intra-regional trips; inter-regional primarily near edges of region	Serves primarily local access function, but long enough to serve mobility function as well	Serves local access function almost totally, but may have other, smaller, local access roads feeding into it	Serves total local access function, with highest degree of access to parking, property & buildings
<i>Mobility/Access Orientation</i>	Total mobility orientation	Primary mobility orientation	Priority on mobility, with some access component	Mix of mobility and access, slight emphasis on access	Priority on access, with minimal mobility component	Nearly total access function	Total access function
<i>Travel Distance</i>	Longest distance travel	Long distance travel	Moderate to long distance travel	Moderate to short distance travel	Very short distance travel	Extremely short distance travel	Shortest distance travel
<i>Travel Speeds*</i>	Highest level speeds (55 - 65 mph)	High travel speeds (35 mph – urban; 55 mph – rural)	Moderate to high travel speeds (30 mph – urban; 45 mph – rural)	Moderate travel speeds (45 mph)	Slow travel speeds (25 - 35 mph)	Very slow travel speeds (15-25 mph)	Slowest travel speeds (15-25 mph)
<i>Level of Access Control</i>	Limited access - interchanges only	Controlled access	Some control of access	Some control of access	Minimal access controls	No access controls	No access controls
<i>Traffic Volumes</i>	Highest traffic volumes (10,000 – 100,000 ADT)	Very high traffic volumes (10,000 – 40,000 daily trips)	Moderate to high traffic volumes (5,000 – 20,000 daily trips)	Moderate traffic volumes (2,000 – 10,000 daily trips)	Low traffic volumes (750 – 2,000 daily trips)	Minimal traffic volumes (500 – 1,000 daily trips)	Lowest traffic volumes (less than 500 daily trips)

\* Design Speeds and not posted speeds.

Source: Chester County Planning Commission (1999)

Except for travel speeds and traffic volumes, the criteria applied to the functional classification of roadways in Table 9-1 are qualitative or, cannot be easily measured. Because of this qualitative nature, it can be difficult to apply these criteria to specific roadways. Applying criteria to an entire road network therefore involves many judgement calls. The primary objective is to achieve reasonable consistency throughout the Township as a whole, even if a particular road does not meet all of the criteria for the classification it is given.

- ***Commission a detailed study to assign classes to all local roads in the Township into the three classes discussed above for local roads.***

Since traffic volume data is not available for all local roads in the Township, a detailed study needs to be done to assign classes to local roads. A set of design standards needs to be derived to relate directly to the function of the roadway, and to achieve the Township goal to maintain its rural character. Design standards for the higher functioning roads are generally inclined in favor of transportation function, while design standards for all lower functioning roadways should emphasize scenic character over transportation function.

For example, lower functioning roads should be permitted to have narrower cartway widths and sharper curves than a higher functioning road may have. In addition, a community can allow (or require) a landowner to preserve hedgerows, walls, fences, and other historic features in order to preserve rural character.

## **ROAD IMPROVEMENTS AND FUNDING OPPORTUNITIES**

### **⇒ Recommendations for Roadway Improvements**

- ***Program for roadway improvement projects that support the Township's goal to maintain its rural character, and preserve historic and cultural resources abutting roadways.***
- ***Give utmost importance to safety improvements throughout the Township.***

Intersection and road segment improvements range in scope from the implementation of signage to significant intersection re-configuration and/or traffic signalization. The recommended improvements are outlined in importance according to the functional classification, accident data, and anticipated volume increase of a specific road segment or intersection. These recommendations coincide with the Township's goal of providing a safe and efficient circulation system while preserving the rural character of the roadways. Therefore, ***safety improvements*** are of the highest priority in the Township. While capacity improvements are generally limited to higher functioning roadways such as Routes 113 and 401, safety improvements are essential for all other roadways.

Most of the major roads in the Township are state owned roads (see "Turn Back of State Roads"). Therefore, the Township needs to work closely with the State to progress with the needed improvements. Thus, applying for turnback of certain State roads may be helpful to improve roads in a timely manner.

There are three specific areas in the Township that are recommended for improvement:

The intersection of Route 113 and 401 – The highest levels of traffic volume was recorded at this busiest intersection in the Township. Chapter 11: Land Use Plan recommends the highest intensity development near this intersection. This in addition to the “D”, “E”, and “F” level of service in 1999, indicates that this intersection will need improvements immediately. The state has recognized this and included it on the Twelve Year Program. “Channelization and Modern Signals” are scheduled to be installed in the first four years of the 1999 program. (See Chapter 5: Transportation and Circulation Conditions.) This intersection needs to be reevaluated periodically to monitor any problems that need to be addressed.

The intersection of Yellow Springs Road and Route 113 – The second highest occurrence of accidents in the Township occurred at this intersection. This intersection has sight distance and alignment problems. It is recommended that, before any other improvements are discussed, the Yellow Springs bridge over Pickering Creek be upgraded. This is placed on the State Twelve-Year Program for replacement. Once the bridge is upgraded a series of recommended improvements can be implemented in order to increase both mobility, access, and in turn alleviate safety concerns. These possible improvements include:

- Signage to direct turning movements and access to the proposed village;
- Left turn lanes on Route 113;
- Safety improvements at the Yellow Springs Road intersection with Route 113.
- Access management strategies to alleviate access and safety issues.
- Traffic signal, when warranted, to facilitate pedestrian crossings.

PA Route 113 – An overall improvement to Route 113 would be to provide left turn lanes at all major intersections – at Davis Road, Horse Shoe Trail Road, Pikeland Road, and Clover Mill Road. This will enhance the access and mobility and in turn improve safety of this arterial roadway.

- ***Update the Road Improvements Inventory periodically to identify all improvement projects in the Township.***
- ***Develop a list of prioritized improvement projects.***

The Township should update the Road Improvements Inventory periodically to identify all roadway improvement projects, based on the annual road inspection performed by the Board of Supervisors. This survey can act as the basis for prioritizing projects, and recommending major projects to be included in the Chester County Planning Commission Highway Improvements Survey and the PennDOT Twelve Year Program. If the road to be improved is a state road, it will necessitate working with PennDOT.

The recommended Road Improvements Inventory could include projects to enhance the following access, mobility and safety issues:

- Enhance mobility on corridors such as Routes 113 and 401, through a series of improvements including access management, widening, left turn lanes, lane channelization, and provision for right-of-way expansions.
- Identify bridges along major roads that need to be preserved or restored for their historic value, or replaced due to safety reasons.



- Limit improvements on existing bridges on local roads to safety improvements.
- Limit improvements on local road segments and intersections to safety improvements.
- Other possible improvements could include – signage, intersection reconfiguration, traffic signalization, turning lanes, and sight distance improvements.

⇒ **Recommendation for Turn Back of State Roads**

- ***Consider applying for “turn back” of selected state roads to local municipalities.***

Apart from Routes 113 and 401, State owned roads in the Township are - Clover Mill Road, Art School Road/Yellow Springs Road from West Vincent Township to Route 113, Lower Pine Creek Road, Seven Oaks Road, Newcomen Road, and Byers Road.

This program allows the state to gradually turn back state roads to municipalities. PennDOT and the Township negotiate an agreement for each road, stipulating what short-term maintenance PennDOT would perform before turning the road back to the Township. Once turned back, the Township is responsible for maintenance and repairs to the road, but would also receive liquid fuels funds from the state to offset some of the costs. The Township may want to consider applying for “turn back” of certain state roads because of possible benefits, including the following:

- Maintenance and improvements initiated by the Township may be more appropriately carried out at the local level;
- Snow plowing and roadway improvements can occur in a more timely manner;
- Ability to ensure that future development or necessary improvements have the minimum impact on the scenic character of these roads.
- The Township can add traffic calming devices to control speeding and discourage “drive through” traffic.

If the Township is interested in this program, they can acquire further information from the Chester County Maintenance Office for PennDOT (610- 436-2091). The Township would directly approach PennDOT with their basic proposal. PennDOT's Municipal Service Office will then meet with the Township to discuss basic issues and process, and ways the Township can pursue the proposal

⇒ **Recommendations for Funding of Transportation Projects**

- ***Pursue funding possibilities for the major prioritized transportation and circulation projects.***

The Township needs to consider how to fund the improvements that are identified in this plan and by the annual Road Improvement Inventory conducted by the Township. There are a variety of funding resources for roadway improvements, each with limitations on what types of projects are eligible, some with requirements for local matching funds, and each with different programming requirements. A list of funding sources, with brief discussions of eligibility and matching fund requirements, is shown in Table 9-2. Township leaders should familiarize themselves with these sources and consider which sources may be applicable, as the need for improvements arise.

**TABLE 9-2**  
**TRANSPORTATION FUNDING OPPORTUNITIES**

SOURCE	FUNDING TITLE	TYPES OF ELIGIBLE PROJECTS	FUNDING SPLIT	ELIGIBILITY	REQUIRED PROGRAMMING
Federal (T-21)	National highway system	Construction or reconstruction of "major" roads	80% Federal 20% State	Roads must be on the designated National Highway System	PennDOT 12 Year Program, DVRPC TIP
Federal (T-21)	Surface transportation program (STP)	Construction, reconstruction, rehabilitation, resurfacing, restoration and operational improvements for highways and bridges; Transit capital costs; and travel demand reduction improvements	80% Federal 20% State Or Local	For use on any roads which are not classified as local or rural or minor collectors	PennDOT 12 Year Program, DVRPC TIP, State Capital Budget
Federal (T-21)	Safety component of STP	Various types of safety improvements which mitigate documented safety problems	80% Federal 20% State	For use on any roads which are not classified as local or rural	PennDOT 12 Year Program, DVRPC TIP, State Capital Budget
Federal (T-21)	Transportation enhancement activities	Bicycle and pedestrian facilities; acquisition of scenic easements and scenic or historic sites; landscaping and beautification; and other environmental related programs	80% Federal 20% State Or Local	For use on any roads which are not classified as local or rural minor collectors	PennDOT 12 Year Program, DVRPC TIP, State Capital Budget
Federal (T-21)	Bridge	Construction, reconstruction or rehabilitation of bridges	80% Federal 20% State Or Local	For any bridge on a public road	PennDOT 12 Year Program, DVRPC TIP, State Capital Budget
Federal (T-21)	Congestion mitigation and air quality improvements	Projects which contribute to meeting the attainment of National Air Quality standards; eligible projects to be determined by USDOT Secretary	80% Federal 20% State	Projects must be part of a Congestion Mitigation Air Quality Plan	PennDOT 12 Year Program, DVRPC TIP, State Capital Budget
Federal (T-21)	Toll roads	Construction and rehabilitation of toll facilities including roads, bridges and tunnels	50% Federal 50% State Or Local	For use on publicly owned facilities and in some cases privately owned facilities	PennDOT 12 Year Program, DVRPC TIP, State Capital Budget
Federal	Community Development Block Grant	Construction and rehabilitation of streets, bridges, pedestrian or parking facilities	100% Federal (HUD)	Project must benefit low-to-moderate income housing	Approval from County Office of Housing and Community Development and State Bureau of Housing and Development
State	Safety and mobility initiatives	Various types of safety and capacity improvements on highway corridors	80% Federal 20% State	For use on state roads	PennDOT 12 Year Program, DVRPC TIP, State Capital
State	Bridges	Construction, reconstruction or rehabilitation of bridges	100% State or 80% State & 20% Local	For use on state and local bridges	PennDOT 12 Year Program, DVRPC TIP, State Capital Budget

Chapter 9 – Transportation and Circulation Plan

SOURCE	FUNDING TITLE	TYPES OF ELIGIBLE PROJECTS	FUNDING SPLIT	ELIGIBILITY	REQUIRED PROGRAMMING
State	Cooperative agreements	Limited safety and maintenance improvements	Materials provided by PennDOT, labor provided by municipality	State roads only, less than \$5,000 cost	
State	Betterment or "3r"	Minor reconstruction or major resurfacing of roads and bridges	100% State or 80% State & 20% Local	For use on state roads	PennDOT 12 Year Program, DVRPC TIP (If Federal Funds are used)
County	Bridges	Construction, reconstruction or rehabilitation of bridges	100% County (Liquid Fuels Fund)	For use on county bridges	County Engineer's Program
State/ Municipal	Transportation partnership	Various safety and capacity improvements	Federal or state share varies by project	Based on the requirements of State Act 47 of 1985	PennDOT 12 Year Program, DVRPC TIP (If Federal Funds are used)
State/ Municipal	Traffic impact fees	Various capacity Improvements as defined in the required Land Use and Traffic Studies conducted by the municipality	Funding share is determined in the capital improvements plan; maximum state participation is 50%	Based on the requirements of State Act 209 of 1990	Municipal Capital Improvements Plan, State Capital Budget, DVRPC TIP (if Federal Funds are used)
Municipal	Debt financing	Various capacity, safety or maintenance improvements as defined by appropriate statute	100% Municipal	Limit of indebtedness regulated by State statute; projects must be approved by the governing body and in some cases by the electorate	Municipal Budget
Municipal	General fund	Various capacity, safety or maintenance improvements as defined by appropriate statute	100% Municipal	Projects must be approved by the governing body; restrictions are identified in the municipal code	Municipal Budget
Municipal	Liquid fuels fund	Construction, reconstruction or maintenance of bridges and roads	100% State Municipal Allocations Are Based On Legislative Formula	Projects must be approved by the governing body and PennDOT; road must be on the approved liquid fuels system	Municipal Budget Program

Source: The Chester County Planning Commission, 1999.<sup>1</sup>

<sup>1</sup> This list is currently being updated, and will be included in the final document.

## ACCESS MANAGEMENT

Access management is a program designed to achieve a balance between safety, mobility, and access onto abutting properties from roadways. Access management problems occur where conflicts between mobility and access exist, resulting in congestion and safety issues. Access management is most critical on roads with competing functions, such as Routes 113 and 401 where, though they have a predominant mobility function, they also provide access to businesses and residential properties.

### ⇒ Recommendations for Access Management

- ***Develop an Access Management Plan that reflects cohesiveness throughout the Township, in the form of an overlay district. Establish access restrictions for each functional class in conjunction with access management programs.***

The ability to control access points on selected roadways is becoming an important issue in the Township. This section describes several access management techniques that can be implemented to correct existing problems and to aid in preventing future access management problems. The Township should refer to PA. Route 113 Access Management Study (1991) to adopt an overlay district. The PA Route 113 Study recommends several access management solutions to local problems (Map 15 A-B), including channelization and left turn lanes at major intersections.

### Access Management Strategies

#### **Rights-of-Way**

A right-of-way is the portion of a property that is reserved for future road improvements. Typically, rights-of-ways are measured from the centerline of a road and the uses permitted in the right-of-way are restricted to nonstructural. For the purposes of future improvements to a road, the amount of right-of-way required should be related to the function of the road. Requirement of sufficient rights-of-way is important for guaranteeing that the necessary amount of land is available for any future improvements. See Community Planning Handbook (Toolbox Volume II), Tool #62, for additional information on Right-of-Way Preservation.

#### **Signal Timing**

Often access management problems can be alleviated by adjusting the phasing, timing, or interconnection of existing signals. The phasing for the signal at 113 and 401 intersection needs to be examined to improve mobility through the intersection. This is scheduled to be done with the other improvements for this intersection in the first four years of the 1999 PennDOT Twelve-Year Program.

#### **Setbacks**

A setback is the minimum distance from the roadway or the right-of-way line that buildings are permitted to be constructed. Setbacks, especially when used in conjunction with rights-of-way, can aid in reserving land for future road improvements. Setbacks should be measured from the ultimate right-of-way so that if a road is expanded in the future, structures will be an appropriate distance from the road improvement. Setbacks will typically be greater the higher the functional classification of the road. In the case of some settings, like a historic village, setbacks may remain smaller to maintain the existing historic character of the resource.

### **Types of Access**

Often the types of access on a given road affect the safety and function of that road. There are several types of accesses that can reduce potential conflicts.

**Shared Driveways:** One option is to encourage the use of shared driveways. Sharing driveways reduces the number of access points on a given road segment and results in fewer points where turning movements are required. The current access to the Township Building and the Post Office is a good example for this technique.

**Control of Curb Cuts:** In areas that have potential for intense development, the control of curb cuts could be adopted to minimize interference with the free flow of traffic. Instituting curb requirements, along with controlling where openings in the curb occur reduces traffic conflicts.

**Driveway Controls:** In the more sparsely developed areas of the Township, driveway controls (such as minimum distances between driveways) are useful. This ensures that driveways are placed so that there will be minimum hazard to the roadway user, and the least interference with the free movement of traffic.

The ultimate result of these strategies is increased safety and enhanced mobility on the road.

### **Reverse Frontage**

Reverse frontage is a technique that requires access from the rear of the property, when a property fronts on two roads of different functional classification. In effect, turning movements are restricted to a minor road allowing for a free and uninterrupted movement on roads of higher function. This technique can be beneficial because it reduces potential dangerous movements and allows traffic to move more freely on higher order roads.

### **Acceleration and Deceleration Lanes**

These lanes provide a transition between through movement traffic and traffic attempting to access a road. An acceleration lane provides an opportunity for traffic making a right turn onto a primary road to accelerate before merging in with traffic. A deceleration lane separates high speed through traffic from decelerating right turn traffic on the primary road.

