

MATAMORAS BOROUGH WESTFALL TOWNSHIP

PIKE COUNTY, PENNSYLVANIA



COMPREHENSIVE PLAN and OPEN SPACE, GREENWAYS AND RECREATION PLAN



This Plan was financed in part by grants from:

- The Land Use Planning and Technical Assistance Program, administered by the Pennsylvania Department of Community and Economic Development.
- The Community Conservation Partnerships Program, Keystone Recreation, Park and Conservation Fund, under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.
- The Pike County Scenic Rural Character Preservation Program.
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PIKE COUNTY, PENNSYLVANIA

COMPREHENSIVE PLAN

FEBRUARY 2011

Prepared By

Comprehensive Plan Committee
Borough and Township Planning Commissions
Matamoras Borough Council
Westfall Township Board of Supervisors

Planning Assistance By

Pike County Office of Community Planning
Sarcinello Planning & GIS Services
Herbert, Rowland & Grubic, Inc.
Community Planning and Management, LLC

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INTRODUCTION AND OVERVIEW

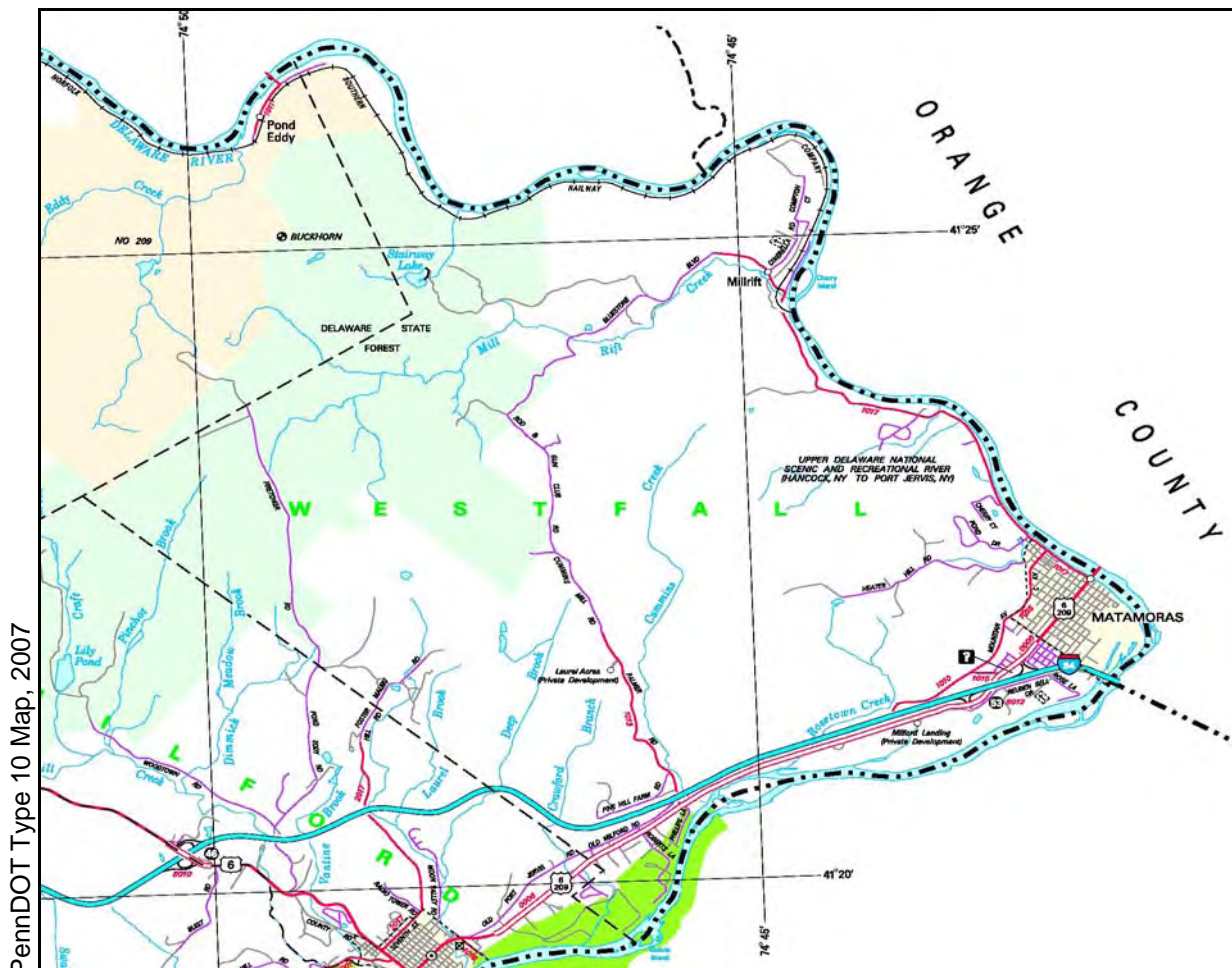
Planning Needs

This *Comprehensive Plan* was undertaken by the local officials of both Matamoras Borough and Westfall Township in recognition of a number of principal critical community needs:

COMPREHENSIVE PLAN

A comprehensive plan does not have the force of law. Instead, it serves as a policy statement and an action guide. As community conditions change, the actions in the Plan may require adjustment. The Plan should be continually reviewed to assess what adjustments are necessary to address these community changes.

- to identify and inventory the changes which have taken place in both municipalities over their development histories, particularly since the update of the Westfall Township Comprehensive Plan in May 1997 and amendment in October 2005;
- to establish a framework for the conservation of the historic character, residential neighborhoods, open land, and environment while concurrently providing for sustainable growth and development;
- to provide the foundation for updated land use management tools, principally zoning ordinances and subdivision and land development regulations, to ensure well designed development and to minimize sprawl;
- to organize for the most efficient administration of local government and the delivery of community facilities and services; and,



- to fully explore the possibilities and benefits of inter-municipal cooperation for providing facilities, services and administration.

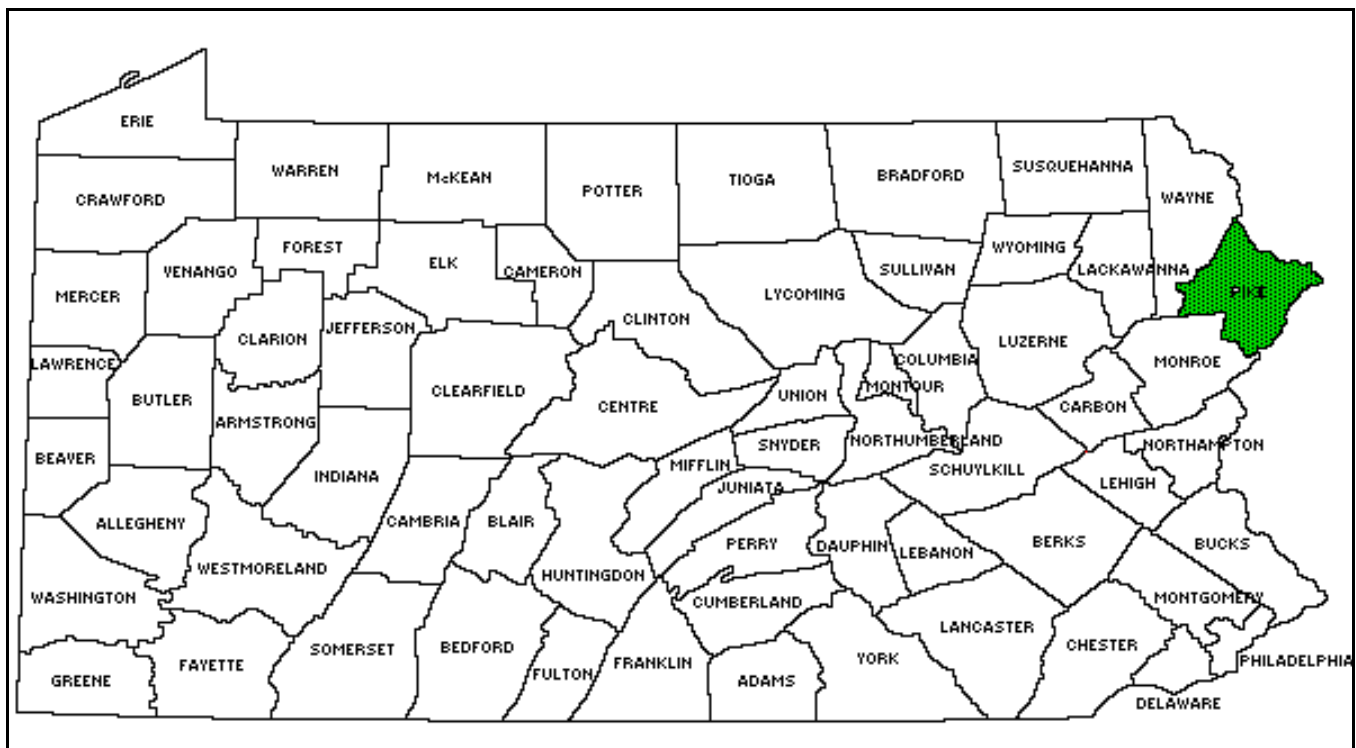
Matamoras-Westfall

Every community is unique in terms of community character and development concerns. The Borough and Township are grappling with and must manage the tremendous population growth occurring in Pike County. Geographically, the Borough and Township lie at the extreme eastern edge of Pike County where the first Interstate 84 interchange accesses Pennsylvania. I-84 carries thousands of vehicles each day, and many of these are destined for the Matamoras-Westfall Planning Area. Many of these travelers are second home owners and tourists; however, in recent years, more and more are permanent residents of Pike County and are commuting to work. This position has been key to shaping the character of the Borough and Township and will perpetually affect its future growth and development as Pike County continues as the fastest growing county in the Commonwealth.

In past years, the Planning Area was seen largely as a rural-small town community. However, in recent years more and more families are *equity exiles* who sell expensive metropolitan area homes and purchase more affordable homes in Pike County. (See the *Equity Exiles Figure* on Page 3.)

Gateway Community

The recent and future growth and development of the Planning Area is aptly described as a *Gateway Community* in Balancing Nature and Commerce in Gateway Communities: Communities that once promised refuge from the ills of the city have been transformed into congested towns with clogged highways, burgeoning crime rates, and mile after mile of look-alike shopping malls, franchise architecture, and soulless housing tracts.



Pike County in Pennsylvania



Matamoras-Westfall in Pike County

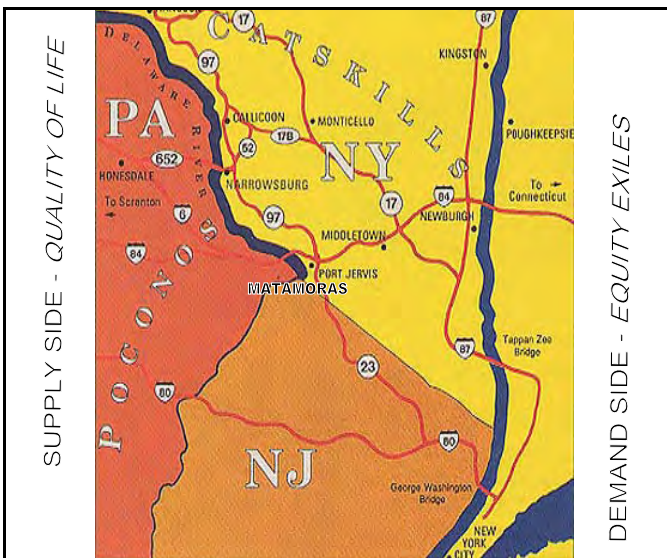
It should come as no surprise, then, that Americans are once again on the move, this time in a migration that pushes growth even farther into the countryside. Increasing numbers of people are fleeing the suburbs and choosing to live in the small towns and open spaces surrounding America's magnificent national and state parks, wildlife refuges, forests, historic sites, wilderness areas, and other public lands.

Gateway communities – the towns and cities that border these public lands – are the destinations of choice for much of the country's migrating populace. With their scenic beauty and high quality of life, gateway communities have become a magnet for millions of Americans looking to escape the congestion, banality, and faster tempo of life in the suburbs and cities.¹

Unlike many U.S. cities and suburbs, gateway communities offer what an increasing number of Americans value: a clean environment, safe streets, and a friendly, small-town atmosphere. But just as in the suburbs, unplanned growth and rapid development in gateway communities can create the same social and scenic ills from which many Americans are now fleeing. Worse, rising real estate values and higher property taxes brought on by an increased demand for housing can force lifelong residents from the communities they call home. Skyrocketing property values can quickly translate into housing shortages for longtime residents.²

If current demographic trends continue, gateway communities will experience astronomical growth rates for at least the next 20 years.³

The Borough and Township clearly serve as a gateway community lying between the 15,600-acre Delaware Water Gap National Recreation Areas and the Upper Delaware National Scenic and



Equity Exiles

Recreational River, and at the eastern edge of a county with some 95,000 acres of state park, state forest and state game lands. In addition, offering many of the national big-box retailers, the Matamoras-Westfall community has evolved into a regional shopping destination for many residents of the Tri-State Area.

¹Balancing Nature and Commerce in Gateway Communities, Howe, J., McMahon, and Propst, L., Island press, Wash., D.C., 1997, p. 1.

²Ibid., p. 2.

³Ibid., p. 3.

**Planning Issues
Overview**

Although not increasing in population at a rate as high as Pike County and other municipalities in the county, the Matamoras-Westfall Planning Area, continued growth and demographic change is expected. Matamoras Borough is largely developed with relatively few vacant lots. Commercial development in the Borough is primarily retail and service found along Pennsylvania Avenue. This development merges with that in the Township. Although served by a public water system, the entire Borough relies on on-lot sewage disposal systems.

The Route 6/Route 209 corridor in Westfall Township is now a major regional shopping destination and continued commercial development is anticipated. The densely settled Bell Manor area of the Township is essentially a part of Matamoras, and many planned subdivisions are found throughout the Township. Nevertheless, much of Westfall Township remains undeveloped woodland including some 4,250 acres of State Forest Land, 165 acres of State Game Lands, and about 310 acres owned by the National Park Service as part of the Delaware Water Gap National Recreation Area.

Given the amount of undeveloped land in the Township portion of the planning area and adjoining municipalities, the attractive lifestyle associated with the traditional, small town character, and the close proximity to the New Jersey and New York metropolitan and developing areas, continued growth in population and number of housing units and associated commercial development and traffic is expected for the Borough and Township. Clearly, the Borough and Township are poised to become one of the most changing areas of Pike County. This anticipated change presents to the municipalities the challenge of providing public services and facilities to meet the demands of the increasing population. Concurrently, the municipalities are responsible to ensure that the growth and development occurs in accord with sound planning principles with the goal of preserving the environment and community character. In short, the citizens and public officials must resolve the land use conflicts which result from the necessary balance between new development and the need for facilities and services, environmental protection, community character and open land conservation.

This combination of growth and development issues clearly demonstrates the critical need for this *Comprehensive Plan*, continued intermunicipal cooperation, and the consideration of new and innovative land use and community management techniques. Each individual municipality must choose its direction, and continue to work cooperatively to accomplish the goals of the *Plan*.

Planning Process

The comprehensive planning process was conducted cooperatively under recent amendments to the Pennsylvania Municipalities Planning Code. Local planning in the Commonwealth is governed by the Pennsylvania Municipalities Planning Code and this *Comprehensive Plan* was prepared and adopted in accord with Planning Code requirements. The two municipalities, recognizing the changes occurring in the area, came together and organized this intermunicipal planning effort.

The elected officials from Matamoras Borough and Westfall Township organized the planning process, and each governing body appointed members

to the Planning Committee that managed the process. Community Planning and Management, LLC, Paupack, Pennsylvania, Sarcinello Planning & GIS Services, West Chester, Pennsylvania, and Herbert, Rowland and Grubic, Inc., Bartonsville, Pennsylvania, provided professional planning assistance. The Pike County Office of Community Planning assisted throughout the project as well.

In short, the planning process involves finding the sometimes complex answers to three simple questions:

1. *Where are we?*
2. *Where do we want to be?*
3. *How do we get there?*
4. *How are we doing?*

Where are we?

Background Studies - The initial step in the process is the collection and analysis of information on a wide range of community characteristics and concerns aimed at defining the existing condition of the community and identifying planning implications. This data is compiled in the *Plan* background studies.¹

Where do we want to be?

Goals and Objectives/ Plans - The *Plan Goals and Objectives* are a vision of how residents and local officials expect the community to develop and evolve into the future. Objectives are specific actions which are designed to achieve goals and satisfy community needs. The *Goals and Objectives* were formulated by the Planning Committee and local officials based on the public participation process and the findings of the background studies. Based on this community vision and the needs identified in the planning process, various plans to guide the future growth and development of the Matamoras-Westfall Planning Area were developed.

How do we get there?

Implementation Strategies - The specific means to effect the various plans are also included, and are detailed in the *Planning Process and Interrelationship of Plan Elements and Implementation Strategies* section and discussed at various points in the various specific plans. In addition, and to facilitate on-going use of the *Comprehensive Plan*, the actions and the responsible entities required to carry out the plan's expectations are summarized in a matrix titled *Implementation Strategies And Specific Actions*. Examples of *implementation strategies* include zoning ordinance and subdivision and land development ordinance updates, historic structures preservation, and capital improvement budgeting.

Basic Planning Steps

Where are we? - inventory

Where do we want to be? - goals/plans

How do we get there? - implement

How are we doing? - evaluate



How are we doing?

Need for Continued Planning - It is important to emphasize that a comprehensive plan should not simply be considered a *document on a shelf*, but instead, one element of a community management process dependent upon the attitude and on-going foresight of the public officials charged with the responsibility of guiding the growth and development of the community. A comprehensive plan is a starting point - a blueprint to guide the future development of the two-municipality area and should be revised and updated periodically to reflect changing conditions, attitudes, situations, and goals of the community. The success of the planning program will be measured only in the form of accomplishment. The effectuation of the plan will be the responsibility of the area's residents. It will require public support and positive action by the local municipal officials.

State Mandated Plan Review

A recent amendment to the Pennsylvania Municipalities Planning Code (§301,c) requires local municipal comprehensive plans to be reviewed *at least every ten years*. The change suggests a greater Commonwealth emphasis on planning and the need for local municipalities to incorporate the planning process into normal functions. However, the ten-year review window is certainly far too long. Planning, that is, assessing how decisions and community changes fit into the plan, should be practiced continually.

Community Survey

As part of the planning process a community survey was conducted. Although the results of the survey are mentioned in the Comprehensive Plan it is important to note that the survey results do not represent the majority opinion of Planning Area residents. Instead, it simply reflects the opinions of those who responded to the survey.

COMMUNITY CONSERVATION AND DEVELOPMENT GOALS AND OBJECTIVES

Need for Goals and Objectives

Any community planning effort by its very nature must include goals. Without goals there would be little direction to the future of the community. In the case of planning for a rapidly changing community such as the Matamoras-Westfall Planning Area, goals establish the framework for change and growth management, and the foundation for maintaining key community characteristics. Goals pronounce the community's expectations and provide a vision of how the community plans to evolve into the future. Objectives are specific actions which are designed to achieve goals and satisfy community needs. Making decisions based on planning goals and attaining specific objectives improves the physical condition of the community and sustains and enhances the overall quality of life.

Community Balance

Rural communities and residents of rural communities are characteristically unique from their more urban counterparts, and have the opportunity to directly mold their communities. The same can be said for the Matamoras-Westfall Planning Area which is clearly a rural community in transition. *The rural community is seen as the conservator of its own resources, habitat, and culture. Local citizens are directly involved in the control of community assets as they plan for the retention, enrichment, and equitable use of those assets for present and future generations. Along with the community's goals, specific objectives must be identified; actions and methods for achieving the goals. Some objectives will be the direct responsibility of local elected and appointed officials. Others will require the cooperation and participation of other levels of government and the private sector.*¹

The goals of all residents of the community will not be the same. Some residents will demand community conservation and environmental protection while other residents will favor increased economic development. Some residents will demand more community facilities and services, while others prefer lower taxes. Some residents will strive for land use diversity while others would prefer to live in a residential community. One function of the community planning process is to strike a balance between these varied expectations and develop a shared vision to meet the overall goals of the community.

Shared Vision - *Every successful business, organization, or individual has a plan for the future. Communities are no different. If nothing else, a community needs to agree on a shared vision of what it wants to become. This vision should address the full range of local concerns: schools, housing, economic development, neighborhoods, parks and open space. Creating a shared vision is important because it provides a blueprint for the future of the community. People may differ on how to achieve the community's vision, but without a blueprint nothing will happen.*

Source: *Balancing Nature and Commerce in Gateway Communities*, Howe, J., McMahon, and Propst, L., Island press, Wash., D.C., 1997, p. 48.



¹ P. Lusk, J. A. Rivera, F. O. Sargent, M. Varela, (1991) *Rural Environmental Planning for Sustainable Communities*, Island press, Washington, D. C., p. 5

County Planning and Area Wide Planning

A key factor in formulating a set of local goals and objectives is the planning conducted at the county level. Typically, a county-wide comprehensive plan establishes a broad framework for the future growth and development of the county. As mandated by the Pennsylvania Municipalities Planning Code (MPC), the Pike County Planning Commission and Board of Commissioners adopted the first county-wide comprehensive plan in 1993, and adopted an updated plan in 2006. The Pennsylvania Municipalities Planning Code §301.4, states *municipal comprehensive plans which are adopted shall be generally consistent with the adopted county comprehensive plan*. This *Matamoras-Westfall Comprehensive Plan* should strive to maintain consistency with the recommendations of the *Pike County Comprehensive Plan* to the extent that the *County Plan* is not untenable in terms of the key provisions of the *Matamoras-Westfall Plan*.

Another test of consistency for this plan will be addressed in terms of the plans of neighboring municipalities along with the plans of other public entities and community organizations providing community facilities and services and dealing with growth and development issues. The Delaware Valley School District is a good example of such an entity.

A Guide and Policy Statement

This *Comprehensive Plan* is intended to serve as a means of addressing the future growth and development of the Borough and Township by identifying key issues and establishing goals and objectives. The community planning process is also aimed at fostering cooperation between Pike County and the two municipalities as envisioned by §306 of the Pennsylvania Municipalities Planning Code which states, *both the county and the municipality shall each give the plan of the other consideration in order that the objectives of each plan can be protected to the greatest extent possible*.

