

## Chapter Two

# REGIONAL INFLUENCES

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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 Treddyfrin. 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.

<b>PLANNING PROGRAMS OF ADJACENT MUNICIPALITIES</b>
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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.

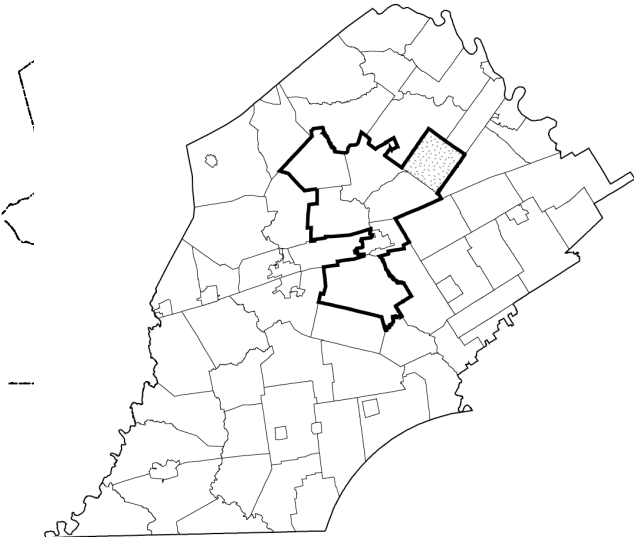
The Plan contains a series of goals intended to guide the formulation of policy related to land use, economic development, transportation, community facilities, utilities, housing, human services, public health, and planning and coordination. Specific objectives are defined for each area and implementation 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.

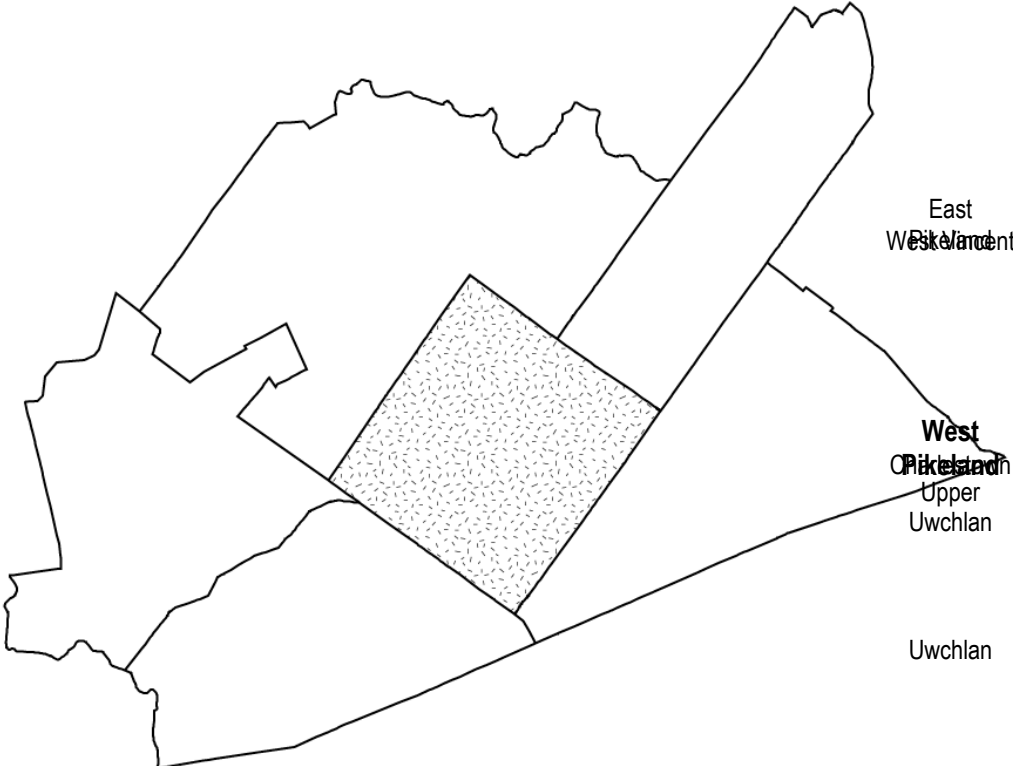
### PLANNING IMPLICATIONS

- ❑ 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 School District in Chester County



West Pikeland and Surrounding Municipalities