### **Turning Lanes**

Providing additional left turn storage areas into and out of access points decreases the accident rate and improves capacity of adjacent roads and access points. This could be applied to all major intersections with Routes 113 and 401.

### **Implement Side Accesses**

This refers to an access point between adjacent parcels. It does not preclude frontage access, however, it provides an opportunity for traffic to move from parcel to parcel without using the primary road. This is a particularly useful technique to implement in areas of concentrated commercial and industrial uses.

The subdivision and land development ordinance of the Township should require an access management plan when a development proposes access onto major roads such as Routes 113 and 401. The above techniques should be implemented in these plans to reduce the possibility of future access problems. The Township can also consider adopting an Access Management Overlay District to ensure the consistent application of these techniques.

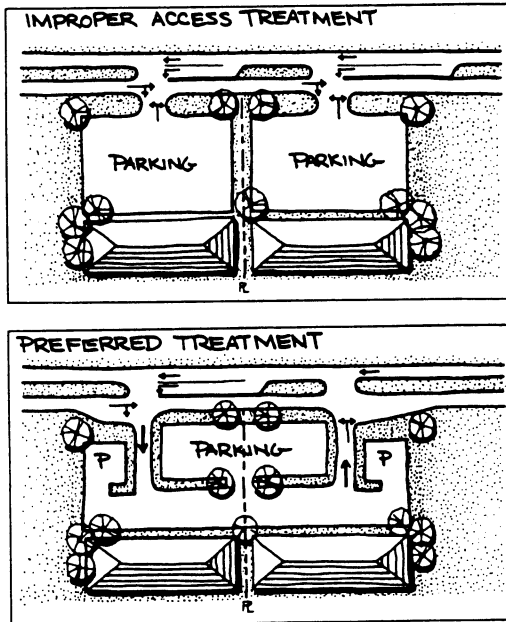
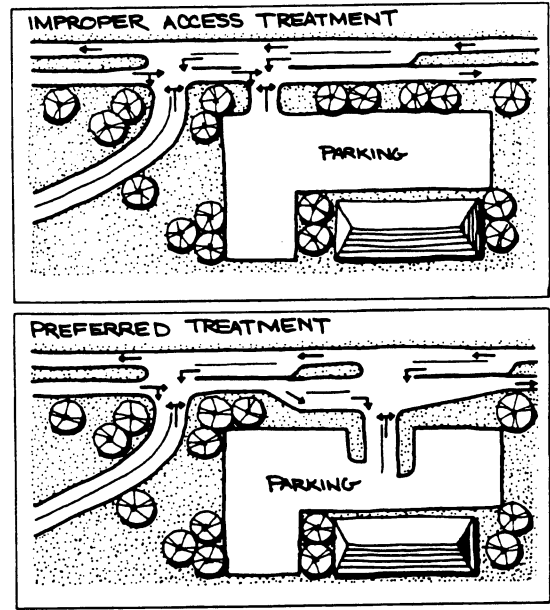


FIGURE 9-2: SHARED DRIVEWAYS



Source: Chester County Planning Commission, 1993.

FIGURE 9-4: DRIVEWAY CONTROLS

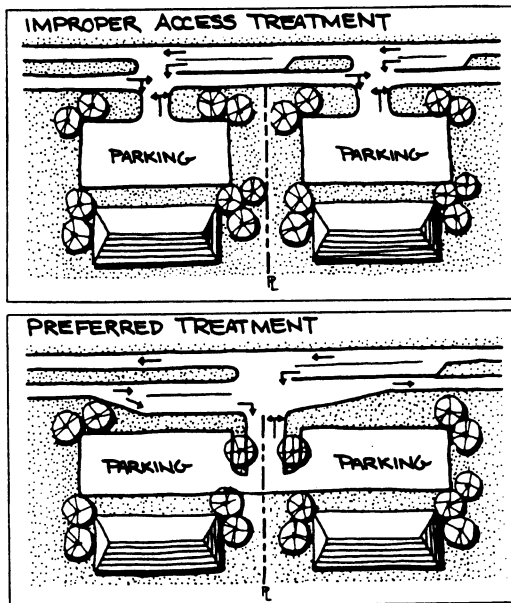


FIGURE 9-3: CONTROL OF CURB CUTS

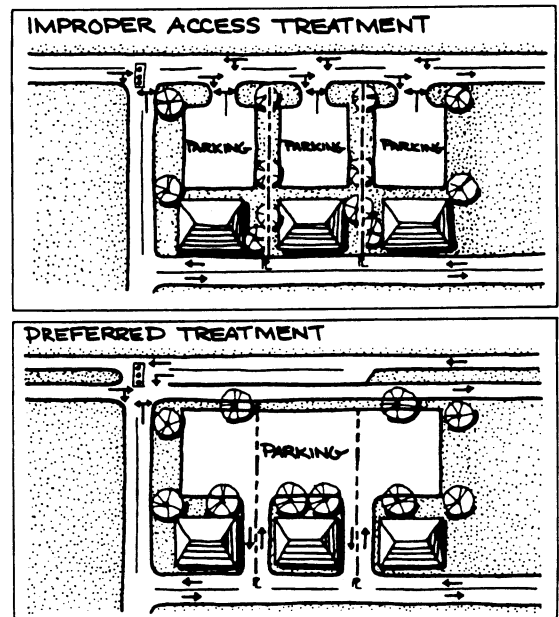
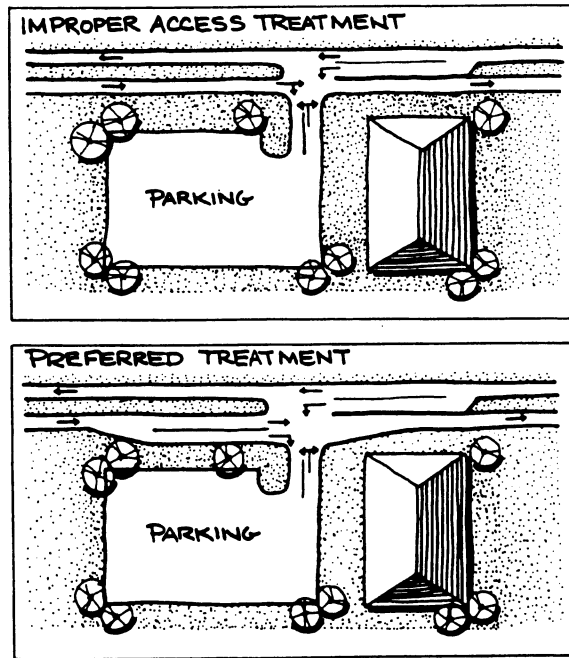


FIGURE 9-5: REVERSE FRONTAGE



Source: Chester County Planning Commission, 1993.

FIGURE 9-6: ACCEL AND DECEL LANES

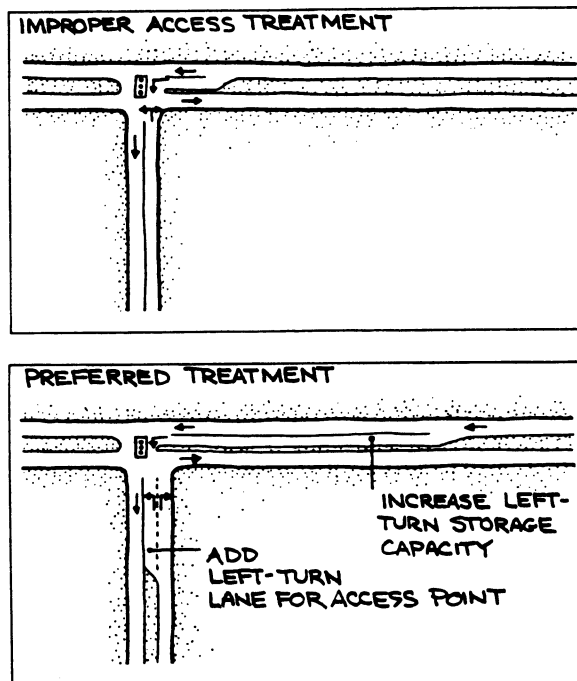


FIGURE 9-7: LEFT TURN LANES

⇒ **Recommendation for Coordination between Land Use and Transportation Planning.**

- *Coordinate future land use planning and transportation planning for the Township as they strongly influence each other.*
- *Consider road functional classes when making land use decisions.*

Due to the strong correlation between transportation planning and land use planning, land use policy should be closely reviewed and monitored in terms of its impacts on the road network and its functional classification. The Township should review zoning districts regulating land uses, as they relate to roadway access, mobility and capacity. The future land use recommendations of this Plan can help to provide overall coordination for transportation planning as well. The Township should work towards integrating existing land use plans, land use ordinances, and transportation and circulation planning. This will reduce potential conflicts between land uses and the capacity and function of the abutting roadway.

<b>NON-VEHICULAR CIRCULATION</b>
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There is a need to identify important pedestrian connections and bike routes within the Township. This can help in preparing an interconnected pedestrian trails and bike routes plan, linking destinations within and in the immediate vicinity of the Township.

⇒ **Recommendations for Non-Vehicular Circulation**

- *Develop an Equestrian, Bicycle and Pedestrian Circulation Plan that would link the various amenities and trip generators of the Township.*

Non-vehicular circulation includes networks for walking, jogging, bicycling, and horse riding. Pedestrian facilities are becoming an increasingly important means to link various amenities, and as a way to tie various open spaces together to make them more useful and accessible. In addition to the obvious health and environmental benefits, pedestrian and bicycle circulation can help decrease congestion on local roads and create recreational opportunities. In a rural community, with no centralized commercial facilities the potential that does exist is primarily for open space trail networks and sidewalks within subdivisions. Currently, therefore, no opportunities for a linkage between residential and commercial uses exist. However, with the plan to concentrate services in “villages”, opportunities for such a linkage may expand. The following recommendations for pedestrian circulation design features should be considered

- A sidewalk or trail linkage should be implemented between the Library, Post Office, Montgomery School and any nearby residential or commercial facilities.
- Crosswalks should be installed (along with vehicular speed controlling devices) along roadways adjacent to “villages” promoting safe pedestrian access between uses.
- Pedestrian islands and pedestrian activated signals should be installed where they are necessary to ensure the personal safety of pedestrians accessing this mix of uses.



- ***Work with potential developers to provide and preserve trails to achieve the goals of the recommended Equestrian, Bicycle and Pedestrian Circulation Plan.***

In rural areas, it is important to designate possible trail corridors before development removes all possible links to a trail system. Land which has development constraints, such as stream valleys, flood plains, or poor soils are possible areas for trails. At times when no possible link is available, trails may be routed on to roads, although proper safety improvements may be required. Route 113 can be anticipated to be improved to accommodate bike travel lanes in the future. The Township should consider consulting with groups such as the Chester County Cycling Committee in order to include bicycle specific road improvements in the Road Improvement Inventory.

In rural areas, a trail system commonly links villages, neighborhoods, parks, open spaces and educational facilities, and accommodates pedestrians and horseback riders commuting between homes and various destinations or recreational users. Usually, this type of system is comprised of trails that require minimal improvements since they are best suited in their natural state.

Bicycle circulation has special requirements. Natural ground surfaces of trails are usually too irregular to accommodate bicycle travel. It is important to consider bicycle circulation, as a distinct form of circulation due to these ground surface needs. Segments of a trail network can be considered for bicycles if surface improvements are made. Low volume roads can also be used to accommodate bike travel, but on higher volume roads, bike paths should be provided on the shoulders.

The County is currently preparing a Bicycle and Pedestrian Trip Generator Map, to identify various trip generators in the County. Once these nodes (generators) are established, possible links could be determined. The Township Open Space, Recreation and Environmental Resources Plan (1992) designates recommended trail network and villages, which needs to be implemented. The 1992 Plan (see Map 8) designates trails along Pine and Pickering Creeks, and villages at Rapps Corner, Pikeland Village, Chester Springs, Anselma, and the Middle Pickering Rural Historic District (which extends into Charlestown and East Pikeland Townships).

## SCENIC ROAD PRESERVATION

### ⇒ Recommendations for Scenic Road Preservation

- ***Implement the recommendations of the Open Space, Recreation and Environmental Resources Plan (1992), to preserve the scenic character of the Township.***

Due to the predominant rural nature of the Township, several road segments throughout the Township are designated as scenic corridors in the Open Space, Recreation and Environmental Resources Plan (1992). The appropriate functional classification of scenic roads can provide a safe road network, and enhance the driving experience.

The scenic designations from the Open Space, Recreation and Environmental Resources Plan (1992) should be consulted. Included in the Open Space plan is a “Scenic, Historic, and Cultural Resources” map which illustrates and locates scenic roads, scenic views, visually significant

landscapes, vista points, and visual accents. These features are located throughout the Township but are concentrated along the Pine and Pickering Creeks. Several roads are located near or adjacent to the mapped features, including: Upper and Lower Pine Creek Roads, Horse Shoe Trail Road, Pikeland Road, and Elbow Road.

Although Pennsylvania Routes 113 and 401 are significant transportation corridors to both the Township and region, they are considered generally rural in nature and complimentary to the scenic character of the community. Future roadway improvements and potential adjacent development should be planned in such a way as to preserve that character to the extent possible, but not to the point of compromising traffic safety on these key roadways.

In order to meet this objective, the Township Subdivision and Land Development Ordinance should be amended to require landowners to preserve hedgerows, walls, fences, and other historic resources in order to preserve the rural character.

- ***Include an inventory of mature trees and their condition in the Road Improvement Inventory, to facilitate PennDOT in identifying trees in the state right-of-way in need of safety improvements.***

There are many scenic tree lined roads in the Township, which needs to be protected. Trees on state roads may be removed without the consent of the Township to protect from liability, thus detracting the scenic character of those roadways. The Township can take a proactive role to protect these mature trees. The Township could, as part of their Road Improvement Inventory, examine all trees too close to the right-of-way, and document any problems. A prioritized list of unsafe tree conditions can be provided to PennDOT, based on health of the tree, hazardous location and/or overhanging branches. The list could also include recommendations on whether the tree needs to be trimmed, scaled back or removed. This local initiative to protect valuable resources on a co-operative basis can be facilitated by this proactive role of the Township.

## REGIONAL PARTICIPATION

### ⇒ Recommendations for Regional Participation

- ***Participate in any regional road improvement efforts that support the overall goal of preserving the rural character of the Township.***

The Township needs to participate in any regional efforts to prioritize and fully support, with the aid of appropriate agencies, a hierarchy of road improvements. If the Region or individual municipalities are willing to commit to a percentage of the total improvement cost of a project, it is more probable that some of the required improvement options would be considered for funding by PennDOT. Projects receive a better chance of being placed in the first four years of the Twelve-Year Program if a matching or partnership funding approach is utilized.

- ***Participate in development proposals in neighboring municipalities that have major impact on Township roadways***

The Township needs to be proactively involved with neighboring municipalities, to provide input on development projects that may have potential impacts on the Township roads.

- ***Support any regional public transportation projects to provide a variety of options to the residents.***

As discussed in Chapter 5, there is very limited public transportation available to the residents of the Township, making them predominantly auto oriented. There is some opportunity for carpooling or ride sharing. This could aid in reducing traffic congestion during peak hours. The Township has no park and ride facilities, but the closest are located at the intersection of Routes 100 and 113, and Routes 30 and 100.

The proposed Schuylkill Valley Metro (SVM) rail service along the Schuylkill Valley corridor, and the Paoli Transportation Center, in Paoli are two regional projects that might have an impact on the Township.

The SVM is a proposed new rail passenger service being considered to connect the 62 mile corridor between Philadelphia and Reading, with 28 feasible stations on the route, with Phoenixville being one of them. There are many advantages to the region if the SVM becomes a reality; this alternate form of transportation would relieve traffic congestion, thereby reducing the pressure to expand existing local roadways/highways.

The Paoli Transportation Center is a proposed multi-modal transportation hub in Paoli, to integrate train, bus, pedestrian and other forms of transportation to connect them to Center City and other locations. With adequate parking facilities, and other transit oriented uses, this may facilitate the use of public transportation, and enhance other possibilities, like car pooling and van pooling to get to and from the Center.








With more public transportation options available at close proximity, more residents commuting to Philadelphia may opt to use public transportation than driving alone in their automobiles. If the need warrants it, additional park and ride lots can be located to facilitate commuters driving to the train stations. Another advantage of these regional rail projects becoming a reality for the Township is, they provide additional rail access, without the direct impacts of a station in the vicinity.

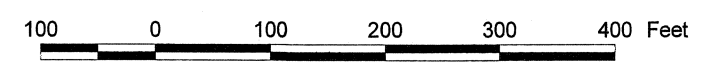
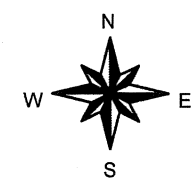
## **CONCLUSION**

The goal of the Township is to maintain the rural character, preserve open space and scenic resources from adverse transportation impacts, and provide a safe and effective circulation system. This can be met with the effective implementation of the recommendations discussed in this chapter. Chapter 12, Implementation Strategies, lists the plan recommendations, timing, and responsibility for implementing that strategy.