The following goals and objectives were developed by local officials based on the planning process. The goals and objectives are intended to serve the Borough and Township as a guide and policy statement for land use management and community facilities and services decision making. Any significant action taken by a local municipality, be it the adoption of a zoning ordinance amendment or the improvement of a municipal building, should be evaluated in terms of the community's goals and objectives. In addition, community planning and land conservation and development management is an on-going process, and the municipalities must periodically evaluate the goals and objectives to ensure that they adequately reflect current community conditions and the expectations of residents and officials.

General Community Development Objectives

This statement of the General Community Development Objectives is intended to set the overall tone for the Comprehensive plan and its implementation. More detailed goals and specific objectives for particular aspects of the community follow in a later section.

Cooperation	To use the comprehensive planning process to expand the level of intermunicipal cooperation between the Borough and Township, and to foster cooperation with adjoining municipalities and the County on growth and development issues of area wide concern.
Internal Coordination	To strive for coordination between policies, plans, and programs in the community through cooperation among governing officials, appointed boards, community interest groups, and residents.
Public Information	To achieve greater awareness, understanding and participation of residents in carrying out the recommendations in the <i>Comprehensive Plan</i> via an active public information process using such methods as a web site, newsletter, and public meetings.

Use of Land	To achieve the best use of the land within the Borough and Township while allowing for reasonable residential and commercial development. In the Borough, the focus will be on preserving historical character and achieving a pedestrian friendly ambiance in the commercial district. In the Township, the focus will be on the preservation of the environment and open space. This will ensure that the varying uses of land will complement one another and thus improve the economic, social, and aesthetic character of the overall community.
Range of Land Uses	To allow a range of residential and commercial uses at appropriate locations and establish performance standards through zoning to ensure that such uses do not unduly affect adjoining properties or the public health, safety and general welfare and are consistent with the historic and gateway character of the communities.
Population Density	To establish realistic population densities in order to ensure health standards, privacy and open space and in order to allow for the provision of community facilities and services in the most convenient and efficient manner.
Streets and Roads	To maintain and improve the street and road system for better internal circulation and to protect residential neighborhoods from through traffic.
Facilities and Services	To provide the necessary community facilities and services to meet the needs of increased development and the increasing and changing population.
Environmental Protection	To guide the location of future development and establish performance standards to minimize <i>externalities</i> (negative impacts) on the natural and community environment.
Housing	To provide the opportunity for a wide-range and variety of housing types at reasonable densities to meet the needs of all residents; newly-formed households, growing families and senior citizens.
Economic Development	To provide, within the context of overall community conservation, the opportunity for local business and strengthen the area economy by encouraging well-planned commercial, industrial, residential, and recreational growth which will provide for local employment, shopping facilities, and recreational opportunities which in turn will strengthen the local tax base.
Monitoring	To update and revise planning goals and objectives, and the operational tools necessary for implementation, in light of new data and changing conditions, and to meet a changing population, both current and new residents, in concert with maintaining small town character and quality environment

GOAL 1

Protect and enhance the Matamoras-Westfall Planning Area's quality lifestyle by maintaining the Borough's small town character and the Township's open space; and, recognize forest land and other open land as important elements of the local economy, character, and scenic setting.

The Planning area's physical environment, regional location and past development practices have shaped and maintained its character. The Borough's small town setting and the Township's rural landscape are key. Without careful planning, vigilant land use management, and continued community conservation, the quality lifestyle sought by so many from nearby metropolitan areas can succumb to the cumulative effects of the demands of an increasing population. The two municipalities are perceived as an attractive community offering a high quality of life, located within an easy commute to employment in the greater New Jersey and New York metropolitan area. Future development must be controlled and managed with an overriding concern to sustain the area's community character while meeting the needs and expectations of residents for employment, shopping, services and community facilities.

Note About Open Space

Open space is the land and water features of the natural landscape that have not been developed for intensive human uses, such as residential neighborhoods, business districts and industrial sites. Open spaces include, but are not limited to, wildlife areas, ridgelines, river and stream corridors, wetlands, parks and recreation areas, as well as productive forestry and agricultural lands. Open space can be publicly or privately owned and managed for production, conservation or outdoor recreation. Open space can protect and enhance environmental quality, provide wildlife habitat, and provide locations for active and passive recreation. An open space network refers to a system of large open spaces and connecting corridors called greenways.

OBJECTIVES:**Open Land Conservation and Rural Character**

Preserve and conserve agricultural land, forest land, open space, significant natural features, and sensitive land areas to maintain rural character.

- Important Areas - Identify and prioritize areas important for preservation.
- Connections - Form a connected network of open space to facilitate natural resource and habitat protection and passive recreational opportunities (e.g., trail networks) with particular attention to connection with public lands and the Delaware River.
- Innovative Conservation Methods - Evaluate more progressive means of open land preservation including purchase of conservation easements and transferable development rights, especially in cooperation with land trust organizations or other partners.
- Conservation Design - Consider requiring the use of *conservation subdivision design* to cluster residential development away from important natural, historic, scenic and cultural features, and preserve the resulting open space.
- Cooperative Zoning - Consider the use of cooperative zoning in the Planning Area as a means of directing higher density residential and commercial/industrial development to areas best suited for such development.

Small Town Character**Develop a coordinated program to maintain the small town character of the Borough.**

- Streetscape - As a means of enhancing the Borough's appeal, improve the appearance of the Commercial District with streetscape improvements.
- Pedestrians - Provide a safe environment for pedestrians by improving sidewalks, controlling traffic, and requiring new development to address pedestrian traffic.
- Street Trees - Recognize the importance of the Borough's street trees and plant, preserve and replace street trees via the Borough Shade Tree Commission.
- Volunteer Organizations - Foster the support and cooperate with the business community and other community volunteer organizations for the enhancement of the Borough.
- Consistent Setbacks - Require in the zoning ordinance the reduction of front yard setbacks for new building to be consistent with the setbacks of adjoining, existing buildings.
- Building Orientation - Require in the zoning ordinance that building orientation be consistent with adjoining structures.
- Transition Area - Recognize that the Pennsylvania Avenue corridor in the Township includes areas immediately adjacent to the Borough which are of a transitional land use nature and require special zoning treatment ranging from intensity of development to sidewalks.

Commercial Uses**Ensure consistency of commercial uses with existing community character.**

- Performance Standards - Apply zoning performance standards to address noise, lighting, outdoor storage, and other potential effects as well as ensuring appropriate landscaping and signage.
- Commercial Design - Develop guidelines for commercial building design, landscaping and parking that will ensure high aesthetic quality and while meeting basic development needs.
- Community Scale - Encourage community-scaled businesses with innovative design as opposed to strip commercial development.

GOAL 2

Conserve natural resources and open space and use the resources in a way to sustain the area's economy, including maintaining a strong connection to the Delaware River.

Without careful planning and management, the use of the natural resources and sensitive environmental areas in the Matamoras-Westfall Planning Area can lead to the decline of community character and the quality lifestyle it affords, with eventual direct threats to the environment and public health and safety. Of special concern are streams, ground water, forest and soil resources. If the quality of the area's natural resources are diminished, the quality of life and the local economy will suffer.

The purpose of conservation: The greatest good to the greatest number of people for the longest time.
- Gifford Pinchot

Recognize the right and duty of this generation to develop and use our natural resources, but I do not recognize the right to waste them, or to rob by wasteful use, the generations that come after us.
- Theodore Roosevelt

If we learn, finally, that what we need to "manage" is not the land so much as ourselves in the land, we will have turned the history of American land-use on its head.
- Gaylord Nelson, Founder of Earth Day

OBJECTIVES:**Conservation and Sensitive Natural Areas**

Conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, flood plains and wetlands, by setting them aside from development.

- Identification Identify sensitive natural areas such as wetlands, groundwater recharge areas, woodlands, steep slopes, poor soils and flood plains, and adopt regulations to protect such areas by requiring resource sensitive development.
- Critical Resource Areas - Promote the conservation of open space within the Planning Area and the County and actively promote the long-term preservation and maintenance of valuable natural resource areas through public negotiated acquisition, private dedication of easements, and other cooperative efforts.
- Land Use Ordinances - Evaluate and develop land use ordinances to minimize effects on natural resources with the goal of maintaining open space to the greatest extent possible while allowing a reasonable density of development.
- Development Incentives - Implement adopted municipal policies to conserve a variety of irreplaceable and environmentally sensitive resource lands, including provisions for reasonable incentives to create a greenway and trail system for the benefit of present and future residents.
- Conservation Design - Use *conservation subdivision design* to cluster residential development away from important natural, historic, scenic and cultural features, and preserve the resulting open space.

Conservation and Sensitive Natural Areas

- Transferrable Development Rights - Use transferrable development rights to direct development to locations with adequate infrastructure and enable conservation-minded landowners to preserve their properties.
- Area Wide Cooperation - Coordinate environmental preservation efforts with neighboring jurisdictions, and establish an action plan targeting environmental concerns that require a regional approach.
- Bureau of Forestry - Coordinate with the PA DCNR Bureau of Forestry on the review of development plan applications as they may relate to the broader region.
- Economic Development - Encourage local economic development groups to make natural resource protection an integral part of all promotion efforts.

Water Supply and Quality and Surface Water Quality**Protect the supply and quality of drinking water and protect surface water quality.**

- Source Water - Identify important source water areas and inform consumers about the protection of their drinking water.
- E & S Control - Reduce erosion and sedimentation by requiring compliance with DEP regulations
- Stormwater - Adopt an up to date stormwater ordinance to control runoff through the use of BMP's.
- Water Quality - Consider the impacts of residential and nonresidential development on water quantity and quality and encourage the use of best management practices.
- Sewage Disposal - Monitor the effectiveness of on-lot sewage disposal systems and evaluate central sewage disposal as a means of correcting any widespread problems.
- Well Ordinance - Apply well construction standards with a well ordinance in areas not served by community water supply.
- Community Water Supplies - Apply well head protection standards to maintain good drinking water quality.

Wildlife Habitat**Protect critical wildlife habitat areas.**

- Pike County Natural Heritage Inventory - Protect sites of rare, threatened, and endangered species as identified in the Pike County Natural Heritage Inventory.
- Forest - Conserve large forested areas that provide wildlife habitat.
- Corridors - Protect important wildlife corridors, consisting of networked open space areas and stream corridors.

**Ridge Lines and
Scenic View Sheds****Conserve ridge lines and scenic viewsheds.**

- Development Standards - Consider measures that will preserve the characteristics of important ridge lines and scenic viewsheds by limiting the amount and type of clearing associated with development.

GOAL 3

Protect historic sites and structures as an important part of the character of the Borough and Township.

A number of historic landscapes, sites and structures are found in the Matamoras - Westfall Planning Area, ranging from traces of the Leni Lenape Native Americans and early settlers, to more recent residences and outbuildings, to schools and churches. Buildings were erected as part of a growing community, and although many of the early structures are now gone, the many which remain add tremendously to the character of the community. In addition to buildings, stone walls and fences are significant historic features throughout the Township. Originally an integral part of early agricultural practices, stone walls and fences are now being incorporated into home design and as the prime feature in landscaping. The preservation of historic buildings and other features, and encouraging new development to be consistent with the existing historic character are critical to the future of the Planning Area.

Pennsylvania has more than 100,000 historic resources identified by the National Register of Historic Places. Thousands more could be identified across the state, in cities, towns and villages, and rural areas. This rich heritage is under threat from abandonment and demolition of decaying urban building stock, destruction of rural landscapes and prime farmland for housing and business, and highway construction to accommodate the tidal wave of trucking and passenger traffic. As with our natural resources, we must strengthen our values and develop strategies to maintain our historic resources. Historic resources are worth saving. Without these resources, communities would lose their integrity, identity, and their attractiveness to newcomers. The goal is to strike a balance between development and saving what's important to the community's past.
Source: *Better Models for Development in Pennsylvania*, p. 83.

OBJECTIVES:**Identify and Evaluate**

Develop an inventory of historic resources and evaluate the resources for register status.

- Historic Register - Based on the historic resources inventory, create a local historic register and consider nomination of qualifying structures and places to the National Register of Historic Places.

Adaptive Reuse

Encourage the adaptive reuse of historic resources.

- Adaptive Use - Allow the adaptive use of large older homes to enable owners to adequately maintain the structures.

Design Guidelines

Develop guidelines for residential and commercial development to encourage historically sensitive design.

Education

Educate property owners on the significance and value of historic resources, and of the opportunities for their preservation.

Funding

Identify funding sources for historic preservation.

GOAL 4

Establish and maintain an adequate circulation system to safely and efficiently move people and goods.

Safe and well maintained roads are vital to all communities, serving not only as the means of travel within the community, but also as the direct link to the region and beyond. The interstate and state routes provide easy access to and from the area, and will certainly foster continued development. Local officials must plan carefully to ensure adequate funding for the improvement and maintenance of locally-owned roads. Land use management tools must consider the capacity of roads, directing commercial and higher density development to areas served by roads capable of carrying increased traffic and the trucks necessary to serve commercial establishments. Providing safe pedestrian circulation in the Borough and Bell Manor can reduce the amount of car trips for goods and services.

C*irculation* - Planners typically talk about "circulation" rather than transportation because circulation (getting around) is the goal of the citizens they serve, whereas transportation is just a method of achieving that goal. A good circulation plan includes more than streets and roads – it includes means of pedestrian and bicycle circulation and, in many communities, some form of mass transportation.

Although good circulation plans involve more than roads, the starting point for an existing conditions analysis of circulation is a map of streets and highways in the community.

Source: Community Planning, an Introduction to the Comprehensive Plan, p. 80.

OBJECTIVES:**Classification**

Inventory and classify according to function all public roads and bridges, and assess maintenance and safety concerns and the improvements needed.

- Road Task Force - Participate in the Pike County Road Task Force to address regional traffic impacts and highway improvement needs.
- Planning - Actively participate in all County and PennDOT highway planning programs.
- Improvements Program - Develop a local road and intersection maintenance and capital improvements program.
- Pennsylvania Avenue - Specifically address the traffic on Pennsylvania Avenue and its effect on pedestrian circulation.

Local Actions

Develop a coordinated Borough - Township program to maintain an adequate capacity of the road network.

- Development Location - Limit higher density and higher traffic impact development to areas with adequate highway capacity.
- Parking and Access - Require adequate off-street parking and loading, limit curb cuts, and require well designed access points.
- New Development - Maintain up-to-date standards for construction of new subdivision roads.

Local Actions

- Road Linkages - Include the consideration of through road connections as part of the development review process.
- Road Dedication - Evaluate the acceptance of public dedication of development roads in terms of public benefit versus long term costs and apply road design standards for the dedication of roads .
- Official Map - Using an official map, establish and reserve public street alignments and adequate rights-of-way for planned street improvements.

Pedestrians and Bicyclists

Consider the needs of pedestrians and bicyclists in all transportation planning.

GOAL 5

Develop a Borough - Township coordinated land use plan that integrates all aspects of growth and development including residential, commercial, industrial and open space.

Land use management is a complex process that depends on the interrelationship of a number of factors including the historic development pattern, regional location, demographics, the regional economy, the transportation network, and soils and land capability. Most of these factors are beyond the control of local municipalities. However, this *Matamoras - Westfall Comprehensive Plan* gives the Borough and Township the opportunity to work together, while maintaining local autonomy, to direct the growth and development of the community using innovative land use management ordinances, careful programming of public facilities, and active participation of residents.

Rampant land conversion is a first consequence of the way Pennsylvania is growing. Quite literally, development-as-usual is consuming the Commonwealth's traditional rural landscape of farmland, forests, wetlands, and open spaces. Overall, Pennsylvania developed some 1.14 million acres, or 1,800 square miles, of fields, open space, and natural land between 1982 and 1997 – the sixth-largest such conversion after Texas, Florida, Georgia, North Carolina, and California.

This also means that fully one-third of all the land that the Commonwealth has ever urbanized since its founding was developed in just 15 recent years. Put another way, over those 15 years the state consumed land at a rate equivalent to 209 acres a day, or 9 acres an hour, every hour.

Source: *Back To Prosperity, A Competitive Agenda for Renewing Pennsylvania*, p. 47.

OBJECTIVES:**Incompatible Uses****Provide adequate separation between incompatible land uses.**

- District Location - Evaluate the location of zoning districts relative to one another.
- Residential - Eliminate incompatible uses in residential districts.
- Commercial - Limit permitted uses within commercial zoning districts to retail, office, and service uses.
- Industrial - Create an industrial district for manufacturing, warehousing, and similar high impact uses.
- Setback/Buffers - Provide appropriate setbacks and buffers between land uses.
- Landscaping - Provide landscaping along road frontages in commercial and industrial areas
- Cooperative Zoning - Use cooperative zoning as a means of recognizing the regional nature of development patterns and for locating commercial and industrial uses proximate to such existing uses and where community facilities are adequate.

Residential**Encourage the development of livable communities and preserve existing neighborhoods.**

- Open Space Access - Create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity.
- Diversity - Provide for a diversity of lot sizes, building densities, and housing choices to accommodate a variety of age and income groups and residential preferences, so that the community's population diversity may be maintained.
- Landowner Development Options - Provide multiple development options for landowners in order to minimize impacts on environmental resources (sensitive lands such as stream corridors, wetlands, flood plain, and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings, and fieldstone walls)..
- Design - Provide greater design flexibility and efficiency in the siting of services and infrastructure, including the opportunity to reduce length of roads, utility runs, and the amount of paving required for residential development.
- Residential - Eliminate incompatible uses in residential districts.

Commercial**Promote innovative forms of commercial development that are in harmony with the small town and rural character of the community.**

- Scale - Provide opportunities for innovative and community-scaled retail commercial use as opposed to strip commercial development.
- Services - Facilitate community service uses such as a pharmacy and medical center.
- Pennsylvania Avenue - Encourage neighborhood scale professional and business offices along Pennsylvania Avenue.
- Streetscape - As a means of enhancing the Borough's appeal, improve the appearance of the Commercial District with streetscape improvements.

Economic Development**Expand the Planning Area's existing economic base by exploring economic development opportunities consistent with and building on the existing *community* character in order to strengthen the existing general and tourist economy, create employment opportunities and generate tax revenue.**

- Location - Welcome new commercial and industrial development to areas of existing similar development and where community facilities

Economic Development

are adequate so that the development is compatible with existing land use and community character.

- Home Occupations - Encourage local economic viability by allowing home occupations consistent with residential districts.
- Economic Development - Recognize the importance of the regional economy and cooperate with local business development organizations to promote commercial development which builds on community assets and which will not compromise the quality of life.
- Regional Image - Create a distinctive image of the region by developing common welcoming signage themes and promoting local activities collectively.
- Government Efficiency - Continue to maintain an efficient government and keep taxes low as an incentive for economic development.
- Scale of Development - Limit the type and intensity of new land uses in the Borough to be consistent with existing development via cooperative zoning with the Township.
- Community Partnership - Work with existing businesses and property owners to ensure the continued viability of the Borough's existing commercial area.
- Existing Business - Support the continued development and possible expansion of existing businesses providing local employment and contributing to the tax base.
- Delaware River - Recognize the Delaware River as an invaluable asset for the local tourism economy and work with the Upper Delaware Council and the National Park Service to conserve its value.
- Visitors Center - Use the PA Visitors Center to the advantage of local businesses.

GOAL 6**Provide for secure and sound housing in a variety of types and densities.**

Families and individuals of all income levels reside in the Matamoras - Westfall Planning Area and need continued access to decent and affordable housing with proper community facilities. The special needs of young families looking for their first home and senior citizens on fixed incomes must be addressed. Similar to commercial development, the Borough and Township can employ cooperative zoning to direct housing types and densities to the most appropriate locations in the Planning Area.

The Pennsylvania Municipalities Planning Code requires *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.*

Zoning must provide for housing of various dwelling types encompassing all basic forms of housing, including single-family and two-family dwellings, and a reasonable range of multifamily dwellings in various arrangements, mobile homes and mobile home parks.

OBJECTIVES:**Current Residents****Meet the housing needs of current Planning Area residents.**

- Sound Housing - Encourage preservation of presently sound housing.
- Rehabilitation - Promote rehabilitation of houses in decline.
- Housing Programs - Encourage participation in all county, state and federal housing rehabilitation and assistance programs to ensure residents receive full benefit from such programs.

Housing Growth**Accommodate anticipated housing growth in appropriate locations, at appropriate densities, and with suitable amenities.**

- Location - Coordinate the location of new housing with pending road improvements
- Density - Provide for varying densities suited to the Planning areas character and landscape.
- Townhouses - Allow townhouses in conservation design in all zoning districts at the same density as single-family dwellings.
- Amenities - Provide for recreation and open space amenities within residential developments
- Senior Housing - Encourage the development of nursing homes, adult care centers, assisted living facilities and other housing types which provide amenities that are attractive to retirees.
- Commercial District Dwellings - Where adequate off-street parking and sewage disposal are available, encourage the use of second and third floor spaces in the Borough Commercial District for dwellings.

Types and Affordability**Provide a diversity of housing types and affordability levels.**

- Type and Density - Allow residential development of various types in suitable areas at a density sufficiently high to moderate the land cost of the increasing cost of housing, while requiring adequate off street parking, water supply and sewage disposal.
- Fair Share - Ensure that the Planning Area provides its required “fair share” of all types and densities of housing.
- Gated Alternatives - Promote alternatives to private, gated communities.
- Innovative Design - Advocate conservation design, village style or traditional neighborhood development.
- Incentives - Consider density and design incentives to encourage the development of age-restricted and affordable housing.

GOAL 7**Ensure that community facilities and services are provided to meet the needs of the Matamoras - Westfall Planning Area.**

Residents rely on community and public facilities and services to meet their transportation, educational, water supply, sewage disposal, police protection, emergency response, recreation and other daily living needs. Municipalities do not, and cannot, provide all the facilities and services demanded by residents, many such services are being provided by other levels of government or volunteer organizations. Nevertheless, without diligent and ongoing attention to the operation and maintenance of existing facilities and services, and planning for new facilities and services, a municipality can fall short in adequately serving its residents.

Community facilities and utilities should be considered resources with limited capacities that are to be provided in appropriate places to support and implement a multi-municipal comprehensive plan. The location of certain key facilities, including water, sewer, schools, and roads, are often essential to providing the necessary services to accommodate more intensive residential and nonresidential development. Conversely, these services will facilitate unintended development in areas, such as important farming areas or areas with limiting natural resources, where growth may not be appropriate. The location of other services, facilities, and utilities should be considered in relation to their ability to support or conflict with the land use planning for the multi-municipal area. The land use planning should facilitate the efficient and economic provision of public, quasi-public, and privately provided community services wherever possible.

Source: *Planning Beyond Boundaries*, p. 3-18.

OBJECTIVES:**Public Facilities and Services****Maintain existing public facilities and services and plan carefully for new public facilities and services.**

- Maintenance - Provide necessary maintenance of existing municipal buildings, equipment and other community facilities to extend the useful life and forestall unnecessary capital expenditures.
- Efficiency - Manage all municipal facilities and services efficiently and effectively.
- Capital Improvements Program - Systematically identify the need for local municipal community facilities and services, including useful life replacement of existing facilities, and develop a capital budget to meet the needs.
- Water and Sewer Extensions - Evaluate the extension of any central water supply or central sewage disposal service in terms of stimulating unwanted development.
- Infrastructure Needs - Encourage the County to take the lead with area municipalities to coordinate planning for the infrastructure needs of Eastern Pike County.
- Cooperation - Encourage and participate in any area intergovernmental cooperation efforts for community facilities planning and economies of scale for joint purchasing, recreation and other facilities and services.

Public Facilities and Services

- Sidewalks - Recognize the importance of sidewalks to the quality of life in the Borough and develop a sidewalk inventory, improvement, construction, and maintenance program to ensure long term viability of sidewalks.

Emergency Services**Protect the Planning Area with effective emergency services.**

- Expanded Service - Identify isolated and under served areas and assess the need for expanded or additional fire and ambulance stations.
- Volunteer Organizations - Acknowledging the critical importance of such groups to the community, encourage and continue to support volunteer fire, ambulance and other public service organizations.
- Police Protection - Maintain existing levels of police protection and continue cooperation as demand for service increases.

Water Supply and Sewage Disposal**Ensure adequate water supplies and sewage disposal facilities.**

- Source Water - Identify important groundwater supply areas and actively protect the sources.
- Borough Water Authority - Monitor the need to extend the Borough water system to serve new customers as demand dictates and the supply permits.
- Well Ordinance - Apply well construction standards with a well ordinance in areas not served by community water supply.
- Community Water Supplies - Apply well head protection standards to maintain good drinking water quality.
- Township Sewer Authority - Monitor the need to extend the sewer system to serve new customers as demand dictates and the treatment capacity permits.
- Sewage Disposal - Monitor the effectiveness of on-lot sewage disposal systems and evaluate central sewage disposal as a means of correcting any widespread problems.
- On-Site Sewage Systems - Ensure that on-site sewage systems are maintained, and that failing systems are repaired and new systems are installed in accord with DEP standards.

Storm Water**Improve Stormwater Management.**

- Planning - Evaluate storm water management facilities and participate in the Pike County storm water planning project to address existing problem and minimize future problems
- Improvements - Include require stormwater management improvements in the capital improvements program.

Storm Water

- Innovate Controls - Incorporate innovative stormwater management techniques into new development.
- Education - Address existing problems with stormwater runoff through outreach and education of landowners.

New Development

Ensure that an adequate and safe water supply system, a proper sewage disposal system, well designed and constructed roads, stormwater management and other facilities are provided by developers as part of any residential development.

GOAL 8

Provide adequate recreation facilities and programs for Planning Area residents and provide open space open to the public.

Airport Park in Matamoras serves as a regional park serving residents not only from the Borough and Township, but other areas of Pike County and nearby areas of New Jersey and New York as well. This *Comprehensive Plan* enables the Borough and Township to cooperate to identify recreation needs and improve and develop new facilities and programs.

Westfall Township includes some 4,500 acres of public forest land which provide a myriad of outdoor recreation opportunities. Careful planning of new development can ensure the conservation of additional open land and promote the creation of connections to existing public lands.

National Recreation and Parks Association
We believe that parks and recreation:

- *Enhances the human potential by providing facilities, services and programs that meet the emotional, social and physical needs of communities.*
- *Articulates environmental values through ecologically responsible management and environmental education programs.*
- *Promotes individual and community wellness that enhances the quality of life for all citizens.*
- *Utilizes holistic approaches to promote cultural understanding, economic development, family public health and safety, by working in coalitions and partnerships with allied organizations.*
- *Facilitates and promotes the development of grassroots, self-help initiatives in communities across the country.*

Source: <http://www.nrpa.org>

OBJECTIVES:**Facilities and Programs**

Provide adequate recreation facilities and programs to serve the community.

- Existing Facilities - Maintain the existing facilities at Airport Park.
- Identify Needs - Analyze and address the need for additional sports and play facilities, passive recreation areas, and recreation programs.
- Plan - Create a plan for municipal park and recreation facilities and programs that is responsive to current needs and to additional demands created by future development.

Trails

Establish a trail network that would provide connections between public lands, identified open space, scenic and historic areas, and trails in adjoining townships and the Delaware River.

- Existing Trails - Work with the County Office of Community Planning to inventory and map existing trails.
- New Trails - Promote new hiking trails that link existing trails with landmarks and community focal points, historic sites, neighboring townships, and the Delaware River.
- Development Connections - Encourage pedestrian connections between developments, while addressing concerns with trespassing.

Trails

- Bike Trails - Create a marked and mapped system of bikeways and bike trails.
- Multiple Uses - Evaluate needs for other trail users, including equestrians, mountain bikers, cross country skiers, snow shoers, snowmobilers, and ATV enthusiasts.
- Design - Design trails to minimize conflicts between different users and with adjacent property owners.

Interconnected Open Space**Create a contiguous and interconnected system of protected greenways and open space.**

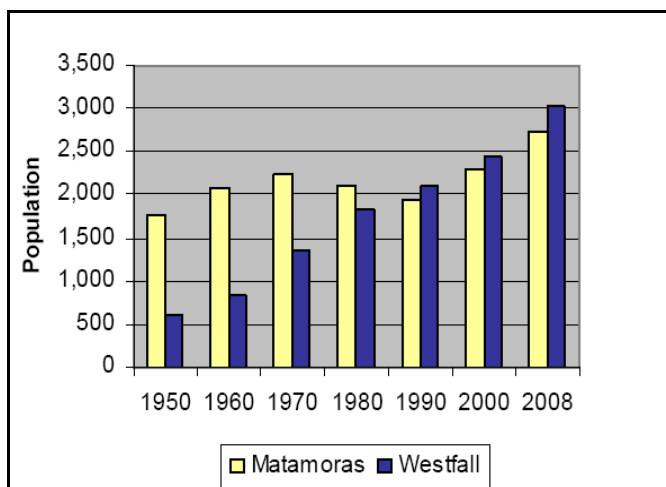
- Prioritization - Prioritize areas to be protected based on natural resources, historic resources, potential trail connections, and proximity to existing conservation areas.
- Habitat - Use open space to protect habitat and water resources.
- Passive Use - Provide for passive recreational uses within open space areas.
- Linkages - Identify opportunities to link open space and greenways to adjoining townships to create a regional open space system.

FINDINGS AND SUMMARY OF ACTIONS

FINDINGS: DEMOGRAPHICS AND ECONOMIC BASE

Westfall Township has increased steadily in population since 1950. Matamoras Borough population decreased between 1970 and 1990 and then increased 1990 and 2000.

The Borough population decreased from 2,244 persons in 1970 to 1,934 persons in 1990, increased to 2,312 by 2000, and was estimated at 2,736 in 2008. It is projected to reach 2,853 by 2010.



Population 1950 - 2008

The Township population increased from 599 persons in 1950 to 2,430 persons in 2000, was estimated at 3,030 in 2008, and is projected to reach 3,201 by 2010.

Population density in Matamoras Borough, 3,300 persons per square mile in 2000, is the highest in Pike County; Westfall Township population density in 2000 was 80 persons per square mile.

Approximately one-third of the population of both the Borough and the Township emigrated from other areas suggesting that the two communities are attracting new residents from outside areas who presumably want to be in close proximity to New York and New Jersey.

The age of a community's population is important in terms of the types of community facilities and services which must be provided.

Population growth occurred across all age cohorts between 1990 and 2000, with the most dramatic increase occurring in Matamoras Borough where the school-aged population (under 18 years) increased by 36%.

In addition to the demand for more dwelling units and building lots, the increase in the number of families with children in the population not only results in more demand on the school system, but results in more demand for such community facilities as recreation parks and playgrounds as well.

The number of second homes in the Borough and Township in 2000 was reported at 6 and 87, respectively. The effects of the seasonal population in the Matamoras-Westfall Planning Area is not significant when compared to other townships in Pike County.

In 1999 per capita and median household income levels of Westfall Township were generally consistent with the County and the Commonwealth, with the majority of households in the lower-middle to

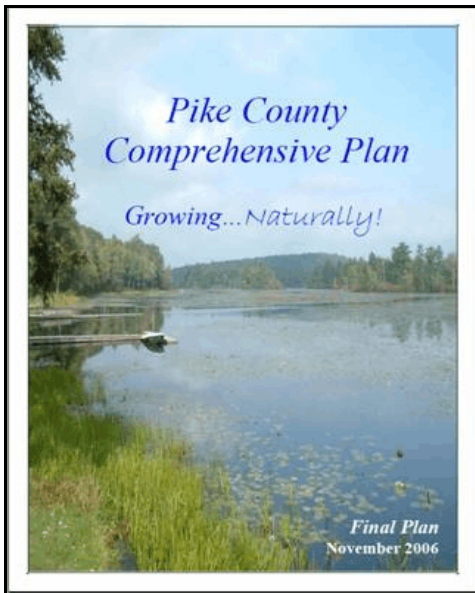
middle income ranges. Income in Matamoras Borough was substantially lower by comparison.

- ☞ Despite the Borough's lower incomes, the number of persons below poverty level decreased substantially, from 120 persons in 1989 to 91 persons in 1999. The opposite was seen in Westfall Township, where, despite higher incomes, the number of persons below poverty level rose from 145 to 162 persons during the same time period.
- ☞ The average travel time to work for Borough residents increased from 20 to 30 minutes between 1990 and 2000, and from 25 to 30 minutes for Township residents, documenting the increased connection of employment to the tri-state area, as well as nearby metropolitan areas.
- ☞ The 2000 Census reported that the greatest proportion of employed persons from the Township worked in the *education, health & social services; arts & entertainment; retail and construction* sectors, showing a strong reliance on the tourist trade.

Planning Implications

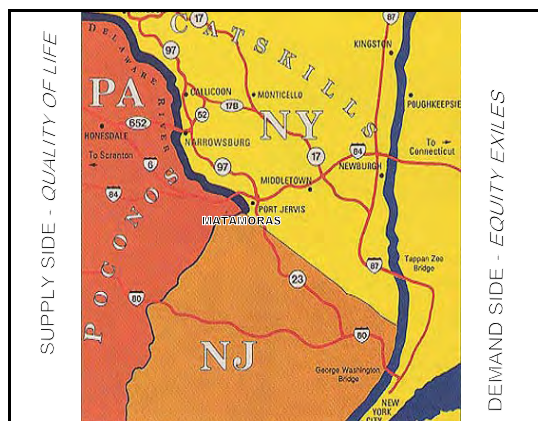
- ☞ While growth in Matamoras Borough is limited by the scarcity of available land, Westfall Township remains a predominantly undeveloped community with the potential for dramatic, long-term population growth.
- ☞ As population increases, the demand for land, housing, facilities, utilities, and services will increase along with traffic congestion.
- ☞ These factors place a strain on the Matamoras-Westfall Planning Area's financial resources and rural small town character.
- ☞ Preserving forest land and open space and increasing the commercial base can help off-set the costs associated with new residential development and reduce the need for tax increases.
- ☞ An increasing population provides a potential market for the retail centers along Route 209 and the small businesses in Matamoras Borough.
- ☞ A coordinated land use pattern that preserves the rural small town character while accommodating projected growth and supporting the local economy is key to the long-term health and well-being of the Matamoras-Westfall Planning Area.

FINDINGS: PLANNING AND DEVELOPMENT IN PIKE COUNTY, CONTIGUOUS MUNICIPALITIES AND THE REGION



- ☞ The *Pike County Comprehensive Plan Update* was adopted in 2006 with the intent to set *Countywide planning goals and priorities, develop partnerships, and enhance the quality of life for the residents of the County*, and to be used as a *guideline for municipal plans and regulations*.
- ☞ The *County Plan* notes that *each municipality retains the right to prepare multi-municipal or individual municipal plans; to control zoning within its boundaries, whether through individual zoning ordinances or a joint zoning ordinance; and to regulate subdivision and land development, and retain their autonomy*.
- ☞ As required by the Pennsylvania Municipalities Planning Code, Borough and Township planning, as documented in this *Comprehensive Plan* is generally consistent with County planning.
- ☞ Based on the zoning district locations and uses permitted in the districts; zoning ordinance performance standards; county, state and federal land ownership; and natural features, the potential for land use conflicts between adjoining municipalities is minimized.
- ☞ While the Delaware River provides a significant buffer in terms of direct landowner-to-landowner conflicts, planning in nearby communities in New Jersey and New York can have an impact in terms of traffic, housing demand, tourism and economic development.
- ☞ No significant inconsistencies are anticipated between the plans of adjoining municipalities and this *Plan*.
- ☞ Borough and Township officials should work with the officials of adjoining municipalities to establish agreements so that any municipality potentially affected by a zoning change or a development project has the opportunity for review.
- ☞ The Northeastern Pennsylvania Alliance serves as a planning and development information source and funnel for grants and special projects for Westfall Township, Matamoras Borough and Pike County, but has no municipally authorized regional planning power.

FINDINGS: LAND USE



- ☛ The challenge in developing a land use plan for the Matamoras-Westfall Planning Area is to provide for the essential economic growth and development of the Township while concurrently conserving its scenic and natural environment and natural resources.
- ☛ The environmental quality, scenic beauty, small town character and proximity of the Planning Area to metropolitan areas are key factors affecting growth and development.
- ☛ Most growth and development issues extend beyond municipal boundaries and can best be addressed through the cooperation of the municipalities in the planning area and region.

- ☛ The future land use, environmental quality and character of the Borough and Township will evolve in response to the actions of community leaders and active citizens combined with the forces of the local and regional economy, and the demand for land and community facilities and services.

Existing Conditions

- ☛ The Matamoras - Westfall Planning Area includes some 19,400 acres of land area, or 30.3 square miles – 0.7 square miles for the Borough and 29.6 for the Township.
- ☛ Matamoras is a mature community in terms of land use with very little land available for new development.
- ☛ The 1997 Westfall Comprehensive Plan notes that *in the early 1980's, residential uses accounted for approximately 700 acres or 3.5% of the Township's land area., and commercial uses accounted for 150 acres or .07%. By 2008, residential land had increased to 1,400 acres and commercial land to 390 acres, documenting the dramatic increase over the last 20 years.*

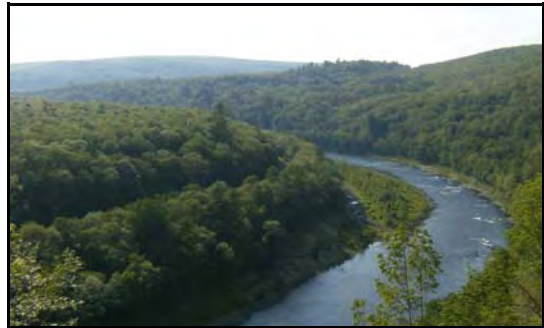
Land Use	Matamoras Borough		Westfall Township	
	Acres	% of Total	Acres	% of Total
Residential - Single-Family	165.25	37.95%	1321.06	6.97%
Residential - Multi-Family/Townhome	9.42	2.16%	82.07	0.43%
Commercial	14.58	3.35%	390.91	2.06%
Institutional	7.00	1.61%	141.03	0.74%
Forestland/Agriculture	77.68	17.84%	8024.96	42.32%
Recreation (Federal/State/Local/ Community Assoc.)	63.65	14.62%	5817.86	30.68%
Club (Rod & Gun Clubs)	0	0.00%	1828.91	9.64%
Conservation Easement	0	0.00%	662.62	3.49%
Utility/Railroad	0	0.00%	191.53	1.01%
Roadway	97.93	22.49%	503.74	2.66%
Total	435.49	100.00%	18964.69	100.00%

Existing Land Use - 2008 (Source: Consultant/Planning Committee Analysis)

☛ R

esidential is the principal type of development in the Planning Area – 175 acres or 40% of the total land area in the Borough and 1,400 acres or 7.5% in the Township.

- ☞ Commercial activities in the Planning Area occupy almost 406 acres – 3.4% or almost 15 acres in the Borough and 2.1% or 391 acres in the Township.
- ☞ Land in the Planning Area used for public and semi-public facilities and services includes such uses as the Borough and Township buildings, fire companies, Delaware Valley Schools, and the PennDOT Visitors Center.



- ☞ Although the Borough and adjoining parts of the Township are densely developed, open land remains a predominate feature of the Planning Area landscape.
- ☞ More than 16,400 of the total 19,400 acres are, or 85% of the land in the Planning Area, is undeveloped, with the bulk of that being forested.
- ☞ The Pennsylvania Bureau of Forestry owns 4,246 acres as part of the Delaware State Forest, the Pennsylvania Game Commission owns 165 as part of State Game Lands No. 209, and the National Park Service owns 308 acres as part of the Delaware Water Gap National Recreation Area, totaling 4,719 acres or 24.25% of the total area of Westfall Township.
- ☞ Most of the 77 acres of undeveloped land in the Borough is the 63-acre parcel adjoining Airport Park.
- ☞ While forestry continues as an important element of the local economy, commercial agriculture in the Planning Area is essentially nonexistent.

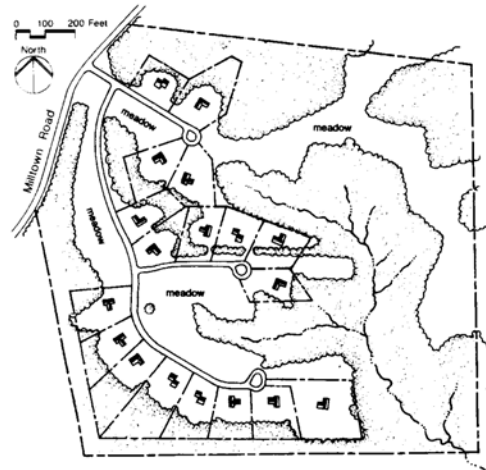
Katz Settlement Agreement

In 2005, the Westfall Township Board of Supervisors adopted Ordinance 123 which created the ED - Enterprise Zone and the GC - General Commercial Zone applicable to three specific parcels located off of Mountain Avenue based on a adjudicated settlement agreement.

- ☞ This Comprehensive Plan and any amendment to the Westfall Zoning Ordinance or the Subdivision and Land Development Ordinance cannot be applied to the specified Katz properties in conflict with Ordinance 123.
- ☞ Ordinance 123 includes specific standards applicable to the ED and GC Zones based on the 1985 Zoning Ordinance and the 1985 Subdivision and Land Development Ordinance as modified by the settlement agreement.
- ☞ A 2005 Order of Court issued by the U.S. District Court for the Middle District of Pennsylvania addressed the provision of sewer and water service to the Katz properties.



18 2-acre Lots in Conventional Subdivision



18 lots Based on 2-acre Density with Open Space

Density Instead of Lot Size

Conservation Design

The use of conservation design would result in an estimated 1,720 acres of additional open space in the Township at build-out. Under conventional subdivision practice almost 36% of the Township would be in residential use while the use of conservation design would limit the area to 27%.

Additional open space could be preserved by:

- ☞ Providing a density bonus for conserving a larger percentage of open space.
- ☞ Making conservation design development the basis for all subdivisions and the only way for developers to achieve full density.
- ☞ Requiring conservation design in situations where conservation is essential.

Planning Implications

- ☞ The Planning Area holds great potential for growth and development.
- ☞ Development will occur on new lots subdivided from open land.
- ☞ Local officials must begin an outreach effort and partner with landowners and local conservation organizations to preserve or conserve priority areas as identified as critical for open space.
- ☞ The provisions of Westfall Township Ordinance 123 and the Katz Equitable Settlement Agreement and the Settlement Agreement/Release have a significant and continuing effect on the long term land use of the entire Planning Area.
- ☞ Development in the Borough will involve primarily in-fill of existing lots and redevelopment of businesses.
- ☞ Commercial development and redevelopment in the Borough should follow a plan aimed at revitalizing the Pennsylvania Avenue business district.

- ☞ More residential development will spawn more pressure for retail/service commercial development and increased demand for municipal facilities and services.
- ☞ The land owned by the Pennsylvania Bureau of Forestry, the Pennsylvania Game Commission and the National Park Service, and Airport Park will likely remain in public ownership.

Note About the *Summary of Actions*

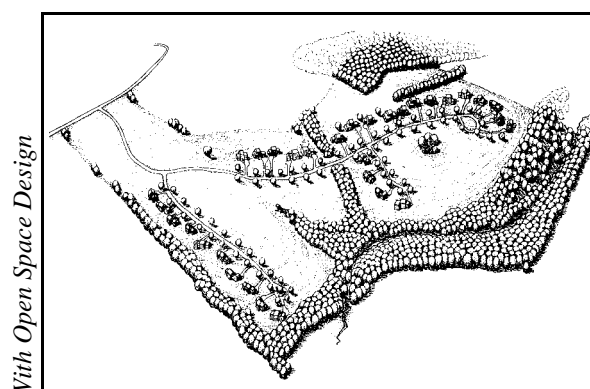
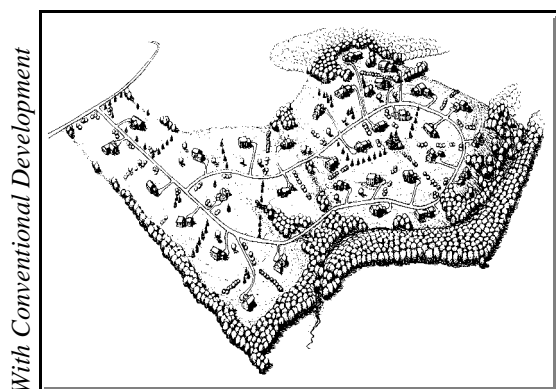
Much of the work of carrying out the Plan, the assessment of the accomplishment of goals and objectives, and the periodic Comprehensive Plan review can be accomplished by the Planning Commissions and citizen volunteers who are appointed to special committees or task forces along with Borough and Township officials. These groups can provide evaluations and recommendations to the Borough Council and the Board of Supervisors for action.