# Map 9-1: Future Functional Classification

## FUNCTIONAL CLASSIFICATION OF ROADWAYS

-  Expressway
-  Principal Arterial
-  Minor Arterial
-  Collector
-  Primary Distributor
-  Secondary Distributor
-  Local Access



This map was digitally compiled for internal maintenance and developmental use by the County of Chester, Pennsylvania to provide an index to parcels and for other reference purposes. Parcel lines do not represent actual field surveys of premises. County of Chester, Pennsylvania makes no claims as to the completeness, accuracy or content of any data contained herein, and makes no representation of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied or inferred, with respect to the information or data furnished herein.

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**West Pikeland Township**

Comprehensive Plan



## Chapter Ten

# COMMUNITY FACILITIES AND SERVICES PLAN

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Managing municipal facilities and providing community services that address the needs of residents is a municipal responsibility. This element of the Comprehensive Plan reviews these facilities and services and recommends additional measures to be considered in light of projected residential growth and land use patterns.

The goals and objectives related to community facilities and services, in conjunction with the analysis for the inventory data contained in Chapter 6, Community Facilities and Services, create the basis for the policy recommendations that follow. A review of West Pikeland Township's goals and objectives are summarized below.

### ***COMMUNITY FACILITIES AND SERVICES GOAL:***

***Provide for community facilities and services that address the needs of residents and are consistent with the overall goals for the Township.***

### **Objectives**

- Establish measures that protect the quantity and quality of water resources to ensure that the potable water needs of present and future residents are met.
- Adopt a Sewage Facilities Plan in accordance with Act 537 to address sewage disposal needs.
- Prioritize on-lot sewage disposal methods where feasible and accommodate alternatives when necessary.
- Continue to secure open space through purchase and the acquisition of easements, using both private and public funding sources, which will provide recreational opportunities as well as enhance the quality of life of Township residents.
- Monitor emergency services specifically police, fire and ambulance, to ensure that services are fiscally responsible and effective in meeting Township resident needs.
- Develop recreational opportunities in compliance with the Township's Open Space, Recreation, and Environmental Resources Plan (1992) that advance the physical and social needs of Township residents.
- Continue to recognize and support important cultural resources in the Township such as the Chester Springs Library, Historic Yellow Springs, and Anselma Mill.

The following recommendations address the issues and implications raised in the Chapter 6, Community Facilities and Services Inventory and the goals and objectives stated. They suggest changes to the provision of services in order to respond to the changing, and in many instances growing, needs of Township residents. They are not listed in priority order; however, they are grouped into general categories that related to the discussion presented in Chapter 6. They are ranked in terms of importance and timing in Chapter 12, Plan Implementation.

## TOWNSHIP ADMINISTRATION AND FACILITIES

The basic municipal service needs of West Pikeland residents are being met through the current service levels. Through this Comprehensive Plan Update, the Township is planning for the projected increases in development that is in keeping with West Pikeland's unique rural characteristics, and is taking appropriate steps to add services without adding excessively to administration. In 1999, a part-time experienced administrator and a full-time assistant secretary/administrator with a related educational background; handle day to day operations while the Board of Supervisors manages some of the additional administrative responsibilities. Many administrative functions are performed by the multitude of talented volunteers in the community. Most municipal functions, including road maintenance and repair, park maintenance, building inspections, planning and engineering reviews, are contractual and renewed on an annual or as needed basis. The Township operates its own police force consisting of six part time officers; fire and ambulance services are regional.

The Township municipal building is located in Chester Springs on Route 113. This renovated school house adequately houses municipal operations. The police department is located on the second floor of the municipal building. The Township owns several other parcels of land, some of which could be considered as potential sites for a new administrative building. The Township owns two other buildings currently available for storage or maintenance purposes as needed.

### ⇒ **Recommendations for Township Administration**

- ***Monitor current staffing levels.***

Since West Pikeland Township's population is not growing rapidly, the current level of staffing meets existing needs and will likely continue to do so into the foreseeable future. To provide a consistent level of service, the Township should monitor staffing levels and ensure that municipal obligations continue to be met. Volunteers play an active role in the Township and perform many administrative functions and should be supported by the municipal staff. Requiring regular reports from Township entities such as the Planning Commission, Park and Recreation Commission, and Historical Architectural Review Board should be considered. This can help to keep local officials abreast of current activities, particularly important when a high number of active volunteers are involved in municipal activities. It also helps to coordinate municipal records.

- ***Encourage volunteerism to build local commitment and a sense of community.***

West Pikeland has been very successful in identifying and recruiting individuals to serve on various Township boards and commissions. Many administrative activities are in fact handled by volunteers as opposed to municipal staff. To ensure that an adequate supply of volunteers continues to be available to fill present and future positions, the Township should regularly maintain a volunteer bank that includes information on interested individuals and the types of activities that they are interested in. Updating this bank on an annual basis will help ensure that volunteers are available and are trained as necessary.

- ***Retain on an as needed basis, professional assistance in identifying and applying for grant funds.***

One of the highest Township priorities is the protection of open space. There are various sources of funding available through both public and private sectors, for the fee simple acquisition of recreation land and open space, and for the purchase of easements (or development rights). The

time involved in researching funding sources and preparing applications can be significant depending on the funding source, and could require expertise beyond that of the municipal staff. Identifying a consultant specializing in grant writing to assist the Township in preparing applications could increase the chance of securing grants and other funds for the protection of open space.

- ***Prepare a Capital Improvements Plan to assist in annual budget preparations.***

West Pikeland Township has the good fortune to be in excellent financial condition. It has a budget reserve at its disposal, however, no formal plan exists for expending the accruals or financing capital improvements. A capital improvement is generally defined as a high value fixed asset intended to be in service for a period of years. Examples of capital improvements include the purchase of computer systems, acquisition of maintenance vehicles, and the purchase or construction of buildings or community facilities. A CIP can also help the Township plan for the purchase or protection of open space, a high municipal priority. The development of a multi-year Capital Improvements Plan (CIP) would provide a framework for programming and financing new or expanded public facilities including parkland and open space. The time period for a CIP is usually five years and requires the Township to prioritize and link the physical goals of the comprehensive plan to the municipal budget throughout this time frame.

- ***Retain professional planners to review development proposals and encourage innovative cluster designs that preserve open space and protect environmental resources.***

Protecting open space and environmental resources is one of the Township's highest priorities. Retaining a professional land planner that works directly with engineers and developers in designing site sensitive subdivisions could encourage the protection of resources and preservation of open space. While ordinances can prescribe site sensitive development, it is not always implemented through the development process. This action, coupled with strengthening the sketch plan option, could reduce the potential for sprawl development and facilitate residential uses that are more in keeping with West Pikeland's unique natural and historic qualities.

- ***Support regional planning efforts and maintain involvement in regional initiatives.***

West Pikeland, along with Upper Uwchlan, Uwchlan, Wallace, East Brandywine, West Bradford and East Caln Townships, and the Borough of Downingtown have joined together to assess the need for a regional cooperation on issues of mutual concern. This planning organization is in the formative stages and its overall mission is under development.

## **WASTEWATER TREATMENT AND SEWAGE DISPOSAL**

The preparation and adoption of municipal Sewage Facilities Plans is mandated by Act 537, the Sewage Facilities Act of 1966. The purpose of this plan is to protect the health safety and welfare of residents by ensuring that household sewage is properly treated and disposed of, that malfunctioning on-lot systems are corrected, and that treatment plants and sewer lines are not overloaded and continue to function properly.

West Pikeland Township currently relies on the Chester County Master Sewage Facilities Plan of 1970 to satisfy its obligations under Act 537. This plan envisioned the Township to remain relatively undeveloped well into the future and to depend on individual, on-lot systems to meet most sewage disposal needs. The Township has exceeded these development expectations, however, and the southern part of the Township is

served by a large community system. Adopting a municipal sewage facilities plan that complements this Comprehensive Plan Update by prioritizing disposal methods and directing new development to appropriate areas will allow the Township additional regulatory control over new development and require compliance with adopted policy.

⇒ **Recommendations for Wastewater Treatment and Sewage Disposal.**

- ***Update the municipal Sewage Facilities Plan in accordance with the provisions of Pennsylvania Act 537 of 1966.***

A Sewage Facilities Plan that supports and implements the land use policies contained in this Comprehensive Plan Update should be prepared by West Pikeland Township. The 537 Plan should delineate the sewage disposal methods preferred by the Township and establish a hierarchy that guides developers in selecting the most preferred methods or a rational as to why an alternate is used. Establishing a hierarchy is particularly important in order to discourage package plants that provide for stream discharge. New development, to the extent possible should be contained within the growth boundary established by the Comprehensive Plan Update and implemented by the Zoning Ordinance. Much of the southern quadrant of the Township is located within the growth boundary and is already served by a community system.

The Act 537 planning process will give West Pikeland the opportunity to thoroughly evaluate innovative, contemporary approaches to wastewater disposal and encourage the use of techniques that facilitate groundwater recharge since the Township relies on this resource. A hierarchy of sewage treatment types identified should include a description of the circumstances to which they are most suited. Technological advancements made in recent years have improved wastewater treatment techniques and reliable alternatives that can facilitate cluster development are more readily available.

- ***Adopt a septic management ordinance requiring regular maintenance.***

A septic management ordinance is a key element of an overall septic management plan. Most ordinances mandate certain forms of septic system maintenance, along with periodic inspection. These requirements serve to help property owners to identify problems before system failure occurs. Through mandatory inspection, the property owner is alerted to maintenance issues and can take steps to correct them, thus preventing more serious, and costly, problems. By regularly maintaining septic systems, the possibility of ground water contamination from leaking septic tanks is greatly reduced.

- ***Establish a septic management program that facilitates regular maintenance of on-lot septic systems to protect groundwater.***

Adopting a program to manage on-lot septic systems could reduce the likelihood for system failures and prevent the resulting environmental contamination. Septic systems can malfunction for any number of reasons including poor maintenance, design flaws, and old age. Most septic systems were never designed to last indefinitely but proper maintenance can increase a system's longevity.

A number of on-lot sewage disposal systems in the Township have reportedly failed and those located in older areas could be malfunctioning. The Township may wish to consider developing, in cooperation with the Chester County Health Department, a program for the management of on-lot



septic systems. A program that includes informational materials on how septic systems function and the type of regular maintenance required would assist homeowners in properly caring for their on-lot systems, hopefully reducing failure rates. A program could be structured in different ways depending on the Township's objectives. At a minimum, a program could consist simply of general information conveyed through newsletters or brochures, or it could be more elaborate and involve workshops or seminars. Mandatory pumping required by ordinance is another alternative.

- ***Adopt a policy that permits the use of off-lot sewage disposal system to facilitate cluster development.***

An individual off-lot sewage system is a septic system in which the effluent absorption area is physically located outside the lot lines usually in a common area. Adopting a policy on off-lot systems, and including it in the hierarchy of sewage disposal alternatives in the Township's Sewage Facilities Plan, can promote cluster development and smaller net lot sizes without the cost and administrative responsibilities associated with development of a community sewage system. Properly designed easement and maintenance agreements is key to the success of this technique. The Chester County Planning Commission has recently adopted a policy regarding off-lot system. This policy is discussed in Planning Bulletin #54, Individual Off-Lot Sewage Systems.

## **WATER FACILITIES**

Nearly all of West Pikeland Township, with the exception of the planned residential developments, is dependent on individual wells for potable water. Due to the geology of the Township, however, the continued availability of adequate groundwater is a critical concern. Each new well constructed taps into the groundwater supply and can impact neighboring wells. Containing new development within the growth boundaries, where groundwater is more readily available and public water can be accessed, will help the Township to manage this resource.

### **⇒ Recommendations for Water Facilities.**

- ***Use growth boundaries implemented through the zoning ordinance to conserve groundwater and facilitate use of public water where available.***

Growth boundaries established through zoning districts should be designated in the southern third of the Township in an effort to focus new growth near existing residential development. The subdivisions located in the southern part of the Township are served by public water through the Philadelphia Suburban Water Company and have a slightly higher new density than other developments in the Township. New residential development should occur in this area as infrastructure is presently in place to accommodate limited growth. Residential development not designed to access public water should also be focused in this area because individual wells will likely yield higher amounts of groundwater due to the underlying geology.

- ***Encourage periodic testing of well water by homeowners to identify groundwater contamination.***

Higher levels of development can increase the potential for groundwater contamination when most development relies on individual wells and septic systems. In many cases, the residents may not be aware of the problem for some time. Providing educational information through the Township's newsletter, or through special supplements, could encourage homeowners to test their well water.

Pollutants can contaminate the groundwater in any number of ways and testing should be done regularly to ensure that potable water remains safe. The Township could also consider adopting an ordinance that links well testing with the implementation of an on-lot septic system management program.

- ***Adopt an ordinance that regulates large scale water extraction to protect groundwater supplies.***

Large scale, water extraction for commercial use could reduce groundwater supplies. Since areas of the Township are noted for their pristine springs and overall high water quality water, there could potentially be a demand for commercial extraction. Developing and adopting an ordinance regulating withdrawals for commercial purposes would give the Township control over this use to ensure an adequate supply. The regulation of groundwater withdrawals must be balanced with other forms of resource protection; however, securing a reliable, long-term potable water supply is well within the Township's regulatory authority.

- ***Establish protective buffers within stream corridors to reduce non-point source pollution.***

The Pickering Creek eventually flows into the Pickering Reservoir, a major water source for Phoenixville, and the surrounding area. As it winds its way through northern Chester County, it risks contamination by pollutants contained in storm water runoff. Protecting the areas adjacent to the streams and maintaining them in their natural state allows the runoff to be filtered, trapping sediment, contaminants, and debris. This action benefits residents beyond West Pikeland Township who rely on the Pickering Creek as a water source. It improves wildlife habitat and provides aesthetic values. The need for protective buffers is also addressed in Chapter 8, Environmental and Historic Resources Plan.

- ***Use zoning to limit intensive land uses in areas demonstrated to have limited groundwater supplies.***

Designating those areas of the Township described in Chapter 4, Environmental and Historic Resources Inventory, found to have marginal groundwater capability as "conservation zones" will reduce development pressure and protect the wells that may already exist. A conservation zone would not prevent development; it would instead reduce or regulate the type and density of future development by limiting certain types of development, reducing the amount of impervious surface, or reducing the levels of disturbance.

## **STORMWATER MANAGEMENT**

Storm water management is traditionally addressed in the subdivision and land development ordinance. West Pikeland Township's ordinance does regulate storm water runoff; however, there is little direction included beyond basic standards for compliance. The methodology for managing storm water has changed significantly in the past decade and natural approaches, as opposed to the more traditional manmade "pipe and basin" approaches, have been determined to be more effective. The Township's subdivision and land development ordinance should emphasize the use of Best Management Practices and prioritize groundwater recharge.

⇒ **Recommendations for Storm Water Management.**

- ***Require the use of Best Management Practices in storm water management planning.***

Approaches to storm water management that emphasize the use of environmentally sensitive techniques are collectively termed Best Management Practices (BMPs). These are techniques that promote system design that maximizes the use of existing site features and natural drainage patterns to manage storm water. A new publication developed by the Pennsylvania Department of Environmental Protection, in conjunction with the Pennsylvania Association of Conservation Districts, and entitled, Pennsylvania Handbook of Best Management Practices for Developing Areas (1998) describes BMPs and provides guidance to municipal officials, planners, developers and engineers in their use and application. Any update of the Township's subdivision and land development ordinance should mandate the use of Best Management Practices where feasible.

- ***Encourage the agricultural community to use conservation measures that reduce topsoil loss resulting from storm water runoff.***

The loss of topsoil due to storm water runoff can be a serious problem in rural areas. Heavy rains falling on exposed farm fields can wash away topsoil, carrying it into streams and other waterways. The topographical conditions, especially the steep stream banks found in several areas of West Pikeland, can exacerbate these losses. Along with topsoil, fertilizers and herbicides can be carried into these waterways resulting in contamination beyond simple siltation. The Chester County Soil Conservation District provides information on ways to minimize topsoil loss. The Township can play an important role in serving as a liaison in disseminating this information and identifying conditions that could result in topsoil loss.

- ***Inspect the site grading on individual home sites prior to issuing certificates of occupancy to ensure that storm water is properly controlled.***

Although runoff generated from single lot development may not appear to be significant, when such development is magnified, it can impact development of adjacent lots and affect future use. If problems are not identified and corrected prior to issuance of a certificate of occupancy, long term damage to adjacent lands could occur. This can become a public problem if runoff is inappropriately directed into the road right-of-way and leads to erosion and surface damage. Reviewing grading plans and ensuring compliance through the final inspection process should prevent this problem from occurring.

- ***Reduce the amount of impervious surface allowed on a lot in an effort to manage storm water runoff.***

Storm water runoff can be minimized by reducing the amount of impervious surface associated with new development. Minimizing the amount of pavement in roads and driveways, and substituting semi-pervious surfaces where feasible, can help control runoff simultaneously facilitating groundwater recharge, particularly important in areas of the Township that depend on groundwater. Encouraging the use of cluster development is an important way to reduce the amount of impervious surfaces since this form of development requires fewer roads and shorter driveways than are usually present in conventional subdivisions. Clustering also protects open space, which facilitates groundwater recharge.

## PARKS AND RECREATION

West Pikeland Township's Open Space, Recreation and Environmental Resources Plan, adopted in 1992, contains a comprehensive inventory of open space and recreational facilities, along with an analysis of the extent that the current inventory addresses needs. The recommendations detail a series of actions to implement the Plan. In 1998, the Board of Supervisors appointed a Parks and Recreation Commission to oversee development of the local park system and implement recreational elements of the Open Space, Recreation and Environmental Resources Plan.