The Basic Land Use Planning Approach of this *Comprehensive Plan* is to:

- provide incentives for good design and open space preservation as property is developed.
- encourage landowners to participate in local and state programs to preserve open space.
- protect residential neighborhoods and planned subdivisions from incompatible development.
- revitalize the Borough's main street.
- provide appropriate areas to accommodate projected growth.
- conserve and protect valuable natural resources and sensitive environmental areas.
- encourage the preservation of historic buildings and sites.

The Future Land Use Plan is intended to accommodate projected growth and provide for needed community facilities and services while preserving the Borough's small town character and conserving the Township's open space and natural resources. It addresses land conservation, sustainable residential development, creation of a town center, opportunities for commercial and office development, and remedies for potential incompatible land uses. The plan is also attentive to state law, which requires municipalities to accommodate all categories of land use or to cooperate on zoning for the Planning Area as a whole.

SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
1	<u>Future Land Use</u> - Preserve the Borough's small town character and conserve the Township's open space and natural resources.	Planning Commissions Council Supervisors	ongoing zoning
2	<u>Zoning Districts Affirmed and Updated</u> - The future land use plan is based on the affirmation of the current zoning districts with the caveat that the Borough and Township will periodically evaluate the effectiveness of the districts, the range of uses in each district, and the need for additional opportunities for commercial and light manufacturing development.		
RESIDENTIAL			
3	<u>Zoning Districts</u> - Provide protection for residential areas by maintaining separate residential and nonresidential zoning districts, applying environmental, development and operational performance standards to commercial and industrial uses, and establishing increased lot sizes, setbacks, and buffers where such uses adjoin residential development.	Planning Commissions Council Supervisors	ongoing zoning
4	<u>Higher Density</u> - Allow higher density residential development only in areas where community water supply and community sewage disposal is available.		
5	<u>Conservation Design</u> - Encourage the use of zoning and subdivision and land development ordinance provisions to effect conservation design development to conserve open land, conserve sensitive natural areas, preserve historic resources and maintain community character.	Planning Commissions Council Supervisors	2 years
6	<u>Require Conservation Design</u> - Consider requiring conservation design in certain districts and/or areas as a means of conserving open space.		
7	<u>Mixed Use</u> - Allow for the integration of retail and service establishments in large residential developments.		
8	<u>Home Occupations</u> - Allow a reasonable range of home occupations consistent with residential neighborhoods.	Planning Commissions Council Supervisors	ongoing zoning



SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
NONRESIDENTIAL			
9	Performance Standards - Review and update as needed the nonresidential performance standards to address changing development patterns and ensure community and environmental protection.	Planning Commissions Council Supervisors	ongoing zoning
10	Location - Allow commercial, manufacturing and institutional land uses only in appropriate districts based on compatibility with surrounding land uses, access potential, and logical extension of utilities.		
11	Reasonable Standards - Do not make standards and the development review process so onerous that commercial and manufacturing development is discouraged.		
12	Home Occupations - Allow for a variety of professional and personal services to be conducted as home based businesses in all areas provided nuisance elements are controlled and ensure that <i>no-impact home-based businesses</i> as defined by the MPC are allowed as principal permitted uses in all zoning districts in the Borough and Township.		
13	Cooperative Zoning - Consider Borough-Township cooperative zoning to allocate commercial and industrial land uses throughout the Planning Area instead of in each municipality, and coordinate commercial zoning standards between the Township and Borough.	Planning Commissions Council Supervisors	1.5 years
14	Site Clearing - Allow the clearing of vegetation and grading only after a development plan has been approved.		
15	Site Characteristics - Require nonresidential development to consider the physical characteristics of the site as part of the design in order to protect environmentally sensitive areas.		
16	Revitalization - Carefully evaluate the range of commercial uses in the Borough's downtown area in terms of revitalization efforts.	Planning Commissions Business Committee Council Supervisors	1.5 years
17	Design Guidelines - To the extent that zoning cannot adequately govern design, prepare and promote design guidelines for commercial, manufacturing, and institutional development to encourage the most efficient use of commercial land and development consistent with community character.		
18	Economic Development - Encourage area economic development organizations to include efforts for the retention of existing business, improvement of the small business climate, and the promotion of tourism instead of simply committing resources to <i>attracting industry</i> .	Planning Commission Supervisors Business Owners Residents	immediate

Commercial Design Standards and Guidelines

Design guidelines, along with development standards and permit approval requirements for specific location and site details can be used to retain community character. Standards and design guidelines in rural areas should consider historic design trends in the built environment and should specifically address issues surrounding the massing, form, materials, and color of new buildings or structures. Zoning performance standards in Pennsylvania generally cannot be used to govern the specific architectural appearance of buildings. Design guidelines, which can be suggested by the municipality and voluntarily adopted by the developer, can be effective for ensuring building designs are consistent with community character.

Site design zoning standards should include, for example, maximum impervious cover, landscaped setbacks between buildings and the road, modest parking lot size, interior landscaping for larger parking lots, sign requirements, and vegetated buffers along property lines. A critical requirement is the retention of existing vegetation to the greatest extent possible. Development standards for lighting, circulation, parking, landscaping, and noise should be consistent with the rural area.

SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
FORESTRY			
19	Zoning Standards - Review the forestry standards in the Westfall Zoning Ordinance to ensure reasonableness, and not so onerous as to discourage forestry enterprises and can be enforced. Essential elements include: <ul style="list-style-type: none"> • requirements for logging plans and the use of good forest management practices • road and property line setbacks for landings • road access and drainage requirements • mandating compliance with environmental laws 	Planning Commission Supervisors	0.5 year
20	Principal Permitted Use - Include <i>forestry</i> as a principal permitted use in all zoning districts in Matamoras to comply with the Planning Code.	Planning Commission Council	0.5 year
21	Businesses - Provide ample opportunity for the development of <i>value added</i> enterprises that use the plentiful forest resources available in the Township.	Planning Commission Supervisors	ongoing zoning
22	Economic Development - Encourage the local economic development organizations to work with the forest industry to promote and grow forestry related enterprises, particularly in the realm of <i>value added</i> products.	Planning Commissions Council Supervisors Business Owners	immediate

SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
MINERAL EXTRACTION			
23	Zoning - Update the mineral extraction standards in the Westfall Zoning Ordinance to ensure conformity with the MPC and case law, to ensure that mineral extraction is controlled to the greatest extent possible .	Planning Commission Supervisors	1.5 years
24	State Requirements - Confirm that proposed mineral extraction operations will comply with state environmental regulations	Supervisors Zoning Officer	ongoing
25	Cooperative Zoning - To the extent possible under the terms of the Planning Code, ensure via cooperative Borough/Township zoning that mineral extraction operations are located in suitable areas where impacts will be minimized.	Planning Commissions Council Supervisors	

Mineral Extraction and the Municipalities Planning Code

The Pennsylvania Municipalities Planning Code clearly recognizes mineral extraction as a lawful use and severely limits the range of development and operational standards which can be applied to mineral extraction by local municipalities, with location standards the primary tool available to the Township. Planning Code §603(l) states that *zoning ordinances shall provide for the reasonable development of minerals in each municipality*. The Code definition of minerals is: *Any aggregate or mass of mineral matter, whether or not coherent. The term includes, but is not limited to, limestone and dolomite, sand and gravel, rock and stone, earth, fill, slag, iron ore, zinc ore, vermiculite and clay, anthracite and bituminous coal, coal refuse, peat and crude oil and natural gas.* The Code, at §603(b) allows zoning ordinances to regulate mineral extraction, but only to the extent that such uses are not regulated by the state Surface Mining Conservation and Reclamation Act, the Noncoal Surface Mining Conservation and Reclamation Act, and the Oil and Gas Act. These Acts regulate such things as setbacks, dust, noise, blasting, water supply effects, and reclamation.

Advantages Offered by Conservation Easements:

Private Ownership: The property remains in private ownership and continues to contribute to the local tax base. The landowner may choose to live on the land, sell it, or pass it on to heirs.

Owners Satisfaction: Gives the landowner the satisfaction that the land will remain unchanged.

Flexibility: Easements are flexible and can be written to meet a particular land-owner's needs while protecting the property's resources.

Permanency: Most easements are permanent, remaining in force when the land changes hands. The easement holder ensures that the restrictions are maintained.

Tax Reduction: There are significant tax advantages if easements are donated rather than sold.

Charitable Taxes: The donation of a conservation easement to a land trust is treated as a charitable gift of the development rights. The donation creates a charitable tax deduction, equal to the value of the conservation easement, on the landowner's Federal and State income tax returns.

Estate Taxes: Estate taxes are significantly lower, sometimes making the difference between heirs holding onto the family land or selling it to pay inheritance taxes.

Property Taxes: Conservation easements will sometimes lower property taxes, a result of reduced valuation on property subject to the conservation easement.

Minimizes Effect of Development: Minimizes other impacts of residential development such as increased population, traffic, and demand for community facilities and services.

SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
LAND CONSERVATION PLANNING			
26	<u>Conservation Design</u> - Consider incorporating conservation design as a preferred option for residential development and providing density incentives as a means of encouraging conservation design.	Planning Commissions Council Supervisors	1 to 2 years
27	<u>TDR and TND</u> - Evaluate providing for the use of transferable development rights and traditional neighborhood development in the Borough and Township using cooperative zoning to direct development to areas with adequate water supply and sewage disposal.		
28	<u>Conservation Organizations</u> - Support the efforts of local land conservation organizations such as the Delaware Highlands Conservancy.	Planning Commissions Council Supervisors Residents	immediate and ongoing
29	<u>Landowners</u> - Encourage and support private landowner efforts to maintain large tracts as open space.		
30	<u>Agricultural Land Preservation</u> - Cooperate with landowners and the County Agricultural Land Preservation Program in the creation of agricultural security areas and the acquisition of agricultural easements.		
31	<u>Committee</u> - Form a Township Open Space Committee to conduct education and outreach to encourage landowners to conserve land through conservation easements, TDR, and other available means.	Supervisors	1 year
32	<u>Local Open Space Funding</u> - Consider a local municipal referendum on a modest earned income tax and other financing options to fund open space conservation.	Supervisors	2 years

SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
COOPERATIVE ZONING ACTIONS			
33	Committee - Appoint a Borough-Township ad hoc committee to consider cooperative zoning and make recommendations to the Borough Council and Township Board of Supervisors.	Council Supervisors	immediate after Plan
34	Plan - Develop a cooperative zoning plan based on existing land use, current zoning districts, potential impacts of land use types, and available or proposed infrastructure.	Committee	1.5 years
35	Intermunicipal Agreements - If deemed beneficial, enter into intermunicipal agreements and make the necessary zoning changes.	Council Supervisors	2 years

Pennsylvania Municipalities Planning Code Provisions for Cooperative Zoning

- §302 authorizes multimunicipal plans.
- Article VI provides the basic authority for zoning.
- §1006-A(b.1) directs the courts to *consider the availability of uses under zoning ordinances within the municipalities participating in the multimunicipal comprehensive plan within a reasonable geographic area and . . . not limit its consideration to the application of the zoning ordinance on the municipality whose zoning ordinance is being challenged* in terms of providing for all legitimate uses.
- Article XI enables municipalities to enter into intergovernmental agreements for cooperative planning and zoning.

SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
OFFICIAL MAP FOR OPEN SPACE AND PUBLIC FACILITIES			
36	Ordinance and Map - Consider an official map for the Borough and the Township and the required ordinance in accord with Planning Code Article IV.	Planning Commissions Council Supervisors	2 years
37	Identified Priorities - Include on the maps needed community facilities and road and intersection improvements, and critical open space areas identified in this <i>Comprehensive Plan</i> .		

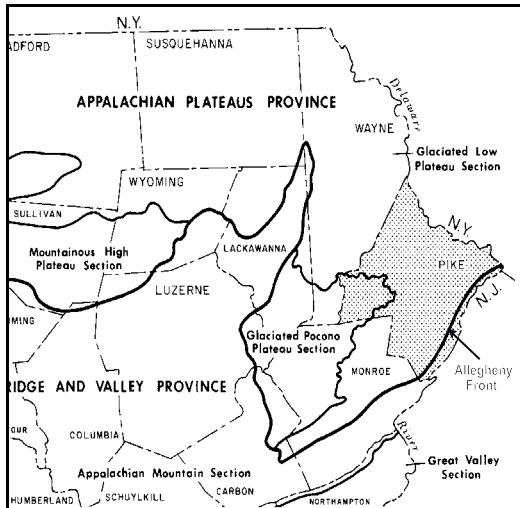
SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
SPECIFIC ZONING ORDINANCE CHANGES - BOROUGH AND TOWNSHIP			
38	ED and GC Districts - Include the uses allowed in the Westfall ED and GC Districts in the evaluation of providing the Planning Area's <i>fair share</i> of land uses which could enable allowing fewer residential uses in commercial districts.	Cooperative Committee Planning Commissions Council Supervisors	2 years
39	Standards - Review, update and add standards to ensure adequate provisions for: <ul style="list-style-type: none">• Yards, Buffers and Screening• Landscaping• Operations and Storage• Radioactivity or Electric Disturbance• Noise• Vibration• Lighting and Glare• Smoke• Odors• Other Forms of Air Pollution• Surface and Ground Water Protection• Storm Water Management and Soil Erosion Control• Waste Materials• Settling and/or Storage Ponds and Reservoirs	Planning Commissions Council Supervisors	2 years
SPECIFIC ZONING ORDINANCE CHANGES - BOROUGH			
40	C-1, C-2 and I Districts - Evaluate the range of uses allowed in the C-1, C-2 and I Districts to ensure compatibility with existing uses and appropriateness of location.	Planning Commission Zoning Officer Council	2 years
41	District Intent - Review and update the District Intent for each District to be consistent with any changes in uses.		
42	Small C-1 and C-2 Districts - Assess the possibility of eliminating the small C-1 and C-2 Districts which are surrounded by the R-1 District.		
43	Landscaping Standards - Include landscaping standards for nonresidential uses, multi-family dwellings and parking lots, and link the standards to the SALDO landscaping requirements.		
44	Accessory Windmills - Determine if and where accessory windmills are appropriate in the Borough, and include the necessary standards.		
SPECIFIC ZONING ORDINANCE CHANGES - TOWNSHIP			
45	Schedule of Uses - Provide a Schedule of Uses for each zoning district to list all uses allowed in the district classified as permitted by right, special exception, conditional use and accessory to complement the current tables and facilitate the understanding and use of the Ordinance	Planning Commission Zoning Officer Supervisors	
46	ED and GC Districts - Include a Schedule of Uses for the ED and GC Districts to ensure the full details are part of the Zoning Ordinance.	Planning Commission Zoning Officer Supervisors	2 years

SUMMARY OF ACTIONS: LAND USE			
#	ACTION	RESPONSIBILITY	TIMING
47	<u>Residential Uses in Commercial Districts</u> - Evaluate the appropriateness of residential uses in the C-1, C-2 and C-3 Districts in terms of reserving adequate areas for commercial and industrial development.		
48	<u>Wind Energy Facilities</u> - Include standards for wind energy facilities (wind farms).		
49	<u>Landscaping Standards</u> - Consider updating the landscaping standards and buffer requirements for nonresidential development, multi-family dwellings and parking lots.		

FINDINGS: NATURAL RESOURCES

Geology and Topography

- The uplands of Westfall Township and most of Pike County are located within the Glaciated Low Plateau Section of the Appalachian Plateaus Province, which is characterized by rounded hills and valleys formed by fluvial and glacial erosion and glacial deposition.

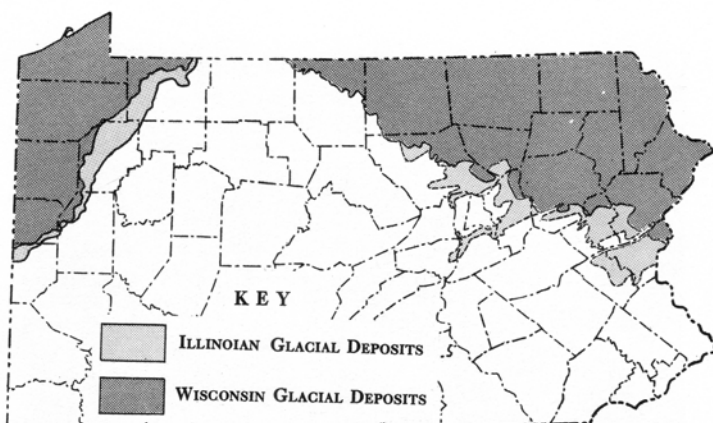


Physiographic Divisions of Northeastern PA



The Allegheny Front

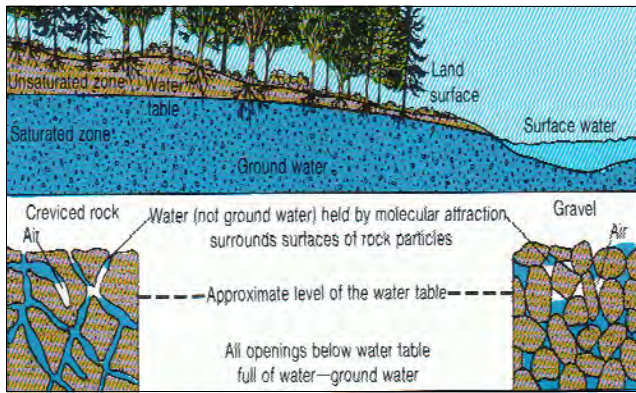
- The relatively level River Valley lies below the Allegheny Front, the escarpment which parallels the Delaware River and which predominates the landscape.
- The steepest slopes in the Planning Area are found along the escarpment with additional steep slopes found most consistently on ridge tops and along the stream and other drainage corridors.
- Although, development on steep slopes is technically feasible, development costs increase dramatically as the slope increases, and the environmental concerns also escalate.
- Steep slopes in the Borough are not an issue and most of the Township falls below the 25% steep slope threshold, so steep slopes are not significant in terms of limiting overall development.
- Bedrock geology and glacial geology are key factors affecting the natural environment and development pattern of the Borough and Township by providing the base for the formation of soils.
- Pike County as a whole is underlain primarily by sandstone, siltstone and shale of the Devonian Age which are some 365 to 405 million years old.
- The glaciation in Pike County has had considerable effect on the soils and groundwater water supply by depositing varying depths of overburden on the underlying rock formations.



Glacial Deposits in Pennsylvania

Groundwater

- Groundwater is the sole source of water supply in the Planning Area with most of the supply pumped from deep wells.
- Based on recharge rates and water use, the overall supply of groundwater should be adequate to sustain development and meet the needs of the foreseeable future.
- Groundwater availability is a regional issue



Water Bearing Geology

and adequate supply is not a valid reason for postponing or avoiding action to ensure continued adequate supply.

- ☞ No significant groundwater contamination problems have been reported in the Matamoras-Westfall Planning Area but quality protection must be addressed.
- ☞ Proper siting, design, installation and maintenance of on-site disposal systems and water supply wells, and groundwater quality, must continue to be a municipal concern and proper land use controls must be applied to protect groundwater recharge areas.

Soils



Typical Profile of River Valley Soil

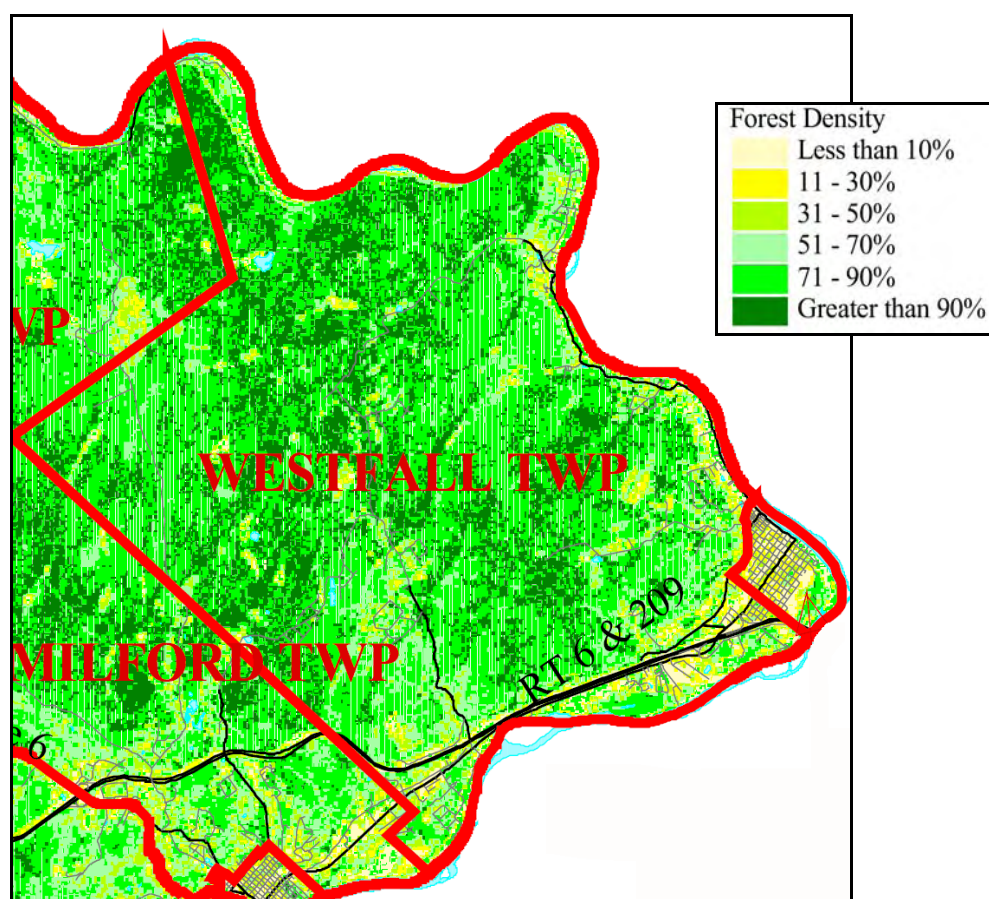
- ☞ Soil conditions, along with slope and underlying geology, pose severe limitations to septic absorption throughout the Borough and Township.
- ☞ Poorly renovated effluent from existing sewage systems on poor soils poses a threat to the quality of surface waters and groundwater supplies.
- ☞ Poor soil conditions in much of the Township uplands present a major challenge to the traditional development type consisting of single-family dwellings with on-lot septic. Site-specific investigations are required to identify suitable areas.
- ☞ The well drained River Valley soils are comprised of stratified silt, sand and gravel, and some cobbles. On-lot sewage systems may appear to be working, but in some cases percolation rates are too rapid with possible poor renovation of septic effluent prior to reaching the water table.
- ☞ Limitations for septic absorption, aging and un-maintained on-lot sewage systems on poor soils, and the lack of sufficient ground for on-lot septic replacement threaten to contaminate soil and groundwater. Long-term maintenance of on-lot sewage systems is critical.
- ☞ Local standards for erosion and sedimentation control must be linked to Pike County Conservation District and Pennsylvania Department of Environmental Resources requirements.

Nitrogen and Chloride Aquifer Study

The U.S. Geological Survey, in 1994, published a study that assessed the effect of septic systems and road and parking lot runoff on groundwater quality in the glacial outwash and kame-terrace aquifer underlying the Route 6/209 corridor between Milford and Matamoras. Nitrates and chlorides from these sources can move through the soil into the groundwater and elevated concentrations above the safe drinking water limits - 10 mg/l for nitrates and 250 mg/l for chloride. While no critical levels of nitrates were identified and chlorides were largely relatively low, the study does show the vulnerability of the sand and gravel aquifer, the study noted that *groundwater quality in the glacial aquifer is threatened by salts and nutrients*. Chlorides in wells near an old tanning business in Westfall Township registered chloride concentrations up to 680 mg/l from contamination via discharge to a septic system.

Forest and Vegetative Cover

- ☞ Westfall Township, and the Planning Area as a whole, remain largely forested owing to the large holdings of the Pennsylvania Department of Conservation and Natural Resources (DCNR) and a number of private landowners.
- ☞ The Borough is almost fully developed with the exception of the 63-acre parcel adjacent to Airport Park which is grassland, and the riparian area of Airport Park which is forested.
- ☞ Forest density throughout Westfall Township is generally greater than 70% with areas of 90% to 100% in some of the large private and state tracts.
- ☞ In many areas, the over-population of white-tailed deer has resulted in poor forest regeneration and the loss of many understory herbaceous species and the expansion of invasive species.



Forest Cover (Source: Pike County Comprehensive Plan)

- ☞ Severe infestations of the gypsy moth caterpillar have occurred in the region in recent years, damaging thousands of acres of forest.
- ☞ Infestations of the hemlock wooly adelgid are also problematic, especially in the Township's hemlock forested stream corridors. Destruction to hemlock stands over the long term could negatively impact stream systems and water quality.

- ☞ Despite infestations of the gypsy moth, hemlock wooly adelgid and other forest pests, and past development, the Planning Area currently has a healthy, diverse and expansive forest ecosystem.
- ☞ The opportunity to preserve large tracts of forest and vegetative cover remains and Planning Area and County officials must continue to take action to preserve its large forest expanses while opportunities still exist.

Wetlands



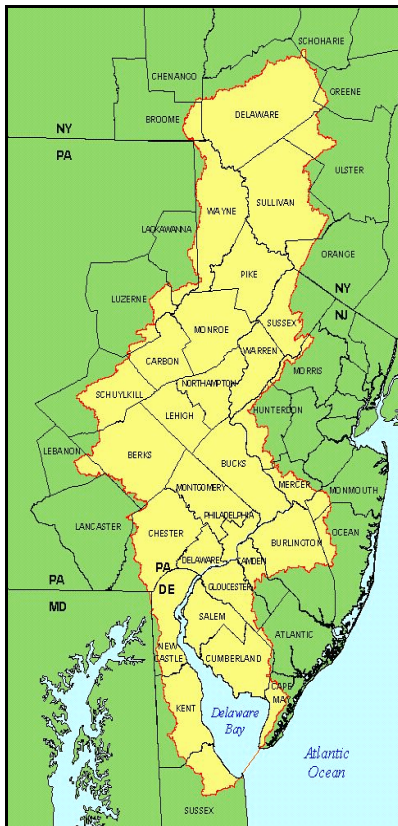
Typical Pike County
Emergent Wetland

- ☞ The environmental value of wetlands in the Planning Area is significant and the development which does occur must provide for the conservation of wetlands.
- ☞ The presence of wetlands will temper, but not significantly limit, the overall development of the Planning Area.
- ☞ State and federal regulations protect wetlands but do not require a buffer around wetlands.
- ☞ Local municipalities can include wetland protection in zoning and subdivision and land development ordinances to augment federal wetland regulations.



Forested Wetland
Cummins Hill Road

Watersheds and Surface Waters



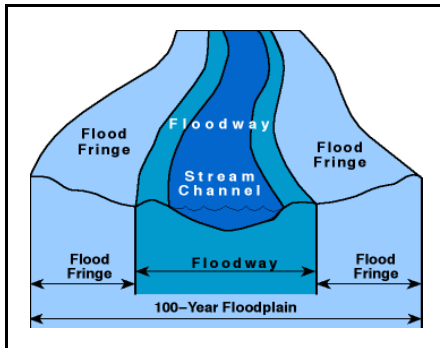
Delaware River Watershed

- ☞ The Borough and Township, along with all of Pike County, lie within the Delaware River Watershed.
- ☞ The Township drains to a number of sub-watersheds, the principal ones being Bush Kill Creek, Cummins Creek, and Vandermark Creek via Deep Brook.
- ☞ The Borough drains directly to the Delaware River.
- ☞ Pennsylvania Department of Environmental Protection regulations provide special protection for streams designated as *exceptional value waters* or *high quality waters* beyond basic standards.
- ☞ In the case of the Planning Area, Bush Kill Creek Watershed and Deep Brook Watershed are classified as *exceptional value* with the balance of the watersheds designated as *high quality*.
- ☞ The Delaware River Basin Commission sets additional standards for new and expanding industrial and municipal wastewater treatment plants when the proposed facility is designed to discharge a daily average rate of 10,000 gallons a day or more.
- ☞ Maintaining good water quality is critical to the quality of life in the Planning Area. In addition to supporting the local tourism and recreation economy, good quality streams and well-conserved watersheds are a good measure of overall environmental quality.

- ☞ State and federal regulations go a long way to protect water quality, but local municipalities often adopt additional standards such as buffers and conservation subdivision design to afford additional protection.

Floodplain

- ☞ The 100-year flood area in the Borough is largely confined to below the top of the River bank except for the low lying areas adjacent to Airport Park and approaching the pedestrian tunnel under I-84.



Floodplain Cross Section



Welcome Center - 2005
(Matamoras EMA)

- ☞ Most of the Borough is included in the 500-year flood area.
- ☞ Most of the developed part of Bell Manor in Westfall is outside the 100-year zone but in the 500-year zone.
- ☞ The 100-year zone extends under the I-84 underpass into the Mountain Avenue and Blue Ridge Avenue areas and to the PA Welcome Center.
- ☞ Much of the River side of I-84 is included in the 100-year zone with the balance in the 500-year zone or subject to 100-year floods of less than 1-foot depth.
- ☞ The Borough and Township have each adopted flood plain regulations which comply with the minimum state and federal requirements. The Borough and Township regulations:
 - Prohibit development in General Floodplain Areas within fifty-feet of the top-of-bank of the watercourse without proper state and federal permits.
 - Allow residential structures in floodplain areas if the lowest floor is elevated at least 1.5 feet above the 100-year flood elevation.
 - Allow nonresidential structures to be flood-proofed or elevated.
- ☞ The Borough and Township have had a long history of flooding resulting from high River levels and ice jams; this will certainly continue as it has in the past due to periodic heavy rains and continued upstream development.
- ☞ In critical floodplain areas where the health, safety and welfare of residents are at stake, municipalities can go beyond the minimum standards and consider stronger floodplain regulations to protect residents over the long term.
- ☞ The *Pike County Natural Areas Inventory* lists the following areas of significance in the Planning Area with rare and endangered plants and animals for protection of biological diversity: Millrift Cliffs, Millrift Flats, Mashipacong Shale Cliff (across from Delaware Valley School complex), and Matamoras Cliffs.

Natural Areas

MILLRIFT CLIFFS - The Acidic Cliff Community is located along the Delaware River and contains an excellent population of a state-endangered plant species. The site should be protected for its biological importance and for its scenic contribution to the Delaware River area. Although a road and several houses occur along the top of the cliff, the impact appears to be minimal at present. However, attempts to log and build new housing have placed the plant species in jeopardy. It is important that water quality and flow pattern not be changed if the species is to remain on the wet cliff face. Diversion of overland and subsurface flow and logging east of the road will adversely impact the species. It is strongly recommended that further development and logging be prevented east of the road and be carefully scrutinized within the entire watershed outlined on the map. TNC (The Nature Conservancy) has begun to pursue conservation easements in this area and the county and township should encourage conservation among the various landowners.

MILLRIFT FLATS - This Xeric Central Conifer Forest is an unusual occurrence along a sandy alluvial terrace in Pennsylvania. This fact and the five animals of special concern make this site a high priority for protection. A few houses have encroached on the natural community and may become a prime development area soon. This area should be protected through conservation easements, tax incentives to landowners or through purchase. The entire watershed which offers a scenic view of the river and also contains a small natural community on the slopes above Millrift Flats should also be included in any protection plan.

- ☞ Habitats identified by the Natural Areas Inventory are most at risk from direct development or watershed disturbance including degradation due to encroaching development, logging and forestry operations, and contamination from wastewater and stormwater runoff.
- ☞ Protection of habitat and Natural Areas Inventory sites requires a combination of local municipal environmental regulations and state and federal resource management and use regulations.
- ☞ Some of these sites are on private land and will require an outreach effort to inspire voluntary protection by the land owners (e.g. establishment of conservation easements).

SUMMARY OF ACTIONS: NATURAL RESOURCES			
#	ACTION	RESPONSIBILITY	TIMING
1	<p>Integrated Approach - The Borough and Township will periodically review and update environmental standards to ensure the most effective protection. The possible range includes:</p> <ul style="list-style-type: none"> • Environmental impact analysis requirements for large scale and environmentally problematic uses. • Retention of existing vegetation on development sites and soil stabilization and landscaping. • Stream, lake and wetland buffers. • Stormwater best management practices including quality treatment and infiltration. • Floodplain management. • Hydrogeologic studies for proposed uses with large groundwater consumption. • On-site sewage disposal system management. • Limitations and special standards for development on steep slopes. 	Planning Commissions Council Supervisors	ongoing

Preservation/Conservation Techniques

Comprehensive Planning - enables counties, boroughs, and townships to create a vision for the future which can focus on open land preservation.

Maximum Lot Size Standards - limits the amount of land devoted to a use as a means to preserve agriculture.

Lot Averaging Standards - overall density is maintained while the individual lot size varies.

Flexible Lot Size - sets lot size based on the availability of public water supply and/or sewage disposal.

Transferable Development Rights - the right to develop is sold from areas to be preserved to areas where development is encouraged; the overall area density development remains the same. Units which would be constructed on the *sending* property are developed on the *receiving* property, and the *sending* property is preserved.

Overlay Zoning - applies special standards in addition to the underlying zoning district for areas of special concern (e.g., floodplain, prime farmland, steep slopes).

Riparian Buffers - areas of vegetation left undisturbed along streams and lakes.

Greenways - corridors of public and private lands preserved as open space, often along streams.

Open Space and Natural Area Acquisition - conservation easements or fee simple title acquired by public bodies or conservation organizations. Permanently limits uses of the land in order to protect its conservation value.

Wellhead and Aquifer Protection - special standards wells and groundwater sources to protect water quality.

Sewage Facilities Planning - conducted in accord with DEP regulations and aimed at assuring adequate sewage disposal and water quality protection.

Floodplain Management - local regulations based on National Flood Insurance Program standards to minimize flood related damages to structures.

Stormwater Management - local regulations based on area wide plans to minimize stormwater runoff.

Erosion and Sedimentation Control - coordination with County Conservation District to minimize soil loss and protect water quality.

Differential Assessment - agricultural and forest land is assessed at its value for agriculture/forestry instead of the fair market value; e.g., Act 319 Clean and Green.

SUMMARY OF ACTIONS: NATURAL RESOURCES

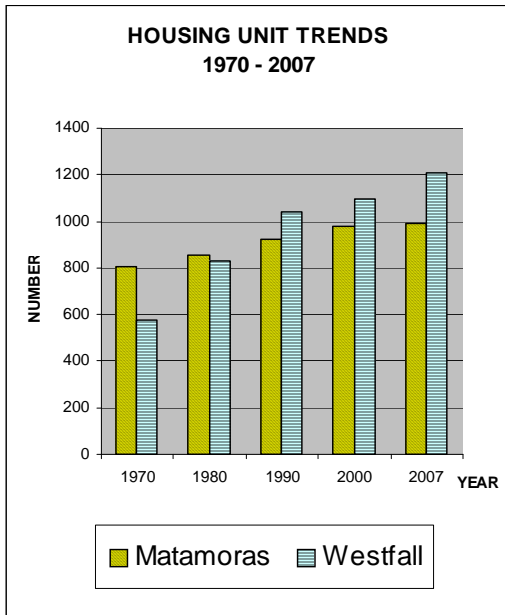
#	ACTION	RESPONSIBILITY	TIMING
2	Wetlands - Require wetland identification prior to development and apply wetland buffer and preservation standards.	Planning Commissions Council Supervisors	ongoing
3	Surface Waters - Apply surface water quality protection standards such as buffers and development best management practices.		
4	Floodplain - Apply current regulations to development in floodplain.		
5	E&S Control - Require an approved soil erosion and sediment control plan for all major subdivisions and land developments and any zoning use involving earth disturbance.		

SUMMARY OF ACTIONS: NATURAL RESOURCES			
#	ACTION	RESPONSIBILITY	TIMING
6	Steep Slopes - Review and update steep slope standards and consider standards to control development of very steep slopes and exclude steep slopes from lot area calculations.	Planning Commissions Council Supervisors	1 year
7	Soils - Consider standards to limit soil removal, limit building on wet soils and exclude wet soil areas from lot area calculations, and continue to enforce on-lot sewage regulations.		
8	Groundwater Protection Standards - Update and apply performance standards related to groundwater: zoning, sewage, stormwater, and well construction.		
9	Forest and Vegetation - Set specific standards for maintaining natural vegetation and require the developer to show why the existing vegetation cannot be maintained to the greatest extent possible		
10	Habitat and Natural Areas - Protect critical habitat areas through protection of topography and geology, soils, forest and vegetative cover, wetlands, floodplain, watersheds and streams, and sites identified in the Pike County Natural Areas Inventory via updated standards.		
11	Dark Skies - Update lighting and glare standards and apply to all residential and nonresidential uses.	Planning Commission Supervisors	1 year
12	Ridge Lines - Consider ridge line and scenic vista protection standards in terms of balancing private property rights with a clearly stated public purpose.		
13	Groundwater Conservation / Protection - Consider undertaking an organized groundwater conservation and protection program including the identification of groundwater recharge areas, protection zones, and measures for protection/education.		
14	Stormwater Management - Update stormwater requirements to be consistent with the County Stormwater Management Plan and DEP requirements	Planning Commissions Council Supervisors	County Plan completion

FINDINGS: HOUSING

Housing Trends

- ☞ In Matamoras Borough, housing units in 2007 were estimated at 1,020, based on the 44 building permits issued since 2000. The increase is on par with the increases since 1970.



- ☞ Based on the 114 permits issued, the number of housing units in Westfall Township in 2007 were estimated at 1,155, with the anticipated 10-year increase well below prior decades.
- ☞ Matamoras has limited potential for increased numbers of dwelling units given few vacant lots and little vacant land, while Westfall Township, with hundreds of acres of open land, holds great potential.

Age of Housing

- ☞ The housing units in the Borough are considerably older than in the Township, which would be expected given the early development pattern of the Planning Area.
- ☞ The age of the housing stock does not appear to be a factor in housing condition and dilapidated housing in the Planning Area is not an issue.

Home Ownership

- ☞ Home ownership rates in Westfall Township were higher than the Commonwealth, but lower than the County.
- ☞ In Matamoras Borough, the proportion of homeowners was on par with the State, but less than Westfall Township and the County.
- ☞ There was an insignificant change in home ownership in the Township between 1990 and 2000. Homeownership it declined somewhat in the Borough during the same period.

Housing Value

- ☞ The Township has a higher proportion of homes of greater value than the Borough, probably a reflection of the age of housing in the Borough with smaller lots, fewer high value vacation homes, and more families working in the local economy instead of commuting to metropolitan areas.
- ☞ After adjustment for inflation, median housing value in the Borough, Township and County actually decreased significantly in the ten years between 1990 and 2000.

Housing Characteristics

- ☞ The housing stock is dominated by single-family detached dwellings.
- ☞ Multi-family housing units account for almost 22% of the total housing stock in the Borough, but less than 5% in the Township.
- ☞ The number of dwellings for season or recreation use in the Planning Area is very low when compared to Pike County as a whole, and the number of such homes declined between 1990 and 2000.

Housing Affordability

- ☞ Real estate values in Matamoras Borough and Westfall Township, and all of Pike County, have increased rapidly given the appeal of the quality lifestyle so close to metropolitan areas.

The Municipalities Planning Code

requires 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.

Zoning must provide for housing of various dwelling types encompassing all basic forms of housing, including single-family and two-family dwellings, and a reasonable range of multifamily dwellings in various arrangements, mobile homes and mobile home parks.

- ☞ Barriers to affordable housing associated with land use regulations, include:
 - insufficient amount of land zoned for medium and high density residential development
 - excessive lot frontage and setback requirements which dictate greater lot sizes
 - excessive street widths and construction standards unrelated to expected traffic volumes
 - lack of provisions for conservation design and planned residential development
 - limitations on the use of mobile homes and manufactured homes
 - plan review and administrative delays
- ☞ The U.S. Department of Housing and Urban Development defines *affordable housing* as costing no more than 30% of a household's gross monthly income.

- ☞ In both the Borough and Township a significant proportion of home owning households (25% and 27%) and renting households 48% and 34%) had Year 2000 housing costs which exceed the *thirty percent rule* for household income and housing expense.

Planning Implications

- ☞ With the exception of ensuring that land use and building regulations are reasonable in terms of affecting costs, small municipalities can do little to manage housing affordability which is so dependent on regional economic real estate market factors.
- ☞ Municipalities can take steps to encourage innovative forms of housing that meet the community's needs and satisfy the market; age restricted housing is a good example.
- ☞ The housing stock in the Planning Area appears to be healthy in terms of condition and overall mix of housing types.
- ☞ The percentage of cost burdened homeowners and renters is high, increasing the chance for instability of home ownership.
- ☞ Residents must look to the Wayne County Housing Authority, under contract with Pike County, for access to publically funded housing development, rent assistance and housing rehabilitation programs.

Housing Policies

- Promote mixed-use development that would accommodate various dwelling types in proximity to commercial and civic services.
- Provide for a variety of housing types, including single-family attached and multi-family dwellings, in order to accommodate individuals and families of various income levels.
- Review land use controls in terms of standards not directly linked to public health and safety which increase housing costs.
- Provide for age-restricted housing in proximity to services to accommodate seniors.
- Consider a market study to determine the need for affordable owner and rental units and propose required actions.
- Investigate ways to bring relief to cost burdened households (owner and renters).
- Permit a mix of lot sizes within residential developments to encourage diversity of housing structures and styles.
- Encourage rehabilitation of substandard housing.
- Cooperate with area municipalities and the County to plan for housing needs regionally and as housing needs are identified consider the development of joint housing plans with neighboring municipalities.

SUMMARY OF ACTIONS: HOUSING			
#	ACTION	RESPONSIBILITY	TIMING
Zoning Ordinance and SALDO			
1	<u>Flexible Design</u> - Update/adopt and promote the use of conservation design, traditional neighborhood, and planned residential development, and development incentives such as density bonuses as a means of providing more affordable housing.	Planning Commissions Council Supervisors	1 year
2	<u>TDR</u> - Consider the use of transferrable development rights to enable the shift of density from more remote parcels to zoning districts allowing higher residential density.		
3	<u>Age / Affordable Incentives</u> - Consider providing some incentives (density or design) for developers who provide age restricted and/or affordable housing.		
4	<u>Multi-Family</u> - Allow multi-family housing where compatible with surrounding land uses, with access to transportation corridors, and in keeping with the logical extension of utilities and public services.	Planning Commissions Council Supervisors	ongoing
5	<u>Cooperative Zoning</u> - Consider the use of cooperative zoning to provide higher density housing in areas with adequate infrastructure.	Planning Commissions Committee Council Supervisors	2 years
6	<u>Design Guidelines</u> - Create design standards that promote attractive, interconnected communities with pedestrian access and appropriate landscaping.		