⇒ **Recommendations for Park and Recreational Facility Development.**

- ***Continue to use the Open Space, Recreational, and Environmental Resources Plan (1992) to guide development of parks and recreational facilities.***

The Open Space, Recreation and Environmental Resources Plan (OSRERP) contains an implementation strategy consisting of actions that will protect more open space and provide for development of the parks system. It also identifies acquisition and development needs. The newly formed Park and Recreation Commission should view the OSRERP as a living document and use it as a policy guide. The Commission should also review it on a regular basis to ensure that the strategies are current and that no major policy changes have occurred that will affect its implementation.

- ***Supplement the Open Space, Recreation, and Environmental Resources Plan (1992) with a detailed trail component.***

West Pikeland has placed a high priority on the development of trails throughout the Township. The OSRERP should be amended to include a trail component that identifies greenways, potential corridors within the greenways, and the segments that have been secured to date. Design criteria should also be incorporated based on anticipated use. Sample purchase and/or easement agreements, along with a funding strategy outlining possible sources may be included as well. Maintenance is an important issue that should be discussed in the component. Amending the OSRERP to include a trail component will formalize the policy, thus providing a basis for implementation by the Parks and Recreation Commission, at the direction of the Board of Supervisors.

- ***Prepare a Capital Improvements Plan focusing specifically on acquisition of parks and open space.***

Acquisition of park land and protection of open space are high Township priorities. The Parks and Recreation Commission should, in conjunction with the Board of Supervisors, preparing a long term capital improvements plan that identifies future acquisitions, estimates costs and outlines funding alternatives will allow the Township to prepare for purchases and take advantage of grant programs available. Many of the basic elements required for a capital improvement program are included in the OSRERP. Prior to developing the CIP, the Park and Recreation Commission should prepare master plans for those sites presented owned by the Township so that development costs can be included in the planning.

- ***Continue to support development of the Anselma Mill Historical Park.***

Several important historic sites are located in West Pikeland, including the historic Anselma Mill complex. The Township recognizes the importance of this historic resource and supports the development of the site as an historical park. A non-profit organization (501c3) has been formed to oversee develop and administer this site and the Township is provided the opportunity to review appointments to its Board of Directors as well as the bylaws. This organization should work cooperatively with the Township's HARB to coordinate preservation efforts.

Development of the Anselma Mill Historical Park should be undertaken in accordance with a professionally prepared master development plan that addresses mill restoration, site circulation, interpretive options, secondary uses (concessions, comfort facilities, etc) and visitor orientation. The master plan should include preliminary site analysis, preliminary architectural plans, and cost estimates for each phase of the project. The Township should be provided the opportunity to take an active role in development of this important site.

- ***The Township and the Historic Yellow Springs Foundation should meet regularly and coordinate, where feasible, recreational programming and activities.***

Historic Yellow Springs is a key cultural resource in West Pikeland. The Foundation is very active and many types of cultural and recreational opportunities relating to the history and development of Yellow Springs are offered on-site. The Township, perhaps through the Parks and Recreation Commission, should encourage coordinated efforts where possible and support the use of Yellow Springs facilities to generate a higher degree of interest and awareness in this aspect of the Township's history. The bylaws of Historic Yellow Springs, Inc., currently provides for the appointment of a municipal official to its Board of Directors thereby offering the opportunity for coordination.

- ***Continue to support the Chester Springs Library as a significant local cultural resource.***

The Township is fortunate to have a branch of the Chester County library system (Chester Springs library) located within its borders. Supporting this important resource through regular interaction with the Library Board and staff will strengthen its role in the Township. The Board of Supervisors must ratify appointments to the Library Board and also approves the Library's annual budget. As a result of these mandates, the Supervisors have the opportunity for considerable input into its operations.

Retention of the library should be considered a high local priority and the planning for expansion should involve Township officials. Any expansion considered should continue to respect the historical context of the village of Yellow Springs and limited service area of the current facility. West Pikeland contributes financially to the library and assists in funding capital improvements and encourage support among residents as well.

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<b>EMERGENCY SERVICES</b>
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West Pikeland Township supports a police force comprised of six part time officers managed by a police chief assisted by a corporal. Coverage is supplemented by the Pennsylvania State Police from the Embreeville location. The police department is located on the second floor of the Township building on Route 113 in Chester Springs.

Fire service is provided mainly by the Lionville Fire Company and Kimberton Fire Company with Ludwigs Corner Fire Company serving a small segment of the Township. Ambulance service is provided by three different organizations. The West End Fire Company and Uwchlan Ambulance Corps serve most of the Township, with the East Whiteland Company serving a small area in the extreme eastern end. Ambulance service throughout Chester County may change due to recent amendments to Title 28 of the Pennsylvania Health and Safety Code.

⇒ **Recommendations for Emergency Services.**

- ***Continue to maintain a highly trained police force and ensure that equipment needs are addressed.***

New law enforcement techniques are continually being developed and police officers should be encouraged to take advantage of training opportunities that enhance their skills. Well-trained officers are better equipped to address law enforcement issues and prevent problems before they occur. The Township's budget should include funding for annual training and equipment upgrades. These types of issues are being incorporated in the Township's personnel policies. Grants for police education and training are available from federal and state sources and should be researched on an annual basis. Coordination with other municipal police forces should be encouraged.

- ***Maintain regular contact with the fire and ambulance service providers in order to promptly respond to service delivery issues.***

With fire and ambulance service provided by six different organizations, it is particularly important for West Pikeland Township to regularly monitor the quality of the service and the response times. Traffic congestion, particularly on Route 113 is a concern that has been raised relative to ambulance service and alternative routes should be evaluated. The Township financially supports the fire and ambulance companies and continues to budget for this expense. It should also contribute to equipment purchases as requested.

<b>EDUCATION</b>
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All of West Pikeland Township is included in the Downingtown School District; however, no public school facilities are located within its borders. One private facility, the Montgomery School, is located in the Township and offers educational programs for K-8, along with a preschool. The Montgomery School encompasses approximately sixty acres located on Route 113; much of the land area is undeveloped open space.

⇒ **Recommendations for Educational Facilities.**

- ***Provide information, as requested, to the Downingtown School District officials regarding new subdivisions proposed for West Pikeland.***

To assist the school district in planning for new school facilities, the Township provides information regularly to school officials on population projections and subdivision proposals. This information is used to determine the type and location of new residential development that could affect enrollment. Downingtown School District officials should be asked to convey information to

Township officials on issues that could impact West Pikeland, such as school bus routes and pick-up points.

- ***Meet regularly with Montgomery School officials to discuss issues of mutual concern.***

The relative size and location of the Montgomery School in West Pikeland Township makes it a significant community facility. Township and Montgomery school officials should maintain open communications on issues of mutual importance, particularly those relating to circulation and traffic on Route 113.

## **SOLID WASTE DISPOSAL**

All waste disposal in West Pikeland Township is contracted to private services. Curbside recycling is an alternative offered with most contractors. The disposal of solid waste is clearly adequate; however, recycling could be encouraged to greater extent.

### **⇒ Recommendations for Solid Waste Disposal.**

- ***Encourage voluntary recycling to prepare residents for the potential of a mandatory program.***

Although it is unlikely that the next decennial census will show that the Township has reached the threshold delineated in Pennsylvania Act 101, the Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act, requiring mandatory recycling, it should continue to encourage voluntary recycling. The haulers currently operating in West Pikeland offer curbside pick up of most recyclables. The Township supports hazardous waste recycling should actively advertise drop off locations to reduce the potential groundwater contamination through the illegal dumping of oil and chemicals. Advertising can occur through newsletters, post card mailings, and posted notices in community facilities.

- ***Maintain the scenic qualities of the Township through regular inspection of road corridors.***

Road debris can be reduced through the initiation of a highway maintenance program. West Pikeland has an extensive system of scenic roads, which should be regularly inspected for debris and litter problems. Debris is not only unsightly, but can pollute streams and wetlands. Programs that increase the awareness of litter problems and encourage residents to clean up roadways can be very effective. This type of a program is generally educational in nature and could be administered by the Township, by a community organization or by private entities.

## **CONCLUSION**

Providing community services and facilities that meet the needs of residents without adding excessive administrative burden is a local objective. The Township wishes to retain its rural character but at the same time, be responsive to meeting community needs. The policies relating to community services and facilities focus on continually monitoring the level of services provided and making adjustments as needed. Most of the new policies recommended in this section do not necessarily require ordinance amendments, but rather changes in administrative procedures and priorities to meet the evolving needs of residents.





## Chapter Eleven

### LAND USE AND HOUSING PLAN

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The purpose of this plan element is to reflect West Pikeland Township's vision by delineating the desired future land use development patterns. The future land use and housing plan is the point at which all elements of the comprehensive plan are integrated. It includes descriptions of potential uses within each land use category and recommends density ranges, providing the rationale for each designation. The chapter is intended to establish the foundation for future land use decisions and implementation of the plan through ordinance updates and planning programs.

This chapter reviews the land use goals and objectives and summarizes past policies in light of changes that have occurred since the previous comprehensive planning effort. It discusses the key points of the other plan elements and reiterates how these affect the future land use plan. In addition, this chapter reviews related planning efforts and programs of adjacent municipalities and their implications.

The land use and housing goals and objectives are stated as follows:

#### ***RESIDENTIAL GOAL:***

***Ensure that residential development respects the rural character of the Township and is developed in a manner that protects environmental resources and maintains open space as an integral part of West Pikeland Township.***

#### **Objectives**

- Establish a growth boundary for West Pikeland Township that guides new residential development to areas best able to accommodate such growth.
- Establish standards for clustered residential development that respects site characteristics with emphasis on preserving open space.
- Adopt regulations to protect natural and historic resources existing on sites proposed for new development.
- Ensure that varied housing forms are available to accommodate all types of residential needs in those portions of the Township designated for growth.
- Provide for flexibility in land use ordinances and regulations to encourage innovative site design and alternatives to conventional subdivisions.
- Consider design standards for higher density housing that seek to preserve natural site features.
- Develop standards that require developers to design in a manner that protects natural or scenic qualities.

**NON-RESIDENTIAL GOAL:**

***Provide for non-residential development in keeping with the rural character of West Pikeland Township to allow for a reasonable level of growth.***

**Objectives**

- Accommodate limited commercial and industrial land uses in keeping with the Township's rural character and at a scale appropriate to its current population and future growth projections.
- Encourage the concentration of non-residential uses in clusters to prevent strip development along the major roadways.
- Determine those locations capable of supporting non-residential uses without compromising the rural character of the Township.
- Ensure that new non-residential development complies with design standards that minimize negative environmental impacts and reflects the rural and historic characteristics of the Township.
- Encourage adaptive reuse and renovation of historic sites in village settings for limited forms of non-residential use under design standards, which enhance their setting as a traditional rural center.

**AGRICULTURAL GOAL:**

***Support the agricultural industry in the Township by protecting land and soil resources.***

**Objectives**

- Protect prime agricultural soils through zoning or other regulatory measures that limits development of these land resources.
- Seek to preserve the agricultural industry while respecting the needs of the landowners to supplement their income.
- Encourage both public and private methods of limiting development of agricultural land through the use of conservation easements.
- Recognize and support equestrian activities as a valid and important ongoing agricultural use that helps preserve the rural character of the Township.
- Continue to support farming while recognizing that the industry is in transition and part-time agricultural activities are becoming more prevalent.

<b>DEVELOPMENT OF THE LAND USE AND HOUSING PLAN</b>
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The comprehensive planning process culminates in the formation of the land use and housing plan, and accompanying map. All issues discussed throughout this planning process including the type and location of existing land uses, the physical characteristics of the land, the development constraints posed, the population

increases projected, and the road network's ability to accommodate more traffic, are used to generate this element.

This element is comprised of future land use categories, a series of implementation recommendations, and the future land use map. Consistent with the other plan chapters, the recommendations define the purpose of the action and how it should ultimately be implemented. The recommendations contained in the various plan chapters are highly interrelated and many of the recommendations contained in this chapter depend on implementation measures contained in other chapters. For example, recommendations associated with cluster development in this chapter depend on implementation of the net out recommendations contained in the Environmental Resources Plan chapter in order for the concept to be effective.

The future land use map indicates where the various uses should be located and illustrates the relationship among them. The map is intended to visually present preferred future land use patterns and to serve as the basis for future zoning modifications.

## REVIEW OF EXISTING PLANNING DOCUMENTS

The future land use plan has considered the policies of the existing Comprehensive Plan (1989), the Open Space, Recreation and Environmental Resources Plan (1992), and the document used to guide sewage facilities planning which in West Pikeland's case, is the Chester County Master Sewer Development Plan (1970). These documents are in some cases outdated, however, their policies continue to reflect the attitudes of the Township on many issues. The Township's land use philosophy has long been conservation oriented and protecting its sensitive environmental features and unique historic features are goals contained in all its planning documents. The best ways to achieve these goals in terms of the planning approaches and techniques available, however, have changed.

### **Comprehensive Plan (1989, as amended)**

The most recent Comprehensive Plan was adopted in 1985 and amended in 1989. This document was viewed as an update, as opposed to a rewrite, of the previous (1973) plan as many of the overriding policies were carried through. The 1989 Plan recognizes that West Pikeland is quite unique in terms of possessing an abundance of natural resources, but that growth and development pressures are increasing and have lead to a greater demand for housing in the Township. In analyzing changes, the plan makes regular reference to the 1973 Comprehensive Plan, comparing past and present circumstances. This approach effectively established a basis for the recommendations presented.

The overriding philosophy of the 1989 plan is to "grow sensitively" meaning *"to grow in a way that preserves productive agricultural land, protects important natural features and resources, and retains the open, rural character of the township to the maximum extent possible"*. Along with this, though, is the recognition that West Pikeland needs to continue to provide opportunities for a range of housing types and lot sizes to meet certain legal requirements and the needs of its existing and future population. The primary land use goal in the 1989 document is as follows:

***To retain the open, rural, agricultural nature of the Township by developing primarily as a low-density residential community.***

This goal is accompanied by objectives related to residential land use, agricultural preservation, commercial and institutional uses, and recreational land use. Together, the goals and objectives have served as the guiding principals on which land use decisions over the past decade have been based. They are still considered valid at this point in time. Many recommendations contained in the plan were

implemented but need to be revisited in order to determine if they are indeed addressing what they were intended to address. Although the goals have not significantly changed, the most effective ways to implement the objectives, have changed and are incorporated in this update.

#### **Open Space, Recreation and Environmental Resources Plan (1992)**

The Open Space, Recreation and Environmental Resources Plan (OSRERP), was developed to serve as the basis for decisions relating to the preservation of open space, the protection of natural and historic resources and the provision of recreational opportunities for the residents of West Pikeland. It contains an inventory of environmental resources and recreational lands and facilities, as well as analysis of their adequacy in meeting Township needs. Because of the extent of environmental resources in West Pikeland Township, there is a particularly important relationship between this document and the 1989 Comprehensive Plan. The two documents interrelate and the implementation of recommendations in either document impacts the implementation of the other.

The goals and objectives of the OSRERP relied heavily on public input received through a questionnaire prepared for the project. A public workshop was also held to seek input on the plan. The questionnaire requested general demographic information, posed thirteen policy questions relating to preservation of the Township's character, and sought input on recreational activities. Over three-quarters of the respondents to the questionnaire either agreed or strongly agreed that the protection of open space and preservation of natural resources are critical issues in the Township and that the zoning ordinance should include provisions requiring open space.

The plan contains a wide range of recommendations addressing the protection of environmental resources including preserving prime agricultural soils, stream corridors, wetlands and woodlands because of its high priority among residents. These complement the recommendations contained in previous planning documents as well as this Comprehensive Plan Update and together, these documents promote the Township's policies regarding resources preservation.

#### **Sewage Facilities Plan (1970)**

Sewage facilities planning is mandated by Act 537 of 1965, the Sewage Facilities Act. Most municipalities in Chester County have opted to develop individual sewage facilities plans to address the local needs and delineate municipal priorities in terms of treatment options. West Pikeland, however, relies on the Chester County Master Sewer Plan (1970) to fulfill its sewage facilities planning obligations. The County's Master Sewer Plan did not envision West Pikeland to be populated to the extent that would require public sewers. Most of the growth in the region was anticipated to be concentrated in the Downingtown and Uwchlan areas. The plan indicates that in areas where population densities are low and soil conditions are suitable, on-site systems are a satisfactory means of sewage disposal. On-lot systems were identified as the primary option for schools, commercial, office uses, camps, and other non-residential uses as well.

The overall population of the County has increased substantially over the past two decades and new development pressure has affected West Pikeland requiring other sewage disposal alternatives. One Planned Residential Development in the southern part of the Township is served by a community system and any future development in the designated growth area would probably require another such system or extension of public sewers. A municipal sewage facilities plan is needed in order to further support the Township's land use philosophy and give West Pikeland greater control over treatment options. Such a plan should support the use of community systems that recharge groundwater through the use of spray or drip irrigation systems.