SUMMARY OF ACTIONS: HOUSING			
#	ACTION	RESPONSIBILITY	TIMING
Additional Measures			
7	<u>Programs</u> - Support the housing recommendations of the Housing Authority relative to subsidized housing programs for low and moderate income families and ensure area residents receive fair consideration for available programs.	Council Supervisors Residents	ongoing
8	<u>Pike County</u> - Encourage Pike County to assess the need and benefit of a County authority or agency (as opposed to contracting with the Wayne County Housing Authority) to address housing needs.		
9	<u>Housing Study</u> - Conduct an in depth housing study to address issues related to affordability and the supply of various types of housing.	Housing Authority Borough/Township Committee	3 years

FINDINGS: COMMUNITY FACILITIES, SERVICES AND UTILITIES



Westfall Township Municipal Building



Matamoras Borough Municipal Building

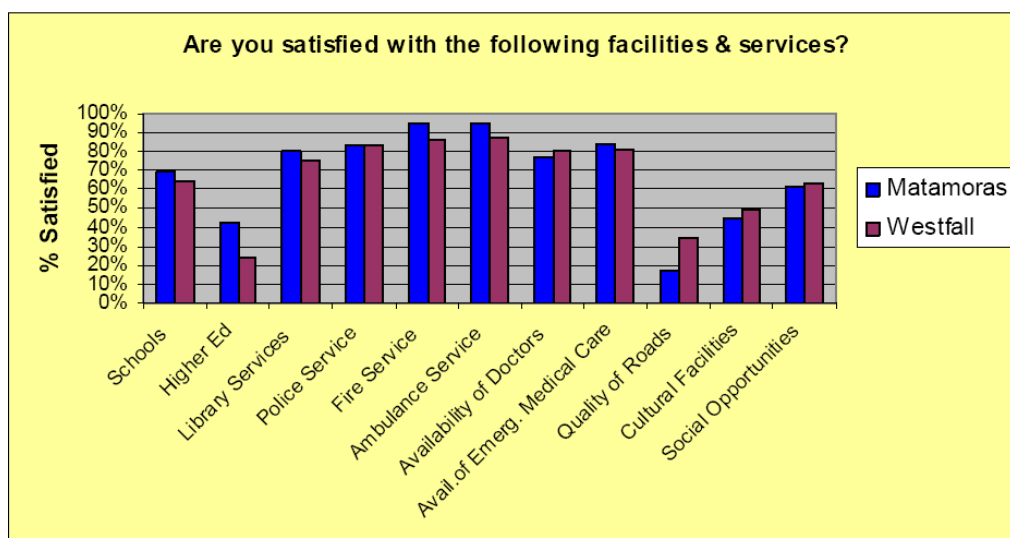
Municipal Facilities

- ☞ Community facilities and services can serve as a tool, or as an unexpected trigger, to guide or stimulate community growth and development. For example, a public sewage disposal system can stimulate commercial and residential development.
- ☞ Public community facilities and services to serve Planning Area residents are provided on several levels, and the provision of these facilities and services is dependent on tax dollars, whether in the form of federal and state aid, county supported programs, or locally funded facilities and services.
- ☞ Excerpts of the survey results for Matamoras Borough and Westfall Township are shown in the *Community Facilities Survey Results Figure*. The survey conducted by Pike County in 2005 reveals that respondents from the Planning Area are generally satisfied with the various community facilities and services, with the exception of *Higher Education*, *Quality of Roads*, and *Cultural Facilities*, where fewer than 50% of residents are satisfied.

- ☞ Both the Borough building and barn are in need of upgrades. The most immediate concerns are the lack of an adequate back-up power supply and a lack of local communication systems, including emergency and radio communications.
- ☞ Only minor maintenance issues exist in reference to the Township Building.

Electricity Service

- ☞ The Township also experiences frequent power outages and has no back-up power system.



Source: Pike County Comprehensive Plan, Township Specific Survey Results, July 2005

- Electricity surges and brownouts have been a real and increasing problem due to aging electric utility infrastructure.

News Media

- The Planning Area has no daily newspaper and no Pennsylvania television stations, which severely limits the local government's ability to communicate with its residents and contributes to a lack of participation in local affairs.

School Districts and the Municipalities Planning Code

Section 305. The Legal Status of Comprehensive Plans Within School Districts. Following the adoption of a comprehensive plan . . . , any proposed action of the governing body of any public school district located within the municipality or county relating to the location, demolition, removal, sale or lease of any school district structure or land shall be submitted to the municipal and county planning agencies for their recommendations at least 45 days prior to the execution of such proposed action by the governing body of the school district.

School District

- In 2009, the Delaware Valley School District enrolled some 5,800 students and the Pennsylvania Department of Education projected the enrollment to increase to almost 6,100 by 2010 and to 6,700 by 2014. However, recent enrollment rates have been stable with a slight decline at the elementary school level.
- The District reports that families moving into and out of the District results in changing students and needs to which the District must respond.

Emergency Services

- Police services are provided by the Eastern Pike Regional Police Department, whose jurisdiction includes Matamoras Borough and Westfall Township.



Matamoras Fire Department



Mill Rift Fire Department



Westfall Fire Department

- Matamoras Borough Fire Department is an all volunteer department providing fire protection, basic life support and water rescue services.
- Fire protection and basic life support in Westfall Township are provided primarily by the Mill Rift Fire Department and the Westfall Fire Department, both volunteer organizations.
- Fund raising is the largest source of funds for the three volunteer departments with additional support from the Borough and Township.
- Funding to purchased updated equipment and maintenance is the most pressing need for all three departments.
- Rural emergency service providers, including those serving the Matamoras-Westfall Planning Area, are finding it more and more difficult to find volunteers given the increased demands for training and qualifications.
- Advanced Life Support (ALS) is provided by Pike County Advanced Life Support, formed in May 2003 with paid paramedics and volunteer Emergency Medical Technician (EMT) drivers.
- As the number of residents and commercial establishments increase, police, fire, and EMS services currently stretched to their limits, will be further stressed to provide adequate emergency protection for the Planning Area.

	<ul style="list-style-type: none">☞ The Borough and the Township have appointed Emergency Management Coordinators who work with the County Emergency Management Agency on planning and emergency response.
Streets and Sidewalks	<ul style="list-style-type: none">☞ The Borough and Township each employ road crews for normal winter and summer maintenance, but contract for larger scale road maintenance and improvement projects such as paving and shoulder reconstruction☞ Using a grant from PennDOT, the Borough has installed sidewalks along the east side of Pennsylvania Avenue, but additional funds are needed to complete the project.☞ Sidewalk improvements are also important on side streets.☞ Street trees in the Borough and Bell Manor section of the Township add to the quality of life and community character.☞ There is a critical need for improved parking to serve businesses along Pennsylvania Avenue.
Solid Waste and Recycling	<ul style="list-style-type: none">☞ Township residents contract with private haulers for solid waste disposal while the Borough provides collection twice weekly.☞ Planning Area residents may deposit recyclables at the Borough recycling center and the County center at the Milford Township building.
Water Supply	<ul style="list-style-type: none">☞ The Matamoras Municipal Authority supplies water to all of the Borough and adjacent portions of Westfall Township serving a population of approximately 2,900 via 1,089 connections from four deep wells.☞ The remaining portion of Westfall Township is served by on-lot, private wells and community water supply systems drawing from groundwater.☞ To date there have been no reports of problems involving insufficient water supply in the Planning Area.
Wastewater	<ul style="list-style-type: none">☞ Most wastewater treatment in the Planning Area and all of Pike County is treated by private, on-lot septic systems with potential for groundwater contamination if systems are not installed and maintained properly.☞ The lack of a central sewer system inhibits commercial growth in the Borough by limiting the types and sizes of businesses that can operate.☞ If widespread on-site sewage system malfunctions are documented and if financially feasible, central sewer provided by the Municipal Authority of the Township of Westfall may be an option for the Borough.☞ The Authority primarily serves the commercial properties located within the State Route 209/6 corridor in Westfall Township and has been ordered by the Federal District Court to plan for the sewage needs of the area known as the Katz properties.

- ☞ The Authority is preparing a Regional 537 Plan update which would expand the service area to include regional growth and evaluate alternatives for treatment.
- ☞ Two private sewage treatment plants operate in the Township serving specific facilities - Delaware Valley School District and Milford Senior Care and Rehabilitation Center. A third treatment plant, M&S Sanitary Sewage Disposal, Inc., treats septage generated by on-lot septic systems and sludge generated by wastewater treatment plants delivered by private haulers.
- ☞ The balance of the Township is served by on-lot septic systems and no significant problems have been reported.
- ☞ Proper installation and maintenance of on-lot sewage disposal systems is important for water quality protection.

Stormwater

- ☞ Stormwater runoff problems have been identified throughout the Planning Area resulting in large part from development lacking stormwater management systems, roads without adequate stormwater conveyance and infiltration systems, and the general topography of the area.
- ☞ Matamoras Borough has specifically identified a need to upgrade its storm drains and install pumps to enable proper drainage.
- ☞ Other specific issues and problem areas have been identified and are cited in the Pike County Stormwater Management Plan being prepared by the County Conservation District.

Planning Implications

- ☞ Projected increases in the population will likely require increased police protection and emergency services, and expanded community facilities and services.
- ☞ Community facilities, services and utilities must be coordinated with the future higher density growth areas of Matamoras Borough and Bell Manor, and the moderate density growth areas of the immediately surrounding areas of Westfall Township.
- ☞ The aim is to achieve more efficient allocation of services and reduce the adverse environmental effects that often arise from un-managed growth and inadequate water and sewerage facilities.
- ☞ Wastewater treatment planning must consider the financial and development impacts that can result from an expanded central sewer system.
- ☞ The Borough and Township should continue to cooperate with each other and other municipalities, the School District, and the County to provide and improve facilities and services which are best provided regionally.

SUMMARY OF ACTIONS: COMMUNITY FACILITIES AND SERVICES			
#	ACTION	RESPONSIBILITY	TIMING
Emergency Services			
1	<u>Funding</u> - Continue financial support of the Eastern Pike Regional Police and local fire departments.	Council Supervisors	ongoing
2	<u>Fire Departments</u> - Consider consolidation / regionalization of fire departments.	Fire Departments Council Supervisors	as needed
3	<u>Volunteers</u> - Assist fire departments with promoting volunteerism.	Council, Supervisors Residents	ongoing
4	<u>EMA Projects</u> - Provide support for planned emergency management projects.	Council Supervisors	available funding
Communications and Utilities			
5	<u>Local System</u> - Pursue the establishment of a local communications system via television, radio, and news print.	Council Supervisors	2 years
6	<u>School District</u> - Continue the lines of communication with the Delaware Valley School District on planning related matters.	Council, Supervisors, Police Department, EMA	ongoing
7	<u>Telecommunications</u> - Bring and maintain state of the art telecommunications to the Planning Area.	Council, Supervisors County, School District, State	2 years
8	<u>Electric Service</u> - Negotiate necessary upgrades with the electric company.	Council, Supervisors County, School District, State	3 years
Circulation			
9	<u>Road Maintenance</u> - Explore cost effectiveness of sharing road maintenance duties or partnering with roads departments in the Pike County COG.	Council Supervisors Road Departments	immediate
10	<u>PA Avenue Improvement</u> - Pursue funding to complete the sidewalk and streetscape project in the Borough.	Council Avenue in Bloom	ongoing
11	<u>Side Streets</u> - Prioritize side streets in the Borough for sidewalk and streetscape enhancements.	Council Avenue in Bloom	2 years
12	<u>Parking</u> - Investigate the feasibility of installing parking lots behind and/or to the side of the businesses on Pennsylvania Avenue.	Planning Commissions Council Road Department	3 years
13	<u>New Development</u> - Include provisions in the SALDO for sidewalks and shade trees in any new high to moderate density subdivisions and land developments as appropriate.	Planning Commissions Council Supervisors	1 year

SUMMARY OF ACTIONS: COMMUNITY FACILITIES AND SERVICES			
#	ACTION	RESPONSIBILITY	TIMING
Groundwater			
14	<u>Land Development</u> - Protect the Planning Area's Exceptional Value and High Quality watersheds by prohibiting development of environmentally constrained land, such as wetlands, stream banks, very steep slopes, and hydric and high water table soils.	Planning Commissions Supervisors	ongoing
15	<u>Vegetation</u> - Protect forest and vegetative cover, especially in headwater drainage areas.	Planning Commission Supervisors Developers	immediate
16	<u>Wellhead Protection</u> - Provide wellhead protection buffer zones surrounding community drinking water wells via a zoning ordinance amendment.	Planning Commissions Council, Supervisors, Water Authority	1 year
17	<u>Upgrade Facilities</u> - Pursue funding through the State to upgrade stormwater management and wastewater disposal facilities.	Council Supervisors	as needed
Stormwater			
18	<u>Upgrade Facilities</u> - Pursue funding through the State to upgrade stormwater management facilities.	Council	ongoing
19	<u>Planning</u> - Participate fully in the County stormwater management planning process.	Council, Supervisors Committee Reps	ongoing
20	<u>Update Standards</u> - When complete, use the County model stormwater management ordinance to develop standards to meet local needs	Planning Commissions Council, Supervisors	1 year after complete
21	Require stormwater management systems that employ Best Management Practices,	Planning Commissions Council, Supervisors Conservation District	ongoing
22	Limit the use of impervious cover and promote the use of pervious surfaces	Planning Commissions Council, Supervisors	ongoing
23	Encourage the use of conservation design development to reduce the volume and rate of stormwater runoff.	Planning Commissions Council, Supervisors	immediate
24	Require regular maintenance of stormwater management facilities.	Planning Commissions Council, Supervisors	1 year
Wastewater			
25	<u>Matamoras</u> - If widespread malfunctions are documented and if financially feasible and affordable for residents, pursue opportunities to bring central sewer to Matamoras Borough through the Westfall Municipal Authority.	Council Authority	available funding
26	<u>On-Lot Management</u> - Consider a management plan for on-lot septic systems that would require routine maintenance of such systems.	Council Supervisors SEO's	ongoing

SUMMARY OF ACTIONS: COMMUNITY FACILITIES AND SERVICES			
#	ACTION	RESPONSIBILITY	TIMING
27	Central Sewage Planning - Comply with DEP's <i>Water Quality Antidegradation Guidance</i> , which requires that land-based sewage disposal alternatives should be examined first for new sewage disposal concepts.	Supervisors Authority	ongoing
28	Ensure that residential lot sizes will provide sufficient isolation distance for on-lot systems and replacement areas.	Planning Commissions Council Supervisors SEO's	ongoing
29	Limit development of lots with unsuitable soils and steep slopes that are not appropriate for individual septic systems.		
Other Facilities and Services			
30	Fully explore and take advantage of any opportunities to improve facilities and services offered by inter-municipal cooperation, Matamoras and Westfall, the Pike County Council of Governments and the Pennsylvania <i>Piggyback</i> (purchasing) Program.	Council Supervisors	ongoing
31	Re-institute curbside recycling pick-up in the Borough when financially feasible.	Council	as possible
32	Rejuvenate the Borough Shade Tree Commission and consider renewed participation in <i>Tree City USA</i> to support Pennsylvania Avenue revitalization efforts.	Council Shade Tree Comm.	1 year

FINDINGS: TRANSPORTATION

Overview

- ☞ A sound transportation system includes adequate and well-maintained roads, available public transportation, safe and convenient pedestrian access, and bicycle routes. However, few small communities with limited budgets are able to achieve this ideal level of service.
- ☞ Local municipalities must evaluate transportation needs, set priorities, and garner all available resources to make improvements.
- ☞ Interstate Route 84, the only expressway in the Planning Area, played a key role in the recent growth and development of the Township and region and will continue to serve as the major transportation routes.

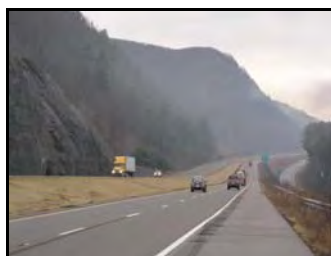
Planning Issues

Issues of concern related to circulation have been identified as follows:

- ☞ Given its adjacency to New York State and I-84, the Matamoras - Westfall Planning Area suffers much of the traffic entering and leaving Pike County.
- ☞ The Planning Area also provides significant retail and service needs to residents of the region, especially along the Route 6 corridor.
- ☞ Many of the Planning Area streets are substandard relative to design and functionality.
- ☞ The Borough streets are narrow and little curbing to control traffic and drainage.
- ☞ There is limited access from the north portion of the Planning Area to the southern portion.
- ☞ Heavy traffic in the Borough makes pedestrian circulation difficult and detracts from small town character.
- ☞ Business parking along Pennsylvania Avenue is extremely limited.
- ☞ Increased residential development is placing more demand for the maintenance and improvement of Township roads.



Classification



- ☞ Interstate 84 is the only expressway in Pike County. Planning Area access is at the Matamoras - Westfall Interchange.
- ☞ Route 6 and route 209 are classified as arterial highways and provide connection between commercial and population centers in the region.
- ☞ Collector roads carry traffic from local streets to arterials and in the Planning Area include Delaware Drive, Mountain Avenue and Avenue C, Cummins Hill Road and Tenth Street north of Pennsylvania Avenue.

- Those land uses which generate larger volumes of traffic should logically be located in the areas of a community served by roads with greater carrying capacity.

Congested Corridor Improvement Program

In December 2004 PennDOT issued the *Congested Corridor Improvement Program Report* for the U.S. 6 / U.S. 209 corridor in Pike County. *The US 6 / US 209 corridor was nominated for the CCIP due to traffic congestion resulting from overwhelming population and retail growth over the last 20 years. Weekend travel is particularly bad, causing residents to schedule simple travel and chore trips around peak congestion times. In addition to heavy congestion, safety has been cited as a serious issue along the corridor. The corridor study limits are a heavily traveled link connecting the Borough of Milford and the Borough of Matamoras in Pike County.*

- The level of service will decline significantly over ten years if no improvements are made to the corridor.
- Constitution Avenue & Reuben Bell Road/ I-84 Eb from the I-84 off ramp is of particular concern at the intersection. Heavy delays for these left turns result in intersection operation of LOS (level-of-service) E during the PM and Saturday peak periods.*
- Congestion in the borough and at I-84 ramp intersections sometimes impeded emergency vehicle response during peak traffic times.

Municipal Roads

- The Township owns and maintains 21.20 miles of roads and the Borough 13.11 miles.
- Township and Borough roads are generally in good condition, with the primary concerns being routine maintenance and drainage improvements.

State Roads



I - 84 / Route 6/209

- The condition of the state roads in the Planning Area is also generally good with the following concerns:

- Correction of dangerous intersections
- Increasing volumes of traffic
- Horizontal and vertical alignment
- Speed limit enforcement
- Adequate maintenance
- Improved signs for hazards and traffic control
- Improvement of Route 6 and Cummins Hill Road intersection
-

New Subdivision Roads

- The Borough and Township Subdivision and Land Development Ordinances includes standards to ensure adequate roads and other facilities for new development.

Bicycle Routes

- Bicycle PA Route Y1* runs along the Route 6/Route 209 corridor and any transportation planning should consider the establishment of additional bicycle routes in the Planning Area.

Airports, Railroads, and Public Transportation

- Area residents rely on regional airports in Pennsylvania, New York and New Jersey for major commercial carrier service.

- ☞ Railroad freight service is available in nearby Port Jervis, New York as is passenger service to New York City used by many Pike County residents.
- ☞ The Shortline Bus Company provides limited service in Pike County.
- ☞ A recent study conducted by the Pike County Area Agency on Aging concluded that a fixed route bus service in the County is currently not financially feasible.

SUMMARY OF ACTIONS: CIRCULATION			
#	ACTION	RESPONSIBILITY	TIMING
Local Roads			
1	<u>Maintenance and Drainage</u> - Continue regular maintenance of local municipal roads and improve drainage.	Council, Supervisors Road Departments	ongoing
2	<u>Inventory</u> - Maintain an up-to-date inventory of road maintenance equipment to plan for replacement and inclusion the capital improvements program.	Council Supervisors Road Departments	immediate
3	<u>Speed Limits</u> - Work with the Eastern Pike Regional Police Department to enforce speed limits.	Council, Supervisors Police Department	ongoing
4	Complete and update annually a detailed road inventory and evaluation to identify needs and develop an improvements schedule.	Council Supervisors Road Departments	immediate
5	<u>CIP</u> - Develop a Transportation Capital Improvement Program to plan and budget for improvements.	Council Supervisors Road Departments	1 year
6	<u>Private Roads</u> - Partner with community associations to address road maintenance issues.	Supervisors Associations	1 year
Local Ordinances			
7	<u>Road Construction/Dedication</u> - Maintain up-to-date road ordinance and SALDO standards for construction of roads and establishing procedures for dedication to the public, but carefully weigh the costs and benefits of accepting private roads for dedication.	Planning Commissions Council Supervisors	1 year
8	<u>Reasonable Standards</u> - Review road construction standards to ensure adequacy for public safety and eliminate excessive requirements to minimize the consumption of resources for construction and long term maintenance.		
9	<u>Road Occupancy</u> - Maintain an up-to-date road occupancy ordinance setting standards for driveway access to Borough and Township roads and for stormwater and utility improvements within the road right-of-way.		
10	<u>Parking and Loading Areas</u> - Review and update zoning standards for parking and loading areas to ensure safe and adequate parking facilities.		

SUMMARY OF ACTIONS: CIRCULATION			
#	ACTION	RESPONSIBILITY	TIMING
Local Roads			
11	<u>Maintenance and Drainage</u> - Continue regular maintenance of local municipal roads and improve drainage.	Council, Supervisors Road Departments	ongoing
12	<u>Sensitive Design</u> - Include context sensitive design standards in the road construction regulations.		
13	<u>Emergency Access</u> - Amend the SALDOs to provide rights-of-way for emergency access and road connections through dedication of land and easements.		
14	<u>Traffic Impact Study</u> - Amend SALDOs and zoning ordinances to require a Traffic Impact Study for higher intensity developments.		
15	<u>Impact fees</u> - Consider the adoption of an Act 209 Traffic Impact Fee Ordinance, which allows municipalities to assess developers for a portion of the transportation capital improvements costs necessitated by, and attributed to their development.	Planning Commissions Council Supervisors	2 years
16	<u>Official Map</u> - Consider an Official Map to identify and reserve land needed for road improvements and connections.		
Congested Corridor			
17	<u>Improvements</u> - Pursue road intersection improvements in the Congested Corridor Improvement Program. • Route 6/209 and Reuben Bell Road / I-84 Eastbound Ramps Intersection. • Pennsylvania Avenue and Mountain Avenue Intersection. • Pennsylvania Avenue and Stella Street / I-84 Westbound Ramps Intersection. • Intersections with insufficient storage lengths.	Council Supervisors PennDOT	available funding
18	<u>12-Year Program</u> - Work with PennDOT to place priority road and intersection improvements on the Twelve-Year Transportation Program.	Council, Supervisors Pike Co., PennDOT, NE PA Alliance	ongoing
19	<u>Message Signs</u> - Install two Dynamic Message Signs in Westfall Township to display the 1-84 traffic conditions in realtime.	Supervisors PennDOT	available funding
20	<u>Signals</u> - Implement mid-day coordinated signal timings on all five traffic signals in Westfall Township.	Supervisors PennDOT	1 year
21	<u>PA Ave Delays</u> - Address stacking and delays on Pennsylvania Avenue due to left turns by eliminating curb cuts and limiting left turn opportunities.	Council PennDOT	available funding
22	<u>Access Management Plan</u> - Develop and adopt an Access Management Plan throughout the Borough of Matamoras to limit curb cuts, require shared driveways and parking, provide service roads, and accommodate pedestrians and public transit.	Planning Commissions Council Supervisors PennDOT	2 years
23	<u>Design Guidelines</u> - Establish site design guidelines to minimize development impacts on the corridor.		