### **Planning Programs of Adjacent Municipalities**

The land use policies of adjacent municipalities impact West Pikeland. Coordinating land uses along borders is particularly important in order to reduce potential conflicts. A low-density residential development bordering, for instance, an industrial complex, could result in conflict requiring Township intervention. The potential for such a conflict can be reduced if the Township is cognizant of the plans and policies of adjacent municipalities and cooperates on regional basis to avoid future problems.

West Pikeland Township shares borders with five municipalities: East Pikeland, Charlestown Township, West Vincent Township, Uwchlan Township and Upper Uwchlan Township. In general, these municipalities share many of the same physical and environmental characteristics but are more developed than West Pikeland. East Pikeland, West Vincent and Charlestown Township still have large areas of open space and active farms and share the goal to preserve the remaining open space and support continuation of the agricultural industry. Much of the remaining open space and agricultural land in these municipalities borders West Pikeland Township. The non-agricultural uses permitted in these areas are mainly low-density residential land uses. Cluster development and lot averaging is an alternative provided in these municipalities, however, the gross densities remain low. Sprawl development is a continuing threat to the open space throughout this entire region.

Of the municipalities in the region, Uwchlan Township has the largest population and the highest densities. It borders West Pikeland's southern boundary and is adjacent to its growth area. The residential uses in this portion of West Pikeland are largely compatible with those in Uwchlan. Continuing to promote this region of West Pikeland as the growth area will not conflict with Uwchlan's land use policies. Although there are concerns with the industrial zoning districts bordering residential zoning, there are several features that serve as natural buffers thereby reducing the potential for conflict.

The boundary shared between Upper Uwchlan and West Pikeland is short, however, it is important as the point that the Pickering Creek enters West Pikeland Township. The land on either side of the borders in both Townships is zoned for residential purposes. The Pickering Creek floodplain will serve to reduce densities at this point and both Townships should promote large buffers.

## **EXISTING DEVELOPMENT PATTERN**

To plan for the future, it is necessary to evaluate existing land uses and understand how and why the development patterns occurred. In many cases, land use patterns evolve from historic settlements and the associated transportation routes. Natural features such as agricultural lands, creeks, and stream corridors usually determined where these first settlements occurred. In West Pikeland, the fertile, well drained soils were suited to farming and early development patterns supported this industry. Mills to process grain were built on the creeks. The first roads developed from the trail system carved out by the native Americans and villages then grew at key points near the roads and streams. Although there is little left of these first villages and rural clusters, some remnants still exist. Future development patterns should respect the historic villages.

### **Residential Uses**

Most residential uses in West Pikeland are low to medium density. Single family homes on large lots and estate parcels dominate the remainder of the Township and are intermingled with operating farms; conservation areas and public open space. New residential development over the past decade has consisted of subdivisions with a limited number of units but positioned on large lots on single cul-de-sacs. Many of the homes are found on residential estates of ten acres or more and on small farms. Large-lot development of two acres or more is beginning to affect the rural character and agricultural base of the

Township and the open spaces are beginning to be depleted. With minor exceptions, residential development is not clustered in the northern region of the Township. Because of the many environmental constraints, sensitive natural resources, unique historic resources and operating farms in this part of the Township, additional residential development should be designed to avoid sprawl through the use of clustering and other alternative planning techniques that encourage preservation of prime open space parcels.

The medium density development is found in the Planned Residential Developments and subdivisions south of Route 401. These include the Twin Hills PRD, consisting of a mix of attached and detached homes on varying lot sizes. Twin Hills contains 250 homes and the development is served by public water and a community sewer system. Fairfields and Bridlewood consist of single family detached homes on lots averaging one acre. These are served by public water and individual on-lot septic systems. Other developments include Pickering Estates, Fox Ridge and Skyline Drive. Several undeveloped parcels are located in the vicinity of these three major developments, some of which are farmed. This area is currently the focus for new residential development since public water is available and public or community sewers are an option. It is easily accessed by major roadways and should remain the focus for new development.

### **Commercial Uses**

Commercial uses are very minor and mainly serve the local residents. Most retail and commercial needs are met outside of the Township in nearby municipalities. Many of the commercial uses exist in or near a historic village. The main intersection in the Township, Route 401, and Route 113, contains the most significant concentration of uses with a service station/convenience store on one corner, a bakery on another, and a restaurant and office on the third. Although the ability of this intersection to handle the current volume of traffic and the high number of turning movements is poor, it is slated for improvement. Since this intersection falls within the growth boundary, it is a logical location for future commercial uses.

The only large commercial use in the Township is a car dealership located north of the Route 401/Route 113 interchange. Other retail uses are found in Chester Springs at the intersection of Yellow Springs Road and Route 113. Chester Springs is the community focal point as the post office and municipal building are located near this intersection. The Yellow Springs Inn, an historic inn and restaurant, is located further west at the intersection of Yellow Springs and Art School Roads, along with a small number of other commercial/office uses. Most are located in historic buildings within the Yellow Spring Historic District and the Township is interested in maintaining the character of this area by allowing uses only of an appropriate type, scale and size.

Hallman's General Store is the only commercial use in the northern part of the Township. It is located at the intersection of Route 113 and Pikeland Road and has served as a "general" store for several decades. Several apartments are also located in this area. The intersection, as with the two previously identified, is historically significant.

### **Community Facilities**

The municipal building and the post office are located in Chester Springs, just south of the intersection of Yellow Springs Road and Route 113. The Chester Springs Library is west of this intersection in the Yellow Springs Historic District. Only one school (Montgomery School) is in the Township and it is also located on Route 113. Although there are very few community facilities, they are somewhat clustered in the Chester Springs vicinity and this area should continue to serve as the community focal point both in term of community and commercial facilities.

### **Recreational Uses**

Pine Creek Park provides for both passive and active recreational uses. The Township also owns the former Ostrander property and several natural areas for passive recreation and open space purposes. The Horseshoe Trail also traverses the Township. An important private recreational facility, the Indian Springs Camp, is located in the northeastern part of the Township. Together, these uses supplement the open space conservation areas contributing to the growing network of open space in the community. This network should continue to be developed to protect fragile resources and maintain necessary open space.

### **Agricultural Uses**

There are many active farms in West Pikeland although their numbers are decreasing. There has been a transition in agricultural use occurring in the Township over the past two decades, with smaller farms including horse farms, replacing some of the more traditional agricultural operations. Horse farms are a viable use and the environmental conditions and topography of the Township are well suited to this particular agricultural activity. Conversion of farms to residential uses is occurring regularly and farms that were in operation as recently as five years ago are now fallow, signaling that a use change may be near. Unless the conversions of farms to subdivisions are addressed immediately, more farms will be lost. The Township should continue to support the agricultural industry including the equestrian community and work with landowners in considering alternatives to land development.

### **Open Space**

An extensive amount of open space has been permanently preserved in West Pikeland through the use of various preservation techniques. Both the public and the private sectors have been actively involved in preserving open space and have worked cooperatively toward this common goal. Large tracts of open space have been eased to non-profit organizations and development subsequently restricted. Private property owners have voluntarily placed restrictions on future development of estate parcels. Key parcels have been purchased by the Township for passive, public recreation and open space purposes in accordance with the policies contained in the OSRER Plan. This combined effort has lead to a nearly integrated network of open space that greatly helps to preserve the Township's environmental qualities and rural character. Protecting open space is a major goal of the Township and it should continue to preserve such land using all available means.

## **ENVIRONMENTAL CHARACTERISTICS**

The environmental characteristics of the Township determine, to a great extent, the location of future land uses. The location proposed for a specific use must be capable of supporting that use on a long term basis. The underlying geology must provide the foundation needed to support the structures and accompanying road systems. If public utilities are not available, groundwater yields must be shown to be capable of providing long term potable water without depleting adjacent wells. The soils themselves must be well drained and considered suitable for on-lot sewage disposal. Land uses proposed should not interfere with the natural functioning of environmental features. No major construction, for example, should be planned for wetlands or flood plains; nor should it be proposed for steep slopes since it could increase erosion and storm water runoff. Ridgelines and viewsheds should be protected to the extent possible. The future land use plan must consider the environmental characteristics and ensure that the uses proposed can be supported without causing long term environmental damage.

### **Land Resources**

Land resources include geology, topography and soils. The Township's land characteristics are discussed in Chapter 4. In summary; the geology of West Pikeland consists mainly of granitic gneisses, which are responsible for the low valleys and steep stream banks. They adequately support construction, however,

because they contain fewer fractures and fissures, they often do not yield high amounts of groundwater. The topography is rolling with low to moderate hills with moderately steep and fairly narrow stream valleys. There are many areas of steep slopes especially in the north and northwestern regions of the Township. Steep slopes are also associated with the Pickering and the Pine Creek corridors. Slopes ranging between 15% and 25% are not considered appropriate for construction due to the potential for erosion, nor are they conducive to the construction or functioning of on-lot septic systems. The soils in West Pikeland are well suited to many types of agricultural uses and Class II and Class III prime agricultural soils are found throughout the Township, particularly in the north and northcentral region.

### **Water Resources**

West Pikeland Township is within the Delaware River basin and the Schuylkill sub-basin. The Township is traversed by the Pickering Creek and the Pine Creek, both critical water resources and known for their scenic qualities. Both creeks have been designated as Exceptional Value waters by the Commonwealth. The flood plains, wetlands, ponds, and springs throughout the Township are linked to these surface waters and are part of an integrated system. Groundwater is also part of this system and changes to the land and to surface waters affect the quantity and quality of the groundwater. Although it can be replenished and from that perspective is not a “finite” resource, the amount of groundwater available is subject to fluctuation, a significant problem for land uses relying on it as a potable water supply. Underlying geology also affects groundwater yields. Groundwater yields are considered low in the south and southeast regions of the Township and moderate in the north region.

### **Biotic Resources**

A wide variety of biological resources are present in West Pikeland. Woodlands cover much of the Township and are particularly extensive in the north and northeastern regions, providing habitat to many species of wildlife. Land that was once farmed and is now fallow provides pastures, meadows and grasslands, supporting a variety of flora and fauna. The Exceptional Value streams support species of fish that depend on clean, clear flowing waters free of sediment and other contaminants. Maintaining this habitat and thus the diversity of biotic resources is an important consideration in this comprehensive planning process. The types and densities of uses proposed must respect these biological resources and environmental qualities on which they depend.

## **FUTURE HOUSING NEEDS**

Act 247, the Pennsylvania Municipalities Planning Code, mandates that comprehensive plans address the housing needs of both present and future residents. It further states that this planning 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. The future land use plan addresses this requirement by describing the anticipated composition, density and location of residential land uses in the Township as projected to the year 2020.

### **Projected Population**

The projected population and the number of residential units needed to accommodate this population are discussed in Chapter 3, Demographic Characteristics. In summary, the decennial census reported the 1990 population as 2,323. The 1997 population was estimated to be 2,750 representing an 18% increase over the 1990 figure. By the year 2020, the Township’s population is estimated to increase to 3,510 persons or another 1,187 individuals over the 1990 figure. The average number of persons per household for the year 2000 is projected to be 2.84; declining slightly to 2.80 by the year 2020.



### Projected Housing Units

The number of homes needed to accommodate the projected population growth is obtained by dividing the projected increase by the projected number of persons per household. If the population of West Pikeland is anticipated to increase between 1990 and 2020 by 1,187 individuals, and if the number of persons per household is anticipated to be approximately three, then approximately 418 residential units are needed to accommodate this growth. The building permit data indicates that 354 units were constructed between 1990 and 1997. To meet fair share obligations, land to accommodate these new units must be made available and described in the future land use plan.

Most of the residential development in the Township is single family detached and it is anticipated that new development will occur in nearly the same proportions. The alternatives to single family detached residential development are discussed within the context of each proposed land use category with the various options described. Allowing for flexibility in site development and providing for design alternatives can lead to varied housing forms in developments that respect the existing character of the Township. The Planned Residential Development (PRD) option has been used by West Pikeland in focusing new residential development and providing alternatives to single family detached units. A PRD provides for flexibility and continues to serve as a development option offered by the Township.

## FUTURE LAND USE CATEGORIES (2020)

The future land use plan for West Pikeland is based on the “growth boundary” concept, a growth management technique used to reduce sprawl. This technique is not intended to halt development, merely to direct it to those areas where it can best be supported in terms of infrastructure. The boundary is a geographic delineation that marks the separation between a more developed or suburban area and a more environmentally sensitive or rural area. The growth boundary technique allows municipalities to plan for new development in the growth area while simultaneously discouraging it outside. Not all development is intended to occur within the boundary, however, the more intense uses, particularly those requiring public services and a high level of infrastructure, should occur in the growth area. Encouraging and supporting development within the growth boundary reduces development pressure in outlying areas.

The land use categories include a description of the land uses and densities envisioned for each region of the Township. The estimated acreage contained in each of these land use category and the estimated percentage of the total land area are presented in Table 11-1, and the categories are visually presented on Map 11-1, the Future Land Use Map. It is important to note that the map is intended to serve as an overall guide in directing future development. It is not a zoning map and should not be misconstrued as a regulatory tool. The purpose of the Future Land Use Plan map is to assist land use decisions by guiding future zoning ordinance revisions.

**TABLE 11-1**  
**FUTURE LAND USE CATEGORIES**  
**Proposed Future Land Uses for West Pikeland Township**

LAND USE CATEGORY	ACRES	% OF LAND IN TOWNSHIP
Neighborhood Development Area	1,656	26.0
Resource Protection Area	4,560	71.5
Villages	159	2.5
<b>TOTAL</b>	<b>6,375</b>	<b>100.0</b>

Each land use category is presented in three parts: the ***purpose*** of the proposed category, its proposed location within the Township, and the implementation ***recommendations***. Together, the three parts provide the rationale for land use designations that address municipal goals in light of the physical, environmental and developmental conditions. Map 11-1 illustrates the location of each land use category.

## **NEIGHBORHOOD DEVELOPMENT AREA**

**1,656 Acres / 26 Percent of Township**

### **Purpose**

The purpose of the Neighborhood Development Area is to provide for new residential development in attractive subdivisions designed to conserve land and respect the natural, historic and scenic qualities of the parcel. Conventional, sprawling subdivisions that needlessly consume land, create artificial views and require high amounts of impervious surface are highly discouraged. The Neighborhood Development Area is intended to serve as the Township's growth area and to accommodate the projected population in a location that facilitates access by public/community water and sewer, is adjacent to major roadways leading to outlying commercial and employment centers, and is in proximity to other residential areas. Interconnections between neighborhoods, both vehicular and pedestrian, should be incorporated where appropriate in order to facilitate access management, ease congestion on the roadways, and generally slow traffic on local roads.

New residential development should be designed to blend with the environment and to the extent possible, units should be clustered within the development to preserve open space, protect fragile lands, reduce impervious surfaces and minimize impact on scenic vistas. Flexibility in unit design is encouraged to accommodate a variety of future residents from those with families requiring larger, detached homes with yards, to those that prefer attractive, well designed townhomes or similar alternative with lower maintenance requirements.

Permitting the creation of residential communities capable of supporting gross densities ranging from one to two units per acre is the overall intent of the Residential Development Area. Clustering in accordance with specified development standards is highly encouraged in order to accommodate net densities of two to four homes per acre in alternate forms. If a transferable development rights program is initiated, this region could serve as the receiving area.

### **Location**

The Neighborhood Development Area is intended to serve as the Township's growth area and is roughly bounded by Route 401 to the south and veering north to encompass Skyline Drive and the intersection of Route 401 and Route 113. The growth boundary (which defines the boundary between this Development Area and the Resource Protection Area) continues in a northwest direction incorporating Meadow Creek Road and proceeding northwest, crossing Messner Road to a point north of Adelpia Lane. The growth area defined contains parcels that should accommodate the projected population for the Township to the year 2020 and possibly beyond. Public water is available and public sewer may be available if full capacity has not been reached. Community systems are an alternative to individual on-lot systems. Off-lot drainage fields are utilized more as well.

The Township's PRD's are located in this growth area and several tracts serve as potential "infill" areas. Roads proposed in new development should interconnect with the road systems established. Route 113 and Route 401 provide major access through the Neighborhood Development Area and distribute traffic to other major roadways (particularly Route 100) within the region. Access to the Pennsylvania Turnpike is within a reasonable distance.

The Anselma Mill Historic District is a key Township controlled resource within the Neighborhood Development Area that will be retained as important open space as this area. The stream feeding the Mill site should also be the focus of protective measures. The recreational land and open spaces within the PRDs created by the clustering also protects scenic views and helps to maintain a rural character. These requirements should be carried through to new development.

⇒ **Recommendations for the Neighborhood Development Area**

- ***Continue to provide for Planned Residential Development (PRD) as a land use option in the Neighborhood Development Area.***

This option provides for a range of housing types and building forms, along with open space and parkland, within a planned community. An integrated circulation system links all parts of the development. The home styles can range from townhouse to detached residences on a range of lot sizes. Since this option offers flexibility in site design, it should continue to be offered as a development alternative for parcels within the Neighborhood Development Area. The development standards included in the zoning ordinance should be reviewed to ensure that PRD proposals reflect the community's character and complement the existing development.

- ***Encourage cluster development to conserve land and protect open space.***

Cluster development should be encouraged in the Neighborhood Development Area. New homes should be sited following the thorough analysis of natural, historic and scenic characteristics of the parcel proposed for development. The Township currently allows for clustering through its Conservation Residents Alternative Overlay (CRAO) ordinance for tracts of 100 acres or more. Consideration should be given to improving the existing CRAO ordinance along with implementing other cluster provisions that encourage preservation of open space.