SUMMARY OF ACTIONS: CIRCULATION			
#	ACTION	RESPONSIBILITY	TIMING
State Roads			
24	<u>Customer Advisory Board</u> - Participate in the PennDOT Customer Advisory Board to communicate concerns to PennDOT.	Council Supervisors	ongoing
25	<u>Road Task Force</u> - Continue to work with the Pike County Road Task Force and PennDOT officials to discuss highway improvement needs and prioritize and promote specific improvement projects.		
26	<u>Studies</u> - Work with local legislators, the County and PennDOT to schedule studies to identify improvements to correct identified road and intersection deficiencies.	Council Supervisors	immediate
Bicycle Routes			
27	<u>Route 6/209</u> - Consider the establishment of a bicycle lane on Route 6/209 to accommodate Bicycle PA Route Y1.	PennDOT	available funding
28	<u>Additional Routes</u> - Consider opportunities to establish additional bicycle routes in the Planning Area.	Council, Supervisors PennDOT	available funding
Public Transportation			
29	<u>Ride-Share</u> - Encourage the establishment of a ride-share (car pool) system. A ride-share program could be coordinated by a Planning Area Transportation Task Force or ride-share participant volunteers. Information regarding the program could be posted on a local website.	Council, Supervisors Residents PennDOT	2 years
30	<u>Public Transportation Planning</u> - Recognize the potential future need for public transportation and plan accordingly (e.g., locate residential development along main roads where transit stops are most like to be located).	Planning Commissions Council, Supervisors	ongoing

FINDINGS: HISTORIC PRESERVATION

- ☞ Archaeological investigations in the area have uncovered artifacts supporting human occupation of the valley as early as 12,000 years ago.
- ☞ Native American inhabitants subsisted in the valley until circa 1758 when European-American settlers forced the last of the Minisink Indians to leave.
- ☞ Post-European settlement of the area, beginning in the early 18th Century, centered around agriculture and later progressed to recreation and tourism.
- ☞ The many historic resources in Matamoras Borough and Westfall Township are key components of the small town character of the community and the rural-recreation landscape.

Pike County Historic Resources Study

This Study, completed in 1997 by Pike County and Cultural Heritage Research Services, Inc., details the many historic resources in Pike County including Matamoras and Westfall. The Study reports:

Eligible for National Register Listing

- Simon Westfael House
- Matamoras Elementary school (razed)
- Charles S. Peirce House
- Conrail #2 Bridge

Potentially Eligible for National Register Listing

- 16 buildings in Matamoras
- an historic farm complex in Westfall

Not Eligible for National Register Listing

- Matamoras Historic District
- Mill Rift Historic District

- ☞ According to the Pennsylvania Historical and Museum Commission, Mill Rift Hall is the only building in the Township listed on the National Register of Historic Places. The Nearpass House was listed but was razed in 2008. None in the Borough are listed.
- ☞ Although not included on the National Register, historic resources of local significance are still meaningful and important to the community's heritage.
- ☞ There are currently no historic districts in the Planning Area and the 1997 *Pike County Historic Resources Study* concluded:
 - *Matamoras was determined not eligible for listing as a historic district in the National Register of Historic Places.*
 - *The Village of Mill Rift Historic District was determined not eligible for listing as a historic district in the National Register of Historic Places.*

- ☞ Although site and sign design guidelines would not be mandatory outside of a historic district listed on the National Register they can encourage commercial establishments and signs to be consistent with the community's heritage.

Historic Preservation Policies

- Continue the identification of historic sites (nationally and locally significant) and pursue National Register listing.
- Promote public education to raise awareness of the Borough's and Township's history and historic resources.
- Promote preservation of historic buildings and structures during the land development process.
- Preserve historic buildings by incorporation in commercial areas as commercial uses.
- Preserve historic sites by promotion as recreational or tourist destinations.
- Pursue technical assistance and funding for historic resource identification and preservation.

SUMMARY OF ACTIONS: HISTORIC PRESERVATION			
#	ACTION	RESPONSIBILITY	TIMING
1	Historical Society - Encourage and support community efforts to create a Local Historical Society to promote the benefits of historic preservation and document and preserve local history and historical artifacts.	Council Supervisors Residents	ongoing
2	Public Outreach - Conduct a public outreach program, perhaps through a newsletter or web site, to provide educational materials on the Planning Area's history and historic resources.	Historical Society	3 years
3	Local Register - Develop a local historic register program aimed at identifying properties eligible for state and national recognition, and encourage and support efforts to list and preserve such properties on the National Register.		
4	Technical Assistance - Seek technical assistance from historic preservation organizations, such as the PHMC and Preservation Pennsylvania for inventorying and documenting resources and nominating resources for the National Register.		
5	Funding - Seek funding from organizations such as the National Park Service, National Trust for Historic Preservation, PHMC, and DCNR, and from programs such as the Federal Rehabilitation Tax Credit Program.		
6	Data Maintenance - Create a system for efficient storage, mapping, and retrieval of historic resource data and maintain a historic resources database.		
7	Design Guidelines - Prepare and adopt design guidelines for commercial, industrial, and institutional development to encourage the most efficient use of commercial land and development consistent with community character.	Planning Commissions Historical Society Business Committee	2 years
8	PA Avenue - Incorporate the preservation of locally significant historic structures into the revitalization program for Pennsylvania Avenue.	Historical Society Business Committee	3 years
9	Ordinances - Consider: <ul style="list-style-type: none"> Adopting a historic resource protection ordinance to <ul style="list-style-type: none"> Require demolition review. Prohibit demolition by neglect. Include provisions for use and adaptive re-use of historic resources. Provide incentives for rehabilitation of historic resources Allow home occupations in all zoning districts as a means of encouraging productive use of historic structures which tend to be larger and more difficult to maintain. Incorporate the preservation of historic resources in conservation design for residential and commercial development. 	Planning Commissions Council Supervisors	2 years ongoing 1 year

SUMMARY OF ACTIONS: HISTORIC PRESERVATION			
#	ACTION	RESPONSIBILITY	TIMING
10	NPS Certified Program - Consider participation in the Certified Local Government Historic Preservation Program of the National Park Service and the Pennsylvania Bureau of Historic Preservation.	Historical Society	3 years

CERTIFIED LOCAL GOVERNMENT HISTORIC PRESERVATION PROGRAM

The Certified Local Government Program is a preservation partnership between local, state and national governments focused on promoting historic preservation at the grass roots level. The program is jointly administered by the National Park Service (NPS) and the State Historic Preservation Offices (SHPOs) in each state, with each local community working through a certification process to become recognized as a Certified Local Government (CLG). CLGs then become an active partner in the Federal Historic Preservation Program and the opportunities it provides.

Why become a CLG? The key reason is the access certification provides to the expert technical advice of the State Offices as well as the NPS. Partnerships with the National Alliance of Preservation Commissions, Preserve America, the National Trust for Historic Preservation, and the National Main Street Center are also networks that CLGs have an opportunity to tap into. Of course, access to Federal funding is another benefit, making certified communities able to access the portion of Federal funds set aside by each SHPO for just CLGs annually. Being a CLG also shows your community's commitment to keeping what is significant from the past for future generations. As a certified town, city, or county seeking other opportunities, it becomes easy to demonstrate a readiness to take on a preservation project and be successful.

What is a CLG required to do?

A community must show both the state and NPS that they are committed to historic preservation. They can do this by addressing the following minimum goals.

- * Establish a Preservation Commission*
- * Establish an ordinance*
- * Maintain an active survey of local historic resources*
- * Participate in the National Register process*

(Source: www.nps.gov/history/hps/clg/)

PLANNING PROCESS AND INTERRELATIONSHIP AMONG PLAN ELEMENTS AND IMPLEMENTATION STRATEGIES

Framework for the Future

This *Matamoras/Westfall Comprehensive Plan* provides a framework for the growth and development of the Borough and Township. Although the *Plan* is comprised of a number of separate elements, each element, and, in fact, each planning and development action taken by a public body or private individual, is inextricably interrelated with other plan elements and planning and development actions. For example, the development of housing implementation strategies cannot be accomplished without taking into account land use controls and economic development trends. Economic development strategies cannot be formulated without considering land use controls and transportation needs. Community facilities and services planning requires an assessment of future development, transportation needs, and housing affordability. In most cases, these types of interrelationships and implementation strategies are discussed in the various comprehensive plan elements.

Planning Process

A theme consistent throughout all elements of this *Comprehensive Plan* is the concept of *process*. The published comprehensive plan document represents only the first step of what should evolve into an on-going planning process. If this *process* frame of mind is not firmly established, local officials, businessmen, land developers, and citizens, all players in the community growth and development arena, will have little chance of achieving the sustainable growth vital to the social, economic and environmental future of the Planning Area. This process will also allow the recognition of the shifting interrelationships of community growth and development decisions vital to the success of long-term planning efforts.

Conservation of Community Character

Another key theme of this *Plan* is the conservation of the Planning Area's rural recreation landscape and residential and small town character. All public and private actions must be assessed in terms of its effect on the community's character. For example, residential development standards in the normal pattern of large lots will fragment remaining open land. The alternative, conservation design or planned residential development, provides the opportunity to conserve open land. The conundrum of central sewage disposal provides another good example of planning interrelationships. This community facility is often the only means of correcting sewage disposal problems yet can stimulate development of more land at higher population densities. Increases in population would trigger the need for improved or new community facilities and services such as schools and police protection. In short, without careful analysis, one *implementation action* taken by a municipality can have unexpected and often undesirable effects.

To achieve growth and development goals and to establish the community's planning process for the future, this *Plan* makes the following overall recommendations:

- Evaluate all public and private actions with the goal of preserving open land as a viable part of community character.

- Direct development away from environmentally sensitive areas and conserve large blocks of open land.
- Identify areas for growth within and adjacent to existing developed areas.
- Require adequate community facilities for new development.
- Carefully consider any sewer extensions to assess effects on stimulating development.
- Plan for transportation improvements to minimize traffic congestion and maximize safety.
- Provide for sound housing and all types of housing.
- Provide for sufficient parks and recreational facilities.
- Promote historic preservation.
- Promote the idea of growth management - an effort to manage the location, type, and timing of future growth.
- Encourage increased local, intermunicipal, and regional cooperation for comprehensive planning and land use control implementation; and overall local municipal administration and management.
- Encourage a mix of business and commercial development in appropriate locations in the planning area.

Community Vision

This *Comprehensive Plan* outlines a vision for the future of the Borough and Township and recommends a course of action to achieve growth and development goals. However, the effective implementation of the *Plan* is necessary to make the planning program a success. Many of the resources, programs and techniques available for implementing the comprehensive plan are not within the direct control of local government. For example, although zoning and subdivision ordinances, the chief tools for land use control and land use plan implementation, are the purview of local governments, the funding, construction and maintenance of major roads and improvements have historically been the responsibility of the state and federal governments. Demand for housing in the Planning Area is generated in large part by external market forces, that is, residents of the larger region who choose to relocate to the Planning Area. The implementation of the *Plan* and the creation of an on-going planning process, must be a community-wide effort fostered by local municipal officials.

Community Involvement

It is obvious that the implementation of the *Comprehensive Plan* will require broad-based community involvement and coordination and cooperation among various federal, state, and local agencies. Plan implementation will require both a commitment of financial resources and human resources. The human resources can include both volunteer and paid staff and professional assistance. Many of the recommendations identified in the *Plan* could require increased staff support and demand for volunteer services.

Community Partnerships

Cooperation among community organizations will also be critical to the future success of the community. The dedicated work of community non-profit, service and similar organizations add considerably to the quality of life. Emergency service providers and the Borough Recreation Board are prime examples. All of these organizations should plan and work together to accomplish community goals and objectives.

Implementation Strategies

A variety of implementation strategies have been recommended in this *Plan* and are oriented to developing long-term policies for growth management, strengthening land use management programs, anticipating capital improvement needs and facilitating inter-governmental cooperation to accomplish local and regional goals. The key implementation strategies in this *Plan* include:

- Reviewing this *Plan* at least annually to evaluate new development and regional issues which warrant plan changes.
- Developing a short-term and long-term capital improvements program to prioritize needed improvements and allocate funds to those improvements; with annual progress evaluations and adjustments in capital project timing and capital equipment purchases.
- Continuing education for local officials via seminars and workshops.
- Diligent updating of land use management ordinances to effect the land use plan, provide environmental protection, preserve open land, maintain rural and historic character, and achieve community facilities and services and housing objectives.
- Focusing limited municipal resources on those community facilities and services which are most critical to meet resident needs.
- Monitoring community facilities and services provided by the county, state, and federal government to ensure such services are adequate and the Planning Area is obtaining its *fair share*.
- Participating in all county, state and federal entitlement and grant funding programs, not solely for the sake of participation, but only if such programs can be sensibly used to achieve valid community development objectives.
- Reviewing all subdivision and land development proposals and all zoning actions and changes for consistency with this Comprehensive Plan.

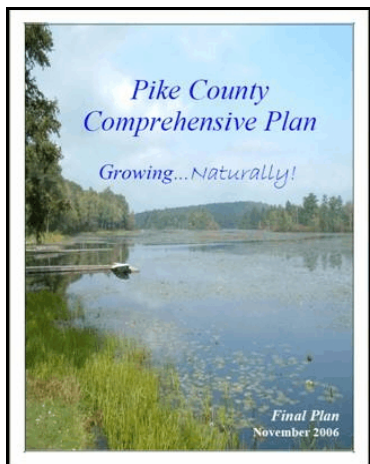
By focusing the available resources on implementation of the this *Plan*, and the continuance of the *planning process* with an eye to preserving open land and rural small town character, the Borough and Township can achieve sustainable growth and development into the future and maintain the quality of life in the community.

PLANNING AND DEVELOPMENT IN PIKE COUNTY, CONTIGUOUS MUNICIPALITIES, AND THE REGION

Planning Code

The Pennsylvania Municipalities Planning Code (MPC) dictates, and common sense suggests, that planning and development in contiguous municipalities, the county and the region be considered when a local municipal plan is adopted. MPC §301.4(a) goes on to state that *municipal comprehensive plans which are adopted shall be generally consistent with the adopted county comprehensive plan.*

County Planning



In 1988 the Pennsylvania Municipalities Planning Code (MPC) was amended to require all counties in the Commonwealth to prepare and adopt a comprehensive plan within three years. Pike County adopted its first comprehensive plan in 1993 which identified a broad range of growth and development issues facing the County, suggested a framework to address the issues, called for ongoing planning, and recognized the importance of intermunicipal cooperation. The same, but much intensified, issues continue to face the County, and the Board of Commissioners and the County Planning Office of Community Planning initiated the preparation of a *Comprehensive Plan Update* in 2003 and the *Update* was adopted in November of 2006.

Given that the *County Plan Update* sets goals which are similar to those of this *Matamoras Borough / Westfall Township Comprehensive Plan* and will provide a broad framework for the future, no inconsistencies between the two plans are anticipated. In addition, local municipalities are responsible for many of the actions proposed by the *County Plan*, particularly those related to land use management and community facilities and services.

County Plan Mission

The Introduction of the County Plan notes:

The primary purpose of this update to the Pike County Comprehensive Plan is to set Countywide planning goals and priorities, develop partnerships, and enhance the quality of life for the residents of the County. The plan's mission is to:

- *Manage growth and development pressures;*
- *Stimulate progressive planning and visionary thinking;*
- *Improve County-Municipal partnerships/ cooperation;*
- *Identify infrastructure needs;*
- *Preserve sensitive lands/open space;*
- *Enhance local land use controls;*
- *Increase housing options;*
- *Enhance economic development;*
- *Enhance tourism opportunities;*
- *Improve on our quality of life .*

The goals and objectives and proposed actions of this *Matamoras / Westfall Comprehensive Plan* are consistent with, and largely mirror, the County Plan mission. In the case of tourism and economic development, Borough and Township goals and objectives recognize the need for county leadership.

The County Plan Update goes on to state:

In the end, the success in managing growth, improving the quality of development, protecting the natural resources of Pike County, and creating partnerships to achieve the vision for the County depends upon active participation of municipal officials; state and federal government agencies; municipal commissions, boards and committees; community associations; and most importantly, the citizens of Pike County. Ultimately, this plan is about the citizens of Pike County, intended to protect the quality of their environment and enhance the quality of their lives.

Municipal Guideline

This (Pike County) Comprehensive Plan is not an ordinance or regulation, but is a guideline for municipal plans and regulations and the basis for undertaking specific County functional plans designed to implement the policies set forth within this Plan. Each municipality retains the right to prepare multi-municipal or individual municipal plans; to control zoning within its boundaries, whether through individual zoning ordinances or a joint zoning ordinance; and to regulate subdivision and land development, and retain their autonomy. The County will be available as a resource that municipalities can utilize to assist in their planning efforts.

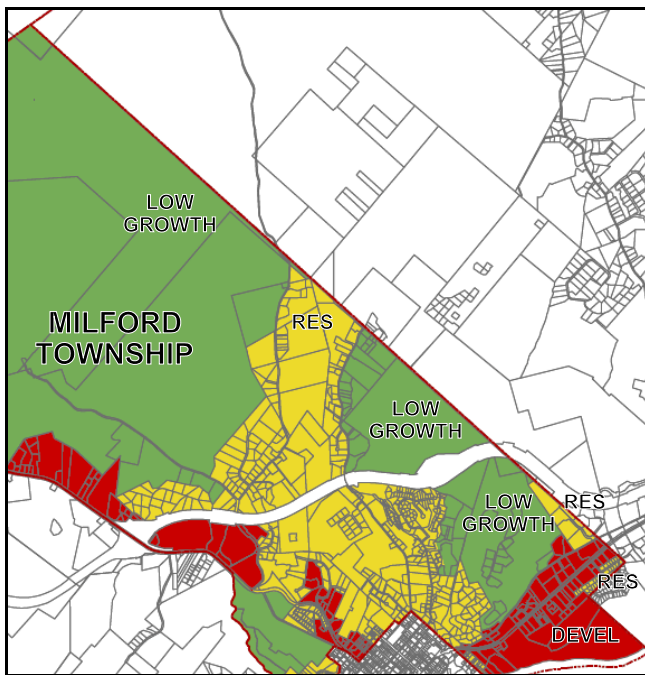
This Comprehensive Plan is not a means to stopping development but rather to ensure that development considers the County's resources and occurs in designated growth areas where it will not adversely impact the County's character and quality of life. Economic development is important to the County, but it should occur with better design, better mix of uses, and more attention to addressing traffic and environmental impacts.

Municipal Bottom Line

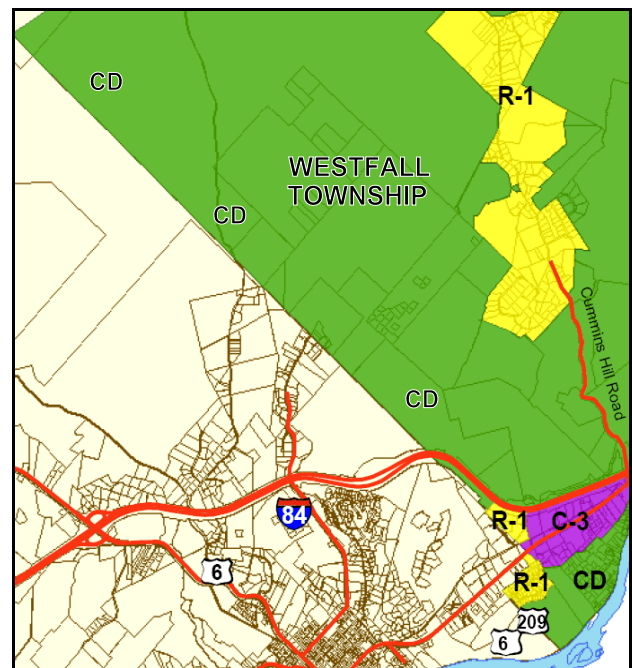
What does the Plan mean for the 11 Townships and 2 Boroughs in the County and why is it relevant to them? The Plan presents policies and actions that will guide how County government will work with the municipalities in the future to address growth issues. The Plan recognizes the important role the municipalities play in land use decisions and implementation of their individual municipal Comprehensive Plans. It indicates how the County intends to provide technical assistance to municipalities. In addition to identifying sources of funding, it supports and sets priorities for future planning efforts and grant applications which will benefit the municipalities.

**Planning and Zoning
in Contiguous
Municipalities**

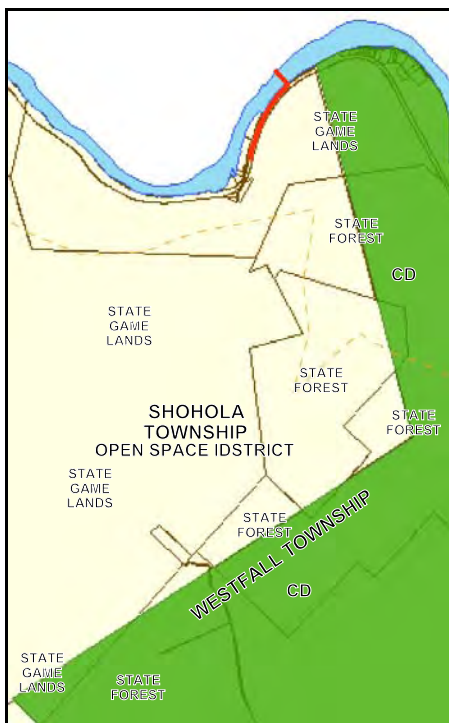
Two municipalities in Pike County adjoin the Matamoras / Westfall Planning Area, both contiguous to Westfall Township: Milford Township and Shohola Township. Milford Township adopted a comprehensive plan with Milford Borough in November 2006 and Lackawaxen Township and Shohola Township adopted a joint comprehensive plan in the fall of 2009. Although the 2006 Milford/Milford Plan and the pending Lackawaxen/Shohola Plan vary to a degree in content, each concentrates on similar issues related to quality of life and conservation issues and no significant inconsistencies are anticipated between those municipal planning programs and ongoing planning in Matamoras Borough and Westfall Township. The public review and adoption process for this *Comprehensive Plan* enabled municipal officials of the contiguous municipalities review and comment on the *Plan* and no potential inconsistencies were identified.



Milford Township Zoning Districts



Westfall Township Zoning Districts

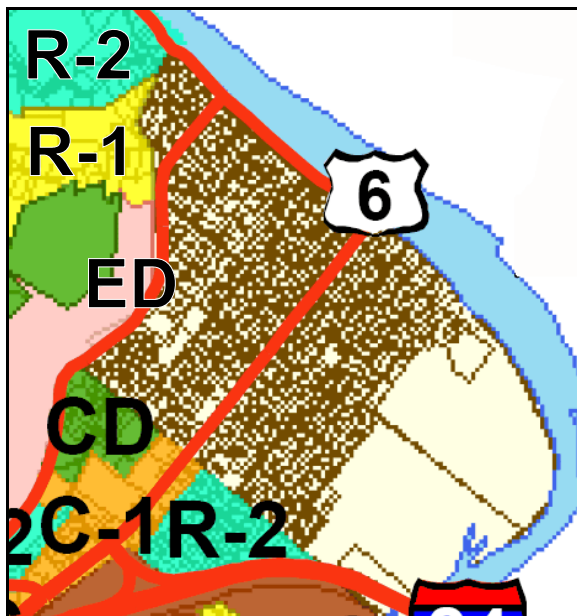


Shohola - Westfall Zoning Districts

The real issue in terms of effects on adjoining municipalities is zoning and the potential for land use conflicts is minimal.

- Milford Township and Shohola Township have each adopted a zoning ordinance.
- With the exception of the narrow strip between the Delaware River and the railroad in Pond Eddy, the entire border between Westfall Township and Shohola Township is either State Game Land or State Forest Land where development is restricted.
- In the area along the common border, Milford Township and Westfall Township are generally similar in character, that is, residential largely adjoins residential, commercial adjoins commercial, and open land adjoins open land.
- Milford Township zoning districts along the Westfall Township border include Residential, Development and Low Growth, and the Westfall districts include CD Conservation, R-1 Low Density Residential, and C-3 Mixed Commercial/Industrial.
- Based on the zoning district locations and uses permitted in the districts, the area along the Delaware River where the Milford Township Development District adjoins the Westfall Township Conservation District appears to be the area of most potential conflict. However, Pike County is in the process of acquiring the parcel for a park.

- While the potential for conflicting land uses does exist, this is the case where any two dissimilar districts adjoin, and zoning ordinance performance standards are expected to provide protection for adjoining uses.

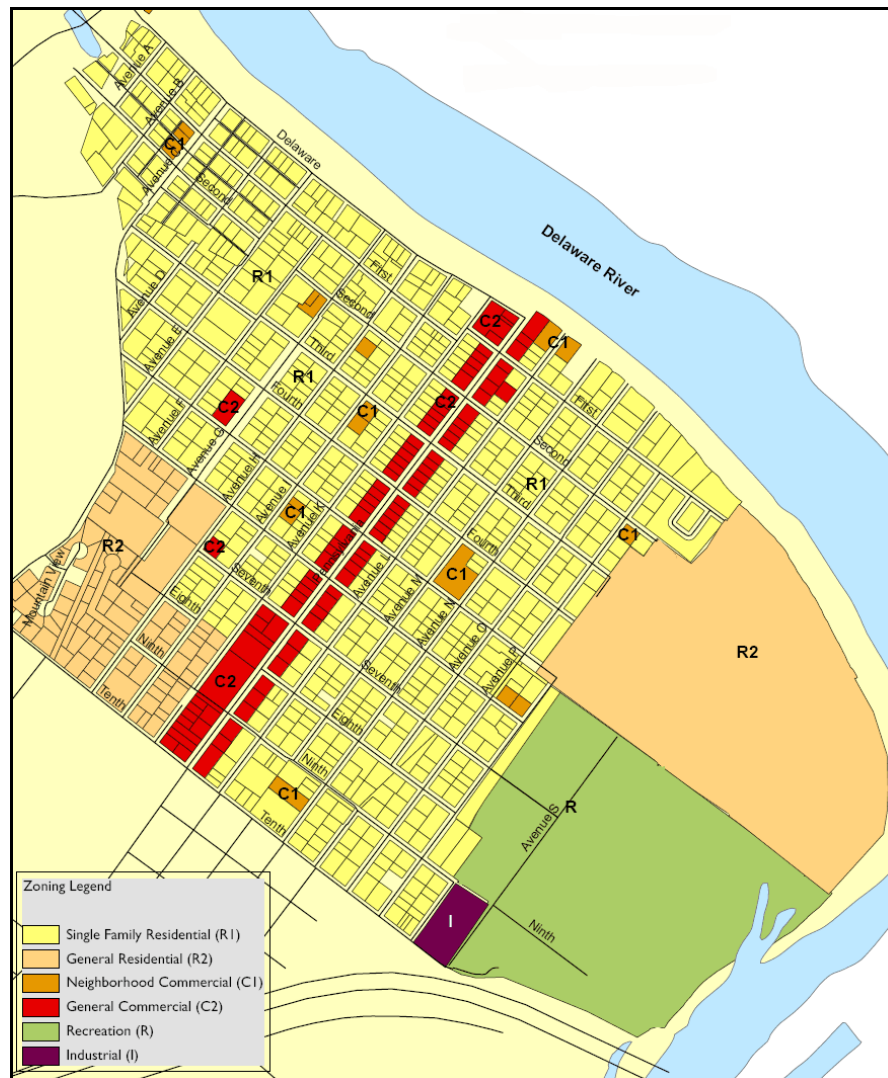


Westfall Zoning Districts

Matamoras - Westfall Border

The potential for land use conflicts along the border between Matamoras Borough and Westfall Township is also low. Based on this joint Comprehensive Plan, the Borough and Township can work together on zoning to allocate land uses in the Planning Area as a means to further minimize conflicts

- Residential districts adjoin residential districts.
- The Westfall C-1 Neighborhood Commercial District aligns with the Matamoras C-2 General Commercial District.
- The escarpment along Avenue C provides a buffer between the Borough and potential development in the Westfall Township ED Enterprise Zone District where a relatively wide range of residential and commercial uses are allowed.



Matamoras Zoning Districts

- The Matamoras I Industrial District adjoins a Westfall R-2 General Residential District but the land is owned by the Borough.
- The Westfall Township CD Conservation District adjoins a R-2 General Residential District in Matamoras but the CD District is largely developed with residences.

NJ and NY

The Matamoras - Westfall Planning Area is bordered by municipalities in New Jersey and New York. While the Delaware River provides a significant buffer in terms of direct landowner-to-landowner conflicts, planning in nearby communities can have an impact in terms of traffic, housing demand, tourism and economic development. All of the adjoining communities have adopted relatively recent comprehensive plans and supporting land use management ordinances. Clearly, the Borough and Township have no control over land use decisions in adjoining communities, but must continue to monitor any land use changes which may have a regional impact.

Existing plans in nearby communities of New Jersey and New York include:

- Town of Deerpark - 2003 Comprehensive Plan
- Town of Lumberland - 2003 Comprehensive Plan
- Township of Montague - 2004 Comprehensive Plan
- City of Port Jervis - 2003 Strategic Plan; Waterfront Revitalization Plan in progress

Contiguous Municipality Review

The Municipalities Planning Code (MPC) §502.1(b) provides standing for local municipal governing bodies to appear before and provide comments to any contiguous municipality considering a proposed subdivision, change of land use, or land development, thereby allowing issues of conflicts to be raised. Any changes made to zoning districts must be considered in terms of the zoning and existing land uses in any adjoining municipality to avoid such land use conflicts. For example, it would be inappropriate to designate an industrial or heavy commercial area adjacent to an existing residential development or residential zoning district in an adjoining municipality.

Borough and Township officials should work with the officials of adjoining municipalities to establish agreements to formalize this process among contiguous municipalities so that any municipality potentially affected by a zoning change or a development project has the opportunity for review. The MPC already requires this for comprehensive plans and plan amendments. This could also be extended to those communities across the Delaware in New Jersey and New York. The Upper Delaware Council serves to facilitate this process among the Upper Delaware communities as discussed in detail in the *Natural Resources Protection Plan*.

Regional Planning

Regional planning in the Pike County area of Pennsylvania is not formalized in any municipally organized body. Each county planning agency is responsible for review and coordination of planning within its jurisdiction. The Northeastern Pennsylvania Alliance, located in Pittston, Luzerne County, serves as a community and economic planning and development information source and funnel for grants and special projects for Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill and Lackawanna Counties, but has no municipally authorized regional planning power.

LAND USE PLAN

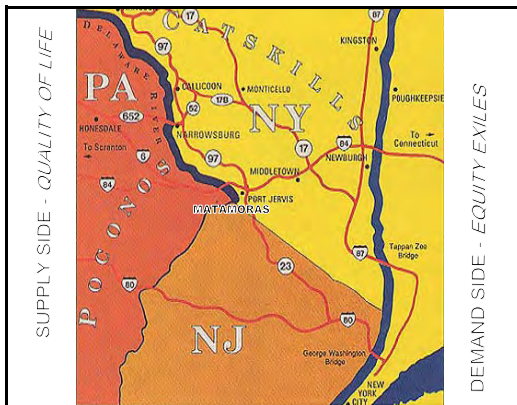
INTRODUCTION

Growth and Development

A community's growth and development is affected by a broad range of interrelating factors including such things as regional location, the transportation system, natural resources, land suitability for agriculture and development, available community facilities such as sewage disposal, condition of the general economy, local land values and real estate taxes. A change in one factor will in all likelihood result in a change in another factor, and the overall character of the community. In short, how a community's character has developed and how it will change into the future, are the result of a complex interaction of sometimes opposing forces ranging from no growth, exclusionary land use controls to unbridled commercial and residential development. Land use patterns in a community are the result of this complex interaction played out over the community's history.

Importance of Regional Location

The environmental quality and scenic beauty of Westfall Township and the small town charm of Matamoras Borough are key factors affecting growth and development. This, coupled with the proximity to the New York and New Jersey metropolitan area, have resulted in the growth and change in the Planning Area and all of Pike County. In any case, it is clear that if this trend continues the two municipalities could, quite literally, become suburbs of the nearby urban areas and employment centers.



The challenge in developing a land use plan for the two municipalities is to strike a balance for sustainable development. That is, to provide for the essential economic growth and development of the area as a whole, while concurrently conserving its scenic and natural environment, particularly open land and natural resources, and its small town character. Without continued careful planning and control of growth, the landscape and community character of the two municipalities will be forever altered by haphazard development. Such development results from uncoordinated individual decisions made by separate property owners.

This *Comprehensive Plan* will serve to guide this set of independent decisions in a direction aimed at coordinated growth and development.

Need for Area Wide Planning

The future land use, environmental quality and character of the Borough and Township will evolve in response to the actions of community leaders and active citizens combined with the forces of the local and regional economy, and the demand for land and community facilities and services. The area's growth and development will be tempered by the land's physical limitations (e.g., steep slopes, poor soils, and wetlands) and must be guided by the application of traditional and innovative land use controls, open land preservation techniques and environmental regulations as part of the planning and development process.

Many of these issues extend beyond municipal boundaries and can best be addressed through the cooperation of the municipalities in the planning area and region. The idea is that the Borough and Township can avoid the impact of uncoordinated land use control decisions made independently and by other agencies involved in the growth and development management process. The Pennsylvania Municipalities Planning Code provides specific authorization for cooperative municipal planning and goes on to authorize cooperative municipal zoning via intermunicipal agreements. This enables communities to locate particular land uses in the most appropriate locations in the area rather than providing for every type of use in each participating municipality.

LAND USE GOAL AND OBJECTIVES

Land Use Goal:

Develop a Borough - Township coordinated land use plan that integrates all aspects of growth and development including residential, commercial, industrial and open space.

Land use management is a complex process that depends on the interrelationship of a number of factors including the historic development pattern, regional location, demographics, the regional economy, the transportation network, and soils and land capability. Most of these factors are beyond the control of local municipalities. However, this *Matamoras - Westfall Comprehensive Plan* gives the Borough and Township the opportunity to work together, while maintaining local autonomy, to direct the growth and development of the community using innovative land use management ordinances, careful programming of public facilities, and active participation of residents.

Rampant land conversion is a first consequence of the way Pennsylvania is growing. Quite literally, development-as-usual is consuming the Commonwealth's traditional rural landscape of farmland, forests, wetlands, and open spaces. Overall, Pennsylvania developed some 1.14 million acres, or 1,800 square miles, of fields, open space, and natural land between 1982 and 1997 – the sixth-largest such conversion after Texas, Florida, Georgia, North Carolina, and California.

This also means that fully one-third of all the land that the Commonwealth has ever urbanized since its founding was developed in just 15 recent years. Put another way, over those 15 years the state consumed land at a rate equivalent to 209 acres a day, or 9 acres an hour, every hour.

Source: *Back To Prosperity, A Competitive Agenda for Renewing Pennsylvania*, p. 47.

Objectives:

Incompatible Uses



Provide adequate separation between incompatible land uses.

- District Location - Evaluate the location of zoning districts relative to one another.
- Residential - Eliminate incompatible uses in residential districts.
- Commercial - Limit permitted uses within commercial zoning districts to retail, office, and service uses.
- Industrial - Create an industrial district for manufacturing, warehousing, and similar high impact uses.
- Setback/Buffers - Provide adequate setbacks and buffers.

- Landscaping - Provide landscaping along road frontages in commercial and industrial areas
- Cooperative Zoning - Use cooperative zoning as a means of recognizing the regional nature of development patterns and for locating commercial and industrial uses proximate to such existing uses and where community facilities are adequate.

Residential

Encourage the development of livable communities and preserve existing neighborhoods.



- Open Space Access - Create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity.
- Diversity - Provide for a diversity of lot sizes, building densities, and housing choices to accommodate a variety of age and income groups and residential preferences, so that the community's population diversity may be maintained.
- Landowner Development Options - Provide multiple development options for landowners in order to minimize impacts on environmental resources (sensitive lands such as stream corridors, wetlands, flood plain, and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings, and fieldstone walls)..
- Design - Provide greater design flexibility and efficiency in the siting of services and infrastructure, including the opportunity to reduce length of roads, utility runs, and the amount of paving required for residential development.
- Residential - Eliminate incompatible uses in residential districts.

Commercial

Expand the Planning Area's existing economic base by exploring economic development opportunities consistent with and building on community character in order to strengthen the existing general and tourist economy, create employment opportunities and generate tax revenue.



- Location - Welcome new commercial and industrial development to areas of existing similar development and where community facilities are adequate so that the development is compatible with existing land use and community character.
- Home Occupations - Encourage local economic viability by allowing home occupations consistent with residential districts.
- Economic Development - Recognize the importance of the regional economy and cooperate with local business development organizations to promote commercial development which builds on community assets and which will not compromise the quality of life.



- Regional Image - Create a distinctive image of the region by developing common welcoming signage themes and promoting local activities collectively.
- Government Efficiency - Continue to maintain an efficient government and keep taxes low as an incentive for economic development.
- Scale of Development - Limit the type and intensity of new land uses in the Borough to be consistent with existing development via cooperative zoning with the Township.
- Community Partnership - Work with existing businesses and property owners to ensure the continued viability of the Borough's existing commercial area.
- Existing Business - Support the continued development and possible expansion of existing businesses providing local employment and contributing to the tax base.

EXISTING CONDITIONS

Land Use Overview

The Matamoras - Westfall Planning Area includes some 19,400 acres of land area, or 30.3 square miles based on 640 acres per square mile - - 0.7 square miles for the Borough and 29.6 for the Township. This represents 5.5% of Pike County's 547-square mile area. The thirteen local municipalities in Pike County range in size from the one-half square mile of Milford Borough to the 79 square miles of Lackawaxen Township.

Land Use Trends

Land use in Matamoras Borough has not changed significantly over the past 20 years except for the construction of new homes and changes in businesses in existing commercial buildings or redevelopment of commercial lots. Matamoras is a mature community in terms of land use with very little land available for new development.

The 1997 Westfall Comprehensive Plan reported land use; however, direct comparison to current information is somewhat difficult due to differing mapping methods and categorization. Nevertheless, the 1997 Plan notes that *in the early 1980's, residential uses accounted for approximately 700 acres or 3.5% of the Township's land area., and commercial uses accounted for 150 acres or .07%.* By 2008, residential land had increased to 1,400 acres and commercial land to 390 acres, documenting the dramatic increase over the last 20 years.

Absent any land use trend data, the visible increases in traffic on Pennsylvania Avenue and Route 6/209 and the continuing residential and commercial development in the Township clearly documents the growth and change occurring in the Planning Area.

Land Use	Matamoras Borough		Westfall Township	
	Acres	% of Total	Acres	% of Total
Residential - Single-Family	165.25	37.95%	1321.06	6.97%
Residential - Multi-Family/Townhome	9.42	2.16%	82.07	0.43%
Commercial	14.58	3.35%	390.91	2.06%
Institutional	7.00	1.61%	141.03	0.74%
Forestland/Agriculture	77.68	17.84%	8024.96	42.32%
Recreation (Federal/State/Local/ Community Assoc.)	63.65	14.62%	5817.86	30.68%
Club (Rod & Gun Clubs)	0	0.00%	1828.91	9.64%
Conservation Easement	0	0.00%	662.62	3.49%
Utility/Railroad	0	0.00%	191.53	1.01%
Roadway	97.93	22.49%	503.74	2.66%
Total	435.49	100.00%	18964.69	100.00%

Existing Land Use - 2008 (Source: Consultant/Planning Committee Analysis)

Existing Land Use

The Existing Land Use Map shows individual tax parcels coded according to the current use of the property and the totals are included in the Existing Land Use - 2008 Table. The data was compiled from County tax assessment records, recent aerial photographs and Planning Committee review.

The Delaware River, the bluff line overlooking the River Valley, and the thousands of acres of public and private forest land in the Township are key features of the Planning Area landscape. Historically, development was concentrated in Matamoras, and as noted earlier, relatively little open land available for development remains in the Borough. In more recent decades, land development has shifted to the Township.

Residential Land

Residential is the principal type of development in the Planning Area.



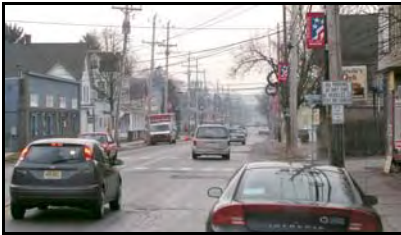
- Single-family dwellings and associated lots occupy about 38% of the Borough and multi-family dwellings add another 2% for a total of 40%.
- At 7.5%, the proportion of residential land in the Township is much lower, but the actual land area is 8 times higher at 1,400 acres.
- Dwellings are spread throughout the Borough except on the Airport Park and a vacant 63-acre parcel adjoining the Park.
- The Bell Manor and Delaware Drive/Avenue C sections are the most densely developed sections of the Township, and from a community perspective, blend into the Borough.
- Many of the homes in the Township are found in planned subdivisions. Although some of the lots remain undeveloped in these residential subdivisions, future subdivisions should be expected, either in the form of planned developments or lot-by-lot subdivision from larger parcels.



- Occupying only some 90 acres, multi-family dwellings represent only a small proportion of residential land use in the Planning Area.
- The roadways in the Borough, which largely serve residences, account for more than one-fifth of the total land area.

Commercial

Commercial activities in the Planning Area occupy almost 305 acres; 3.4% or almost 15 acres in the Borough and 2.1% or 391 acres in the Township.



- Businesses in the Borough are located primarily along Pennsylvania Avenue from the Delaware River Bridge west to the Westfall Township line and are comprised of small retail and service establishments and restaurants.

- Several other businesses are operated off of the Avenue and include among others a self storage facility, a greenhouse, and an auto repair garage.



- The retail service establishments along Pennsylvania Avenue continue into Westfall Township to the I-84 Interchange.

- West of I-84, the Route 6/209 corridor has emerged as a regional retail center with big box and other retailers, national chain restaurants and a large hotel.



- Three canoe liveries are located in Westfall Township along Delaware Drive.

- The Pike County Environmental, Inc., sewage treatment facility on 20 acres along Delaware Drive in Westfall Township is the only real industry in the Planning Area.

- The Norfolk Southern Railroad running along the Delaware River north of Mill Rift accounts for most of the utility/railroad land in the Planning Area.

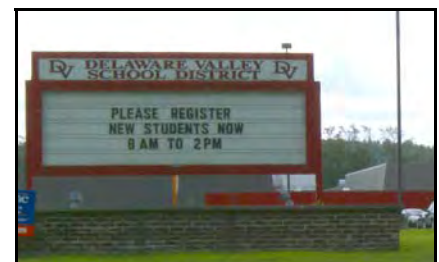
Institutional

Land in the Planning Area used for public and semi-public facilities and services is included in the *institutional* classification and includes such uses as the Borough and Township buildings, fire companies, Delaware Valley Schools, and the PennDOT Visitors Center.



- Institutional uses in the Borough occupy 7 acres and 141 acres in the Township