One of the more innovative approaches to cluster development is the conservation subdivision design. This performance based design technique is referred to as the "Growing Greener" approach, and was developed by the Natural Lands Trust, a regional land trust working to conserve land in the Delaware Valley. The process is in the publication, Conservation Design for Subdivisions, by Randall G. Arendt.

Conservation subdivision design is a multi-step process that involves first identifying key resources through a detailed site analysis plan, prioritizing the resources to be conserved, then creating a subdivision plan that sites homes in a manner that only minimally impacts those resources. This design approach is particularly applicable in a community such as West Pikeland that has extensive natural and historic resources. Both the zoning ordinance and subdivision and land development ordinance updates should incorporate this option.

- ***Continue to emphasize the use of road setbacks and trees to serve as a buffer between residential development and transportation corridors.***

The use of spatial and topographical buffers, and natural tree lines, to separate residential development from transportation corridors accomplishes several design goals. For the residential development, the buffers separates homes from the roadway reducing traffic noise as creating a safety zone between yard areas and roadways. It also filters dust, debris and storm water runoff. For those traveling within the corridor it enhances a sense of open space and contributes to the rural quality of the Township. Requiring a setback, particularly for residential development

abutting minor arterial roads like Route 113 and Route 401, should be incorporated into the Township's zoning ordinance and specified in its subdivision and land development ordinance. The use of native species within buffers should be required.

- ***Emphasize the need for an informal sketch plan review prior to formal preparation of development applications.***

Sketch plan review provides an opportunity for developers and municipal officials to work cooperatively on subdivision design. Seeking the input of a professional land planner with expertise in site design at the sketch plan review phase would assist municipal officials in identifying design flaws early. Use of this option could reduce development costs and lengthy review times as well.

- ***Encourage creative design that links subdivisions within the proposed Neighborhood Development Area.***

The Township's zoning ordinance and subdivision and land development ordinance should be revised to require residential development that respects the natural site features as opposed to facilitating sprawling conventional development. New subdivisions should integrate with other development in the Area to create continuity and provide an interior circulation system that reduces traffic on major roads. The pedestrian circulation pattern should be considered where appropriate. A trail system or pathway, preferably along rear lot lines, is another alternative that can link neighborhoods without the use of sidewalks.

## **RESOURCE PROTECTION AREA**

**4,560 Acres / 71.5 Percent of Township**

### **Purpose**

The purpose of this land use category is three fold. It is intended to protect open space, to reduce development pressure in those portions of the Township that are sensitive from an environmental perspective and to support the agricultural industry by directing residential development to the identified growth area. The Township is meeting its obligation to accommodate growth by providing for a range of housing types in the Neighborhood Development Area, the area of the Township determined to be most appropriate for such development. By limiting development in the Resource Protection Area, and preserving open space through a variety of means including establishment of a Municipal Land Trust, it is also addressing health, safety and welfare of those residents who currently reside in this Area and are dependent on these resources.

In addition, the steep slopes, stream valleys, floodplains, wetlands and woodlands all pose significant development constraints and inappropriate construction could have negative and far reaching environmental impacts on both present and future Township residents. A large percentage of the Resource Protection Area is used for agricultural purposes and one of the Township's goals is to implement land use policies that directly and indirectly support the continuation of this use. Strictly limiting the development in the Resource Protection Area will protect agricultural lands, reduce demand on the potable water supply and reduce contamination and runoff into the Pickering and Pine Creeks, reduce soil erosion and reduce storm water runoff.

Recognizing that alternatives to agricultural use must be provided, however, this land use category permits some development options, but only on a very limited basis and at a density that will have negligible impact. These should be considered in addition to a transferable development rights program described in this section.

**Option 1:** Tracts within the Resource Protection Area may be subdivided into twenty acre parcels provided at least two acres remain free and clear of environmental constraints and provided that further subdivision is restricted in perpetuity. This option is intended to facilitate continued agricultural use while also recognizing that the nature of agriculture in the community is changing and that smaller farms, particularly horse farms, are becoming more prevalent. The topography and the soils are appropriate for livestock, and since horse farms require less acreage, providing for minimum tract sizes of twenty acres is an option that encourages continued agricultural use but is responsive to market demand as well.

**Option 2:** Tracts within the Resource Protection Area may be subdivided in accordance with a mandatory cluster development plan that allows for a variety of residential design options at a gross density of approximately 0.5 units per acre. A maximum lot size of 1.5 acres is recommended to reduce sprawl patterns and minimize development pressure on adjacent parcels. This is a performance based approach in that gross density could range significantly depending on the design selected; however, gross density should not exceed 0.5 units per acre (one unit per two acres). The lot areas must be free and clear of sensitive resources, specifically floodplain, wetlands, and steep slopes. Approximately seventy percent of the tract must remain in open space and 100% of the constrained land may be included in the open space. Lots must be contiguous. Tract yield depends on the site design in accordance with development standards. If the tract contains agricultural soils, the design should facilitate the continued use of that parcel for the same purpose and homesites should be located accordingly.

#### **Location**

The Resource Protection Area encompasses the north, northcentral and northeast region of the Township outside of the growth boundary delineated by the Neighborhood Development Area. Most of the Resource Protection Area is comprised of sensitive natural resources such as steep slopes, flood plains, wetlands and prime agricultural soils. A large percentage of this area is constrained in terms of groundwater yields. The underlying geology indicates the likelihood of low to moderate yields necessitating full, thorough evaluation of groundwater capabilities prior to even minimal residential construction. Since it is difficult to make general assumptions on capabilities, it is necessary for such analysis to occur on a site by site basis.

Within the Resource Protection Area, four villages are proposed: Chester Springs, Yellow Springs, Rapps Corner, and Pikeland. These villages are intended to accommodate mixed uses that respect existing patterns and conform to the existing scale. Land uses proposed for the villages is described in the next section, Village Development Areas.

#### **⇒ Recommendations for the Resource Protection Area**

- ***Require mandatory cluster development for single family residential uses on parcels located in the Resource Protection Area.***

New residential development should be focused within the Township's growth boundary, however, some development option must be provided for in the outlying areas. Since this Area is not appropriate for extensive residential development, very low gross densities should be maintained. To prevent sprawl development and the road congestion, storm runoff and strain on groundwater supplies posed by such development, cluster development should be mandated and significant open space should be required. Allowing for a maximum gross density of approximately 0.5 units per acre and stipulating that approximately 70% of a tract proposed for development remain in open space thereby allowing for lots only on the remaining 30% of the parcel (minus approximately 15% for infrastructure and roadways) provides for a reasonable development alternative yet one that is sustainable considering the considerable natural resources.

- ***Strengthen the development standards for cluster to provide greater guidance in site design.***

Cluster development should be mandatory in the Resource Protection Area. Detailed development standards should be included in the zoning ordinance. This is particularly important if a range of lot sizes is permitted because the resulting number of home sites could vary and thus affect the financial feasibility. As in the Neighborhood Development Area, the sketch plan review becomes a critical part of the process as it gives the Township and the developer the opportunity to work together for the best possible outcome.

- ***Support the agricultural industry by offering a development alternative that supports broader agricultural uses.***

West Pikeland's historical roots are in agriculture and many farms continue to operate in the Township despite residential development pressure. In order to support the industry and maintain the agricultural base, an alternative that allows for agricultural pursuits but at a somewhat smaller scale, should be considered. Agriculture is not limited to crop production, but includes raising livestock and equestrian uses as well. Allowing for small scale farms suited to raising certain types of livestock, provided that the land is secured from further subdivision, is a development alternative that should be considered. Since the Township's agricultural base is threatened, providing for a transition to a different type of agricultural activity could help prevent permanent loss of important resources.

- ***Require subdivision design that facilitates protection of prime agricultural soils.***

Because farmland tends to be the least costly to develop, it is usually sought out for residential development. Prime farmland should be protected by clustering new residential development outside cultivated areas so that the agricultural operations can continue. The Township, as a condition of development, should require that homesites be clustered in the least intrusive locations on the site so that the open agricultural land can remain useful. A record or lot of such farmland should be maintained and made available to those seeking to rent farm fields. Since residential uses and agricultural uses can conflict, it is important that potential buyers be educated on the drawbacks of living adjacent to agricultural operations.

- ***Encourage participation in the Agricultural Security Areas Program.***

The Agricultural Security Area program began in 1981 as a means of protecting agricultural lands throughout Pennsylvania from excessive governmental regulations, nuisance ordinances and other measures that could hinder the industry. The ASA program also offers protection from condemnation proceedings and certain state initiated activities. Participation is strictly voluntary and does not require a commitment to keep farmland out of development. The minimum area required to establish an ASA is 250 acres (or 500 acres to participate in the easement program), and can consist of multiple, non-contiguous farms.

- ***Promote, in conjunction with the Chester County Agricultural Development Council, educational programs that assist the agricultural community in maintaining their farming operations despite increasing development pressure.***

In addition to administering the agricultural conservation easement program, one of the major responsibilities of the Chester County Agricultural Development Council is to provide education and technical assistance to the agricultural community either directly or through referrals. Chester

County is the second largest agricultural county in Pennsylvania and preserving the industry and protecting critical soil resources are key County objectives. Technical and financial resources are available to address this objective and the Township can play an important role in helping to disseminate the information available.

- ***Encourage landowner participation in Act 319 and Act 515 as a way of preserving important agricultural land.***

Act 319, known as the “Clean and Green” Act, provides tax relief to farmers by allowing agricultural land to be assessed based on factors such as soil characteristics, farm productivity, and overall capacity for generating income. The program is voluntary and the minimum parcel size is ten acres or a minimum of \$2,000 gross agricultural income annually. The assessment remains on the property in perpetuity or until a change in use occurs. The agreement must be renewed every 7 years.

Act 515 also offers tax relief by providing for a different method of assessment, however, this program is based on the location, size, and use of the land as related to market demand. It is not used as extensively as Act 319. The minimum qualifying parcel size is 10 acres. The provisions are enacted by a covenant that must remain in effect for a minimum of 10 years.

- ***Continue to work with large landowners in the conservation of key parcels, particularly those containing sensitive environmental resources.***

To monitor changes in land use, Township officials maintain informal contact with large landowners. This contact is very positive in that it allows municipal officials to discuss alternatives with the landowners and possibly influence (to a degree) future land use patterns. This contact should be formalized through a program that establishes regular contact with key landowners and provides information on development alternatives including the use of cluster options, conservation easements, and the sale of development rights. The program should be tailored to West Pikeland’s goals and resources.

- ***Consider forming a Municipal Land Trust sponsored and administered by West Pikeland Township.***

The purpose of a land trust is to protect large properties either by purchasing undeveloped properties outright or by purchasing conservation easements on undeveloped properties. Conservation easements are defined as legal agreements made voluntarily by a property owner to restrict the type and amount of development that may take place on his or her property. The contract permanently limits the type and intensity of future land use while allowing landowners to retain ownership and control of their properties. When a land trust purchases an easement, they in essence, enter into a contract with the landowner to obtain a specific property right. Most land trusts are non-profit organizations and several municipalities in Chester County (Kennett, Pennsbury, East Marlborough and West Vincent Townships) have formed land trusts to facilitate preservation of open space.

- ***Consider establishing a Transferable Development Rights program.***

A transferable development rights (TDR) program as authorized through the Municipalities Planning Code is administered through the municipal zoning ordinance. It establishes “sending” and “receiving” areas within Township boundaries and allows development potential to be sold

and transferred from one location to another. Through the purchase of development rights, a developer is then permitted to increase slightly, the density of a parcel in the receiving area over and above the base zoning. There is an administrative burden associated with such a program; however, this could be contracted to an outside entity. A TDR program can be very effective in directing new development to appropriate areas and preserving agricultural lands. In West Pikeland, the sending area is envisioned to be Resource Protection Area while the receiving area is envisioned to be the Neighborhood Development Area.

## **VILLAGES**

**159 Acres / 2.5 Percent of Township**

### **Purpose**

The purpose of the Village land use category is to preserve the historic development pattern of the Township and to provide an opportunity for non-residential and higher density residential uses outside identified growth areas. The villages are intended to serve primarily local residents and provide for minor, small scale commercial and office uses.

Six villages are established in West Pikeland: Opperman's Corner, Anselma Mill, Chester Springs, Yellow Springs, Rapp's Corner and Pikeland. Although they vary in size and scale, all are small in comparison with other villages and Rural Centers in Chester County. Each has unique qualities that are largely based on its historic purpose or associations. All, with the exception of Rapp's Corner, once served as a community, transportation or commercial center for the Township. Rapp's Corner is considered a hamlet, as historically it was smaller and more residential in nature. The villages have changed significantly over time and in the case of Opperman's Corner in particular; their historic associations are barely recognizable. They continue to be community focal points and much of the Township's unique history and rural character is linked to these sites. Even though these villages do not currently function as "centers", some remnants of the historic land use patterns still exist, along with many of the original buildings. The historic pattern should be encouraged and new uses that complement the intent of each village will promote the pattern.

The Village land use category is intended to accomplish multiple goals. It offers a way for locally oriented land uses can be focused in the rural landscape, it promotes historic preservation because it fosters rehabilitation and adaptive reuse, and it provides a means for the Township to meet its obligation to provide for various land uses. The uses proposed for each village should be tailored to the site. A separate zoning district, possibly in the form of an overlay district, will be required for each. The regulations should take into consideration the site characteristics and allow new development on an infill basis that respects the existing scale and pattern.

### **Location**

Three of the six villages proposed are located along Route 113 at key intersections. Opperman's Corner is located at Route 113 and Route 401, Chester Springs is at the intersection of Route 113 and Yellow Springs Road, and Pikeland Village is located on the west side of the intersection of Route 113 and Pikeland Road. The other three villages are Yellow Springs, located west of Chester Springs at the intersection of Art School and Yellow Springs Roads, Rapp's Corner is a residential hamlet located at the intersection of Yellow Springs and Street Roads, and Anselma Mill at Route 401 near Byers Road. The villages and proposed land uses are further described as follows:

**Opperman's Corner:** The intersection of Route 113 and Route 401 is recommended to serve as a minor commercial center for Township residents. Since it proposed to be located within the Neighborhood Development Area, it can appropriately serve as a focus for small scale commercial and institutional uses. Most commercial, office and institutional uses are met at the regional level within the Route 100 corridor.



Improvement of the intersection could help the traffic flow at this location and the intersection should be designed to accommodate the current level of minor development. The impact of development on traffic at this intersection will be a key issue and access will need to be carefully considered if any further expansion of commercial activities are contemplated.

Anselma Mill: This area was once the site of an operating mill and historically was an important local commercial and community center. Much of the actual mill site is still intact and a non-profit organization has recently been formed to restore the mill and develop the property as a historical park. The area has also been designed as an historic district under the auspices of PA Act 167. Minor commercial uses could also be considered for this vicinity thereby providing some retail services to site visitors as well as to the neighborhoods located both north and south of Route 401.

Chester Springs: This village is near the geographic center of the Township and presently serves as the community center since the Township building, post office and library are all in this vicinity. There are small retail uses on the west side of Route 113 and several older residential structures on the east side present some redevelopment potential. Encouraging the preservation of these buildings could help showcase the history of Chester Springs as a Victorian era transportation center, a perspective that could be encouraged at this location. The relationship between Chester Springs and Yellow Springs should be taken into account when considering both development standards and design guidelines. Any new development at this intersection must be closely tied to intersection improvements to manage traffic flow. Pedestrian circulation and parking will be key issues.

Pikeland Village: A locally important general store operates at this intersection serving mainly the surrounding community. Several attached residential structures are found at this location and infill of a similar nature could be permitted in this vicinity. Minor commercial development could be permitted, but restricted to the west side of the intersection since much of the east side is township owned and is intended to remain undeveloped. Permitting new development only on the west side of Route 113 would help move traffic through the Township and reduce the potential for conflict.

Yellow Springs: This village has deep, historical roots and is widely recognized as the Township's cultural center. Both the Historic Yellow Springs Foundation and the Township are committed to working together to preserve the area. Future development, in accordance with the provisions of the certified historic district, must respect the existing architecture and overall character of the village. The Historical Architectural Review Board should play a major role in reviewing development proposals that include modifications to existing buildings. Commenting on proposals early in the process can help ensure that infill proposed for this area maintains the village's historic character.

Rapp's Corner: Rapp's Corner is a crossroads hamlet with individual homes clustered at the intersection of Yellow Springs and Street Roads. Although commercial uses once were found in the area, none have been present for several decades and no new commercial uses should be permitted. Attached homes could be considered as infill at this location in order to preserve the residential character and charm of this crossroads. Any small-scale residential uses should be permitted only along the frontage in order to maintain the historic "hamlet" qualities of the area.

## ⇒ **Recommendations for Villages**

- ***Develop individual zoning districts that are tailored to each village in the Township.***

In order to preserve the historic land use pattern of the Township as well as the unique character of the villages, separate zoning districts for each village are required. The zoning districts, which

could be developed as overlay districts, should be written only after review of remaining analysis of individual site characteristics and the remaining physical features to ensure that new (infill) development is appropriately integrated. The area and bulk regulations of the district should reflect the existing lot configurations and new uses should respect the scale of existing development.

- ***Encourage the formation of a village design guide to ensure that new development complements the existing pattern and structures in each village.***

Design guides should be used to encourage new development and infill that reflects the character of each village. Although in most of these cases, few buildings remain, however, historical documents could provide some guidance. The type and form of the buildings located near each village could also provide insight into historic architectural styles and the relationship among the structures in the villages. This is most relevant in the village of Yellow Springs, a certified historic district and as such, provides the Township the authority to mandate compliance with certain architectural characteristics. Design guidelines could be developed first for this area and the concept “tested” in terms of applicability to other villages.

- ***Consider developing a “village concept plan” to help guide development in each village.***

A concept plan that identifies the location and site design of future uses within a village district can help convey the Township’s land use vision to property owners and developers. A concept plan can also help in conveying the scale of development and the interrelationship among various uses within a specific area. Depending on the scope of the concept plan, design elements such as vehicular and pedestrian/ access, circulation, parking, and signage could be addressed. If municipal officials wish to formalize a specific pattern, the concept plan could be translated into an official map which reserves open space, road rights-of-way, and future development areas within the proposed boundaries.

- ***Reduce the visibility of parking areas by locating such facilities in side or rear yards and using landscape buffers or screens.***

Identifying appropriate locations for parking in village settings can be challenging. Because most villages tend to be higher density and pedestrian oriented, they are not conducive to the standard suburban parking lot designs. Requiring that parking associated with commercial or community uses in villages to be located in side or rear yards, encouraging shared parking where possible, and requiring landscape screens and buffers, can all be required in the techniques that can be required through the zoning ordinance.

- ***Maintain a pedestrian orientation in the villages.***

Villages, by their very nature, tend to be pedestrian oriented. Although many have lost that orientation, new and infill uses should be designed in accordance with a village-wide pedestrian circulation system identifying access points, sidewalks and bike paths. As new uses develop, they should be integrated into the land use pattern, and the circulation system should link the various uses. These provide the opportunity for pedestrians to park once and walk to other locations within the village. Linkages via existing greenways should be explored.

- ***Encourage the effective use of landscaping materials to enhance the village design and define the village edge.***




The use of landscaping can enhance the village design and help create a sense of place. The type of landscaping required should be set forth in zoning district regulations along with specific information as to the location, size, and maintenance of the plant material required. Native materials should be encouraged by providing a list of desired species. Landscaping should also be tailored to the specific characteristics of the village.

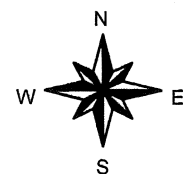
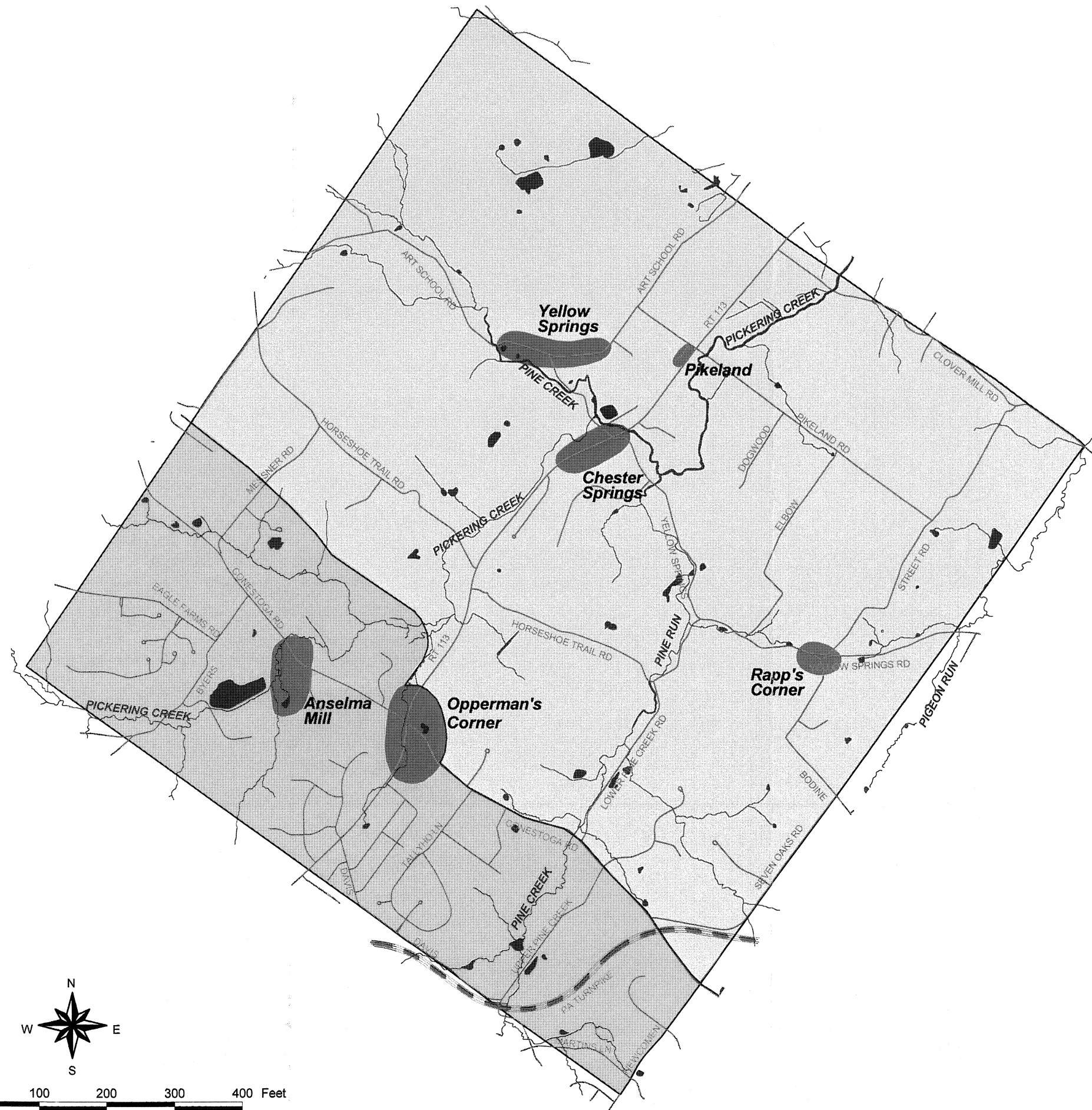
# Map 11-1: Future Land Use

## FUTURE LAND USE CATEGORY

-  Neighborhood Development Area
-  Resource Protection Area
-  Village

## FEATURES

-  Streams and Ponds
-  Road Network
-  Municipal Border



100 0 100 200 300 400 Feet

Thu Sep 02 10:05:59 1999

Source: Chester County Planning Commission, 1999.  
ChesCo Land Records System, 1998.

This map was digitally compiled for internal maintenance and developmental use by the County of Chester, Pennsylvania to provide an index to parcels and for other reference purposes. Parcel lines do not represent actual field surveys of premises. County of Chester, Pennsylvania makes no claim, as to the completeness, accuracy or content of any data contained hereon, and makes no representation of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied or inferred, with respect to the information or data furnished herein.

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## West Pikeland Township

### Comprehensive Plan



## Chapter Twelve

# IMPLEMENTATION STRATEGIES

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The purpose of this chapter is to summarize the recommendations contained in this Comprehensive Plan Update and discuss the implementation strategies. Through adoption of this Update, the Township's planning policy is formalized and implementation of the Plan begins by undertaking the recommendations contained in each plan element as summarized in this chapter.

To assist in implementation, a summary table is included in this chapter that lists the plan recommendations intended to address each goal. Each recommendation listed references the suggested priority, the responsible entity, the implementation tool or technique and a page citation.

### Implementation Recommendations

The recommendations discussed throughout this Update are organized in Table 12-1 by planning component. The purpose of the Table is to serve as a general index, but it also serves to show the relationship between the recommendations and the goals each are intended to address.

### Priority

The recommendations are prioritized as Immediate, Short-term, Long-term or On-going. The prioritization is provided to indicate the urgency of addressing the issue. The definitions are as follows:

- Immediate:*** Implementation should begin within one to two years after plan adoption. Recommendations identified as "immediate" priorities are issues of high concern.
- Short-term:*** Implementation should occur within three to five years after plan adoption. Recommendation identified as "short-term" priorities are those that may require a degree of preliminary investigation before they can be effectively implemented.
- Long-term:*** Implementation should occur within five to ten years of adoption of the plan. These recommendations generally do not require the same degree of urgency as others. They may also require a significant amount of evaluation prior to implementation.
- On-going:*** Implementation is already occurring on some level and a more concerted effort may be required.

### Entity

Table 12-1 identifies the organization or entity primarily responsible for implementing each recommendation. This does not imply sole responsibility, but it is this entity that should be formally assigned the task and held accountable for initiating and monitoring its progress. Joint efforts will be required to implement most recommendations and all such activities should be monitored by the Board of Supervisors.

As indicated, much of the implementation of the Comprehensive Plan Update is assigned to the Planning Commission. Since many of the individual recommendations are indicated as "immediate" or "short-term" priorities, the workload for this entity could potentially be quite heavy for the next two to three

years. The Township recognizes that in order to implement the Plan in the manner indicated, it will need to contract with planning consultants, professional engineers, and other municipal consultants for assistance. Funding for this purpose continues to be made available by the Board of Supervisors to the Planning Commission and the Township is encouraged to use this alternative. The initial implementation activities anticipated to be undertaken are updates of both the Zoning Ordinance and the Subdivision and Land Development Ordinance, which will incorporate many of the recommendations contained in this Plan.

Citizen input and participation is a critical component to successful implementation of most plan elements. Ways to encourage citizen participation and involvement should be identified before individual recommendations are implemented.

### **Implementation Tool**

Most of the recommendations contained in Table 12-1 must be implemented through documents such as the zoning ordinance, subdivision and land development ordinance, or building code. In some instances, regulations must be specified in more than one of these documents and it is necessary to maintain consistency among all Township regulations. The following provides a brief explanation of these primary implementation tools.

#### ***Zoning Ordinance:***

Many of the recommendations in this Update are to be implemented through zoning. Zoning is enabled through Act 247, the Pennsylvania Municipalities Planning Code. It allows municipalities to plan for and regulate land use to protect and promote safety, health, and welfare of the community. The Township's zoning ordinance creates districts and specifies the use and density of development within those districts. It focuses development in those areas best able to support such uses and delineates the standards to which new development must adhere. The zoning ordinance is a legal document that regulates the type, location and method of development. It includes a zoning map that outlines the boundaries of the zoning districts described in the ordinance.

West Pikeland's zoning ordinance was adopted in 1976 and several amendments have been incorporated since that time. The Township intends to update the ordinance to include land use regulations that better reflect the philosophy delineated in the Comprehensive Plan Update as an initial step to implementation.

#### ***Subdivision and Land Development Ordinance:***

Article V of the Pennsylvania Municipalities Planning Code enables municipalities to adopt an ordinance that regulates how land is to be subdivided and development is to be undertaken. Subdivision occurs whenever a parcel of land is divided into two or more legally defined parcels for future or immediate sale, transfer or development, while land development is the improvement of a parcel for any purpose such as the construction of buildings and infrastructure. Subdivision and land development regulations are necessary to ensure that standards are maintained, development is coordinated, environmental damage is minimized and adjacent property is protected.

The Township's subdivision and land development ordinance was adopted in 1974 and has been amended several times. The Township is considering a full update to address planning issues and concerns, and to implement specific components of the Comprehensive Plan Update.

#### ***Building Code:***

Building codes regulate the manner in which buildings are constructed and the types of materials and methods used. One of their main purposes is to establish standards to which all building must

adhere in order to ensure the health, safety and welfare of occupants. Most municipalities in Chester County adopt the Building Officials and Code Administrators International (BOCA) code and require compliance with those regulations. Other codes that regulate plumbing, electrical and fire prevention are adopted to supplement the BOCA code. Regularly adopting the updates issued help to ensure that the latest methodology and technology is required.

West Pikeland Township has adopted the 1996 BOCA code. Enforcement is critical and the Township monitors the inspection process on an on-going basis.

***Official Map:***

An Official Map is a tool enabled by Article IV of the Pennsylvania Municipalities Planning Code. It allows a municipality to “master plan” an area providing a means through which land needed for future public use can be identified. The location of future roads, setbacks, utility corridors, sewage treatment facilities, parks and recreational facilities can be reserved by delineating their locations on an Official Map. This does not obligate the municipality to purchase the land or rights-of-ways identified, however, the Township must be given the first right of refusal if the property is proposed for development. The reservation becomes void one year after the property owner notifies the municipality of the intention to develop, or has applied for a building permit.

Although West Pikeland Township has not adopted an Official Map, it could eventually be considered as a way to ensure that development, particularly in the neighborhood development area, is coordinated.

***Capital Improvement Program:***

The Capital Improvement Program is an important tool in planning and budgeting for community facilities. It links the long-term planning with the annual budget process as it establishes the framework for programming and financing new or expanded public facilities. It is not an ordinance, and not regulatory in nature, but is instead an independent document that complements the municipalities annual budget. The capital improvement program is implemented through the annual budget which incorporates the capital expenditures and revenues necessary to carry out the expenditure program.

Capital improvements planning in West Pikeland is on-going, however, establishing a formal program both for open space acquisition as well as community facilities, is a recommendation contained in this Update.

**Reference Page**

The summary table includes a page reference where more specific information on the recommendation can be found.

**TABLE 12-1**  
**SUMMARY OF RECOMMENDATIONS AND IMPLEMENTATION STRATEGY**

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>ENVIRONMENTAL AND HISTORIC RESOURCES</b>				
<b>GOAL:</b> Protect those natural, scenic and historic resources that contribute to the unique character of the Township.				
<b>GOAL:</b> Use innovative land management techniques to facilitate the preservation and protection of the environmental and historic resources.				
<b>RECOMMENDATIONS FOR NATURAL FEATURES PROTECTION</b>				
<b>Recommendation:</b> Adopt a "Net-Out" provision as part of the zoning ordinance update.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance	8-2
<b>Recommendation:</b> Ensure that the open space specified in development proposals is protected in perpetuity from further development or re-subdivision.	Immediate	Planning Commission, Township Engineer	Zoning Ordinance, Staff Review	8-3
<b>Recommendation:</b> Facilitate private efforts to protect natural and historic resources through the purchase or donation of conservation easements.	Short-Term	Board of Supervisors, West Pikeland Land Trust	Planning Program	8-3
<b>Recommendation:</b> Reduce soil erosion and stream sedimentation, and promote groundwater recharge, through storm water management techniques that emphasize the use of Best Management Practices.	Short-Term	Planning Commission, Township Engineer	Zoning Ordinance, Subdivision/Land Development Ordinance	8-4
<b>Recommendation:</b> Ensure that storm water management facilities are properly inspected and that long-term maintenance is addressed.	On-Going	Board of Supervisors, Planning Commission, Township Engineer	Administrative Process, Subdivision/Land Development Ordinance	8-4
<b>RECOMMENDATIONS FOR VEGETATION PROTECTION</b>				
<b>Recommendation:</b> Protect existing vegetative cover by incorporating a vegetation management component into the conservation plan requirement of the Subdivision and Land Development Ordinance.	Immediate	Planning Commission	Subdivision and Land Development Ordinance	8-5



ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Require the use of native species when landscaping new subdivisions or land developments.	Immediate	Planning Commission, Township Engineer	Administrative Process, Subdivision/Land Development Ordinance	8-5
<b>Recommendation:</b> Encourage sound forest management techniques among property owners that own significant stances of woodlands.	Long-Term,	Board of Supervisors Township Staff	Educational Program	8-5
<b>Recommendation:</b> Expand the landscaping requirements contained in the Township's ordinances.	Immediate	Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	8-6
<b>RECOMMENDATIONS FOR WATER RESOURCE PROTECTION</b>				
<b>Recommendation:</b> Promote the designation of the Pickering and Pine Creeks as "Exceptional Value" streams.	Immediate	Board of Supervisors, Planning Commission, Parks and Recreation Commission, Trout Unlimited, French and Pickering Creek Conservation Trust	Administrative Process, Educational Program	8-6
<b>Recommendation:</b> Clarify the percentage of flood plain that may be included in a residential lot area calculation.	Immediate	Planning Commission	Zoning Ordinance	8-6
<b>Recommendation:</b> Incorporate zoning ordinance provisions aimed at protecting wetlands.	Immediate	Planning Commission	Zoning Ordinance, Subdivision and Land Development Ordinance	8-7
<b>Recommendation:</b> Consider a water withdrawal ordinance as a way of monitoring ground water supply and demand.	Short-Term	Board of Supervisors, Planning Commission	General Ordinance, Zoning Ordinance	8-7
<b>Recommendation:</b> Adopt a scenic overlay district for the Pickering Creek stream corridor	Short-Term	Board of Supervisors, Planning Commission	Zoning Ordinance	8-7
<b>RECOMMENDATIONS FOR HISTORIC RESOURCES PROTECTION</b>				
<b>Recommendation:</b> Emphasize preservation of remaining historic resources when developing a Village Protection Overlay District.	Short-Term	Planning Commission, Historical Architectural Review Board, Historical Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	8-8

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Complete a comprehensive survey of historic resources that builds upon the information contained in the Chester County Historic Sites Survey (1981)	Short-Term	Planning Commission, Historical Commission	Special Study	8-9
<b>Recommendation:</b> Update the historic resources inventory based on the existing survey data.	Short-Term	Historical Commission	Special Study	8-9
<b>Recommendation:</b> Consider an historic overlay district as part of the Zoning Ordinance Update.	Short-Term	Planning Commission, Historical Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	8-9
<b>Recommendation:</b> Continue to support the efforts of organizations such as the West Pikeland Municipal Land Trust, Historic Yellow Springs, French and Pickering Creek Conservation Trust, Anselma Mill Trust, and Natural Lands Trust in protecting historic resources.	On-Going	Board of Supervisors, Historical Architectural Review Board, Historical Commission, West Pikeland Municipal Land Trust	Administrative Activity	8-10
<b><i>RECOMMENDATIONS FOR DEVELOPING A MUNICIPAL HISTORIC PRESERVATION PROGRAM</i></b>				
<b>Recommendation:</b> Consider appointing a Historical Commission to advise on general historic preservation issues in the Township.	Immediate	Board of Supervisors	Administrative Action	8-10
<b>Recommendation:</b> Encourage the preparation of a “multiple resource” National Register nomination to recognize and document scattered rural resources and clusters.	Long-Term	Historical Commission	Special Study	8-10
<b>Recommendation:</b> Encourage the protection of historic resources through education.	Short-Term	Board of Supervisors, Historical Commission	Administrative Activity	8-11
<b>Recommendation:</b> Sponsor activities such as house tours, educational seminars, preservation workshops, and local recognition programs as part of an historic preservation program.	Long-Term	Historical Commission	Administrative Activity	8-11
<b>Recommendation:</b> Develop a comprehensive Historic Preservation Plan for West Pikeland Township using Chester County’s Historic Preservation Planning Grant Program.	Short-Term	Planning Commission, Historical Commission	Planning Activity	8-11

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>TRANSPORTATION AND CIRCULATION</b>				
<b>GOAL:</b> <b>Provide for a safe and effective circulation system that minimally impacts the Township's rural character, open space, and scenic roadways.</b>				
<b><i>RECOMMENDATIONS FOR FUNCTIONAL CLASSIFICATION SYSTEM</i></b>				
<b>Recommendation:</b> Adopt a unified, township wide, future Functional Classification for roadways, and a set of design standards to relate directly to each class of roadways, to achieve the Township's goal to maintain the rural character.	Short-Term	Board of Supervisors, Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	9-2
<b>Recommendation:</b> Local Roads should be further classified to accommodate the diverse functions of local roadways.	Long-Term	Board of Supervisors, Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	9-2
<b>Recommendation:</b> Commission a detailed study to assign classes to all local roads in the Township into three classes.	Long-Term	Board of Supervisors, Planning Commission	Planning Activity	9-6
<b><i>RECOMMENDATIONS FOR ROAD IMPROVEMENTS AND FUNDING OPPORTUNITIES</i></b>				
<b>Recommendation:</b> Program for roadway improvement projects that support the Township's goal to maintain its rural character, and preserve historic and cultural resources abutting roadways.	Long-Term	Board of Supervisors	Administrative Activity	9-6
<b>Recommendation:</b> Give utmost importance to safety improvements throughout the Township.	On-Going	Board of Supervisors, Planning Commission	Administrative Activity	9-6
<b>Recommendation:</b> Update the Road Improvements Inventory periodically to identify all improvement projects in the Township.	Long-Term	Board of Supervisors	Planning Activity	9-7
<b>Recommendation:</b> Develop a list of prioritized improvement projects.	On-Going	Board of Supervisors,	Planning Activity	9-7
<b>Recommendation:</b> Consider applying for "turn-back" of selected State roads to local municipalities.	Long-term	Board of Supervisors Township Staff	Administrative Activity	9-8
<b>Recommendation:</b> Pursue funding possibilities for the major prioritized projects.	On-Going	Board of Supervisors	Administrative Activity	9-8

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>RECOMMENDATIONS FOR ACCESS MANAGEMENT</b>				
<b>Recommendation:</b> Develop an Access Management Plan that reflects cohesiveness throughout the Township and establishes access restrictions for each functional classification.	Long-Term	Planning Commission	Planning Activity	9-11
<b>Recommendation:</b> Coordinate future land use planning and transportation planning in the Township.	On-Going	Planning Commission	Planning Activity	9-15
<b>Recommendation:</b> Consider road functional classifications when making land use decisions.	Immediate	Board of Supervisors, Planning Commission	Planning Activity	9-15
<b>RECOMMENDATIONS FOR NON-VEHICULAR CIRCULATION:</b>				
<b>Recommendation:</b> Develop an Equestrian, Bicycle and Pedestrian Trail Plan that would link the various amenities and trip generators in the Township	On-Going	Park and Recreation Commission, Planning Commission	Planning Activity	9-15
<b>Recommendation:</b> Work with potential developers to provide and preserve trails to achieve the goals of the Equestrian, Bicycle and Pedestrian Trail Plan.	On-Going	Board of Supervisors, Planning Commission	Administrative Activity	9-16
<b>RECOMMENDATIONS FOR SCENIC ROAD PRESERVATION</b>				
<b>Recommendation:</b> Implement the recommendations of the Open Space, Recreation and Environmental Resources Plan (1992), to preserve the scenic character of the Township.	Long-term	Board of Supervisors, Planning Commission, Park and Recreation Commission	Administrative Activity, Capital Improvements Plan, Subdivision and Land Development Ordinance	9-16
<b>Recommendation:</b> Include an inventory of mature trees and their condition in the Road Improvement Inventory to assist PennDOT in identifying trees in the State right-of-way in need of safety improvements.	Long-term	Township Staff	Administrative Activity	9-17
<b>RECOMMENDATIONS FOR REGIONAL PARTICIPATION</b>				
<b>Recommendation:</b> Participate in regional road improvement efforts that support the overall goals of preserving the rural character of the Township.	On-Going	Board of Supervisors	Administrative Activity	9-17

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Participate in the development of proposals in neighboring municipalities that have a major impact on Township roadways.	Short-Term	Board of Supervisors, Township Staff	Planning Activity	9-18
<b>Recommendation:</b> Support regional public transportation projects to provide a variety of options to the residents.	Long-term	Board of Supervisors	Administrative Activity	9-18
<b>COMMUNITY FACILITIES AND SERVICES</b>				
<b>GOAL:</b> Provide for community facilities and services that address the needs of residents and are consistent with the overall goals for the Township.				
<b>RECOMMENDATIONS FOR TOWNSHIP ADMINISTRATION</b>				
<b>Recommendation:</b> Monitor current staffing levels.	On-Going	Board of Supervisors	Administrative Activity	10-2
<b>Recommendation:</b> Encourage volunteerism to build local commitment and a sense of community.	On-Going	Board of Supervisors	Administrative Activity	10-2
<b>Recommendation:</b> Retain on an as-needed basis, professional assistance in identifying and applying for grant funds.	Short-term	Board of Supervisors, Township Staff, West Pikeland Municipal Land Trust	Administrative Activity	10-2
<b>Recommendation:</b> Prepare a Capital Improvements Plan to assist in the annual budget preparations.	Immediate	Board of Supervisors	Administrative Activity	10-3
<b>Recommendation:</b> Retain professional planners to review development proposals and encourage innovative cluster designs that preserve open space and protect environmental resources.	On-Going	Board of Supervisors, Planning Commission	Administrative Activity	10-3
<b>Recommendation:</b> Support regional planning efforts and maintain involvement in regional initiatives.	On-Going	Board of Supervisors, Planning Commission	Administrative Activity	10-3
<b>RECOMMENDATIONS FOR WASTEWATER TREATMENT AND SEWAGE DISPOSAL</b>				
<b>Recommendation:</b> Update the Municipal Sewage Facilities Plan in accordance with the provisions of Pennsylvania Act 537 of 1966.	Immediate	Board of Supervisors, Planning Commission	Planning Activity	10-4

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Adopt a septic management ordinance requiring regular maintenance.	Immediate	Board of Supervisors Planning Commission	Administrative Activity	10-4
<b>Recommendation:</b> Establish a septic management program that facilitates regular maintenance of on-lot septic systems to protect groundwater.	Short-Term	Board of Supervisors, Township Staff	Administrative Activity, Septic Management Ordinance	10-4
<b>Recommendation:</b> Adopt a policy that permits the use of off-lot sewage disposal systems to facilitate cluster development.	Short-Term	Board of Supervisors, Planning Commission	Administrative Activity	10-5
<b>RECOMMENDATIONS FOR WATER FACILITIES</b>				
<b>Recommendation:</b> Use growth boundaries implemented through the Zoning Ordinance to conserve groundwater and facilitate use of public water where available.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	10-5
<b>Recommendation:</b> Encourage periodic testing of well water by homeowners to identify groundwater contamination.	Short-Term	Board of Supervisors	Administrative Activity	10-5
<b>Recommendation:</b> Adopt an ordinance that regulates large scale water extraction to protect groundwater supplies.	Immediate	Board of Supervisors, Planning Commission	Administrative Activity,	10-6
<b>Recommendation:</b> Establish protective buffers within stream corridors to reduce non-point source pollution.	Immediate	Planning Commission	Zoning Ordinance Subdivision/Land Development Ordinance	10-6
<b>Recommendation:</b> Use zoning to limit intensive land uses in areas demonstrated to have limited groundwater supplies.	Immediate	Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	10-6
<b>RECOMMENDATIONS FOR STORM WATER MANAGEMENT</b>				
<b>Recommendation:</b> Require the use of Best Management Practices in storm water management planning.	Immediate	Board of Supervisors, Planning Commission, Township Staff, Township Engineer	Zoning Ordinance, Subdivision/Land Development Ordinance	10-7
<b>Recommendation:</b> Encourage the agricultural community to use conservation measures that reduce topsoil loss resulting from storm water runoff.	Short-term	Board of Supervisors	Administrative Activity	10-7
<b>Recommendation:</b> Inspect the site grading on individual home sites prior to issuing certificates of occupancy to ensure that storm water is properly controlled.	On-Going	Township Staff	Administrative Activity	10-7

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Reduce the amount of impervious surface allowed on a lot in an effort to manage storm water runoff.	Short-Term	Board of Supervisors, Planning Commission,	Zoning Ordinance, Subdivision/Land Development Ordinance	10-7
<b>RECOMMENDATIONS FOR PARKS AND RECREATIONAL FACILITIES DEVELOPMENT</b>				
<b>Recommendation:</b> Continue to use the <u>Open Space, Recreation and Environmental Resources Plan (1992)</u> to guide development of parks and recreational facilities.	On-Going	Planning Commission, Parks and Recreation Commission	Planning and Administrative Action	10-8
<b>Recommendation:</b> Supplement the <u>Open Space, Recreation and Environmental Resources Plan (1992)</u> with a detailed trail component.	Short-Term	Parks and Recreation Commission, Planning Commission	Planning Activity	10-8
<b>Recommendation:</b> Prepare a Capital Improvement Plan focusing specifically on acquisition of parks and open space.	Immediate	Board of Supervisors, Park and Recreation Commission	Planning Activity	10-8
<b>Recommendation:</b> Continue to support development of the Anselma Mill Historical Park.	Short-Term	Board of Supervisors	Planning and Administrative Activity	10-9
<b>Recommendation:</b> The Township and the Historic Yellow Springs Foundation should meet regularly and coordinate, where feasible, recreational programming and activities.	On-Going	Board of Supervisors, Historical Architectural Review Board, Historical Commission	Planning and Administrative Activity	10-9
<b>Recommendation:</b> Continue to support the Chester Springs Library as a significant local cultural resource.	On-Going	Board of Supervisors	Administrative Activity	10-9
<b>RECOMMENDATIONS FOR EMERGENCY SERVICES</b>				
<b>Recommendation:</b> Continue to maintain a highly trained police force and ensure that equipment needs are addressed.	On-going	Board of Supervisors	Administrative Activity	10-10
<b>Recommendation:</b> Maintain regular contact with the fire and ambulance service providers in order to promptly respond to service delivery issues.	On-Going	Board of Supervisors	Administrative Activity	10-10
<b>RECOMMENDATIONS FOR EDUCATIONAL FACILITIES</b>				
<b>Recommendation:</b> Provide information, as requested, to the Downington School District officials regarding new subdivisions proposed for West Pikeland.	On-going	Board of Supervisors	Administrative Action	10-10

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Meet regularly with Montgomery School officials to discuss issues of mutual concern.	On-Going	Board of Supervisors	Administrative Activity	10-11
<b>RECOMMENDATIONS FOR SOLID WASTE DISPOSAL</b>				
<b>Recommendation:</b> Encourage voluntary recycling to prepare residents for the potential of a mandatory program.	Long-Term	Board of Supervisors	Administrative Activity	10-11
<b>Recommendation:</b> Maintain the scenic qualities of the Township through regular inspection of road corridors.	Long-Term	Board of Supervisors	Administrative Activity	10-11
<b>LAND USE AND HOUSING</b>				
<p><b>GOAL:</b> Ensure that residential development respects the rural character of the Township and is developed in a manner that protects environmental resources and maintains open space as an integral part of West Pikeland Township.</p> <p><b>GOAL:</b> Provide for non-residential development in keeping with the rural character of West Pikeland Township to allow for a reasonable level of growth.</p> <p><b>GOAL:</b> Support the agricultural industry in the Township by protecting land and soil resources.</p>				
<b>RECOMMENDATIONS FOR THE NEIGHBORHOOD DEVELOPMENT AREA</b>				
<b>Recommendation:</b> Continue to provide for Planned Residential Development (PRD) as a land use option in the Neighborhood Development Area.	On-Going	Board of Supervisors, Planning Commission	Zoning Ordinance	11-11
<b>Recommendation:</b> Encourage cluster development to conserve land and protect open space.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance	11-11
<b>Recommendation:</b> Continue to emphasize the use of road setbacks and trees to serve as a buffer between residential development and transportation corridors.	Immediate	Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	11-11
<b>Recommendation:</b> Emphasize the need for an informal sketch plan review prior to formal preparation of development applications.	Immediate	Board of Supervisors, Planning Commission	Subdivision/Land Development Ordinance	11-12



ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Encourage creative design that links subdivisions within the proposed Neighborhood Development Area.	Immediate	Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance, Official Map	11-12
<b>RECOMMENDATIONS FOR RESOURCE PROTECTION AREA</b>				
<b>Recommendation:</b> Require mandatory cluster development for single family residential uses on parcels located in the Resource Protection Area.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance	11-13
<b>Recommendation:</b> Strengthen the development standards for cluster to provide greater guidance in site design.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance	11-14
<b>Recommendation:</b> Support the agricultural industry by offering a development alternative that supports broader agricultural uses.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance	11-14
<b>Recommendation:</b> Require subdivision design that facilitates protection of prime agricultural soils.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	11-14
<b>Recommendation:</b> Encourage participation in the Agricultural Security Areas Program.	Short-Term	Board of Supervisors	Educational Program	11-14
<b>Recommendation:</b> Promote, in conjunction with the Chester County Agricultural Development Council, educational programs that assist the agricultural community in maintaining their farming operations despite increasing development pressure.	Short-Term	Board of Supervisors	Educational Program	11-14
<b>Recommendation:</b> Encourage landowner participation in Act 319 and Act 515 as a way of preserving important agricultural land.	Short-Term	Board of Supervisors	Educational Program	11-15
<b>Recommendation:</b> Continue to work with large landowners in the conservation of key parcels, particularly those containing sensitive environmental resources.	Immediate	Board of Supervisors, Planning Commission	Educational Program	11-15
<b>Recommendation:</b> Consider forming a Municipal Land Trust sponsored and administered by West Pikeland Township.	Short-Term	Board of Supervisors	Land Conservation Program	11-15

ACTION	PRIORITY	ENTITY	TOOL	PAGE
<b>Recommendation:</b> Consider establishing a Transferable Development Rights Program.	Short-Term	Planning Commission	Zoning Ordinance	11-15
<b>RECOMMENDATIONS FOR THE VILLAGES</b>				
<b>Recommendation:</b> Develop individual zoning districts that are tailored to each village in the Township.	Immediate	Board of Supervisors, Planning Commission	Zoning Ordinance	11-17
<b>Recommendation:</b> Encourage the formation of a village design guide to ensure that new development complements the existing pattern and structures in each village.	Short-Term	Planning Commission, Historical Architectural Review Board	Educational Program	11-18
<b>Recommendation:</b> Consider developing a “village concept plan” to help guide development in each village.	Short-Term	Planning Commission	Special Study	11-18
<b>Recommendation:</b> Reduce the visibility of parking areas by locating such facilities in side or rear yards and using landscape buffers or screens.	Short-Term	Planning Commission	Zoning Ordinance	11-18
<b>Recommendation:</b> Maintain a pedestrian orientation in the villages.	Short-Term	Planning Commission	Zoning Ordinance	11-18
<b>Recommendation:</b> Encourage the effective use of landscaping materials to enhance the village design and define the village edge.	Short-Term	Planning Commission	Zoning Ordinance, Subdivision/Land Development Ordinance	11-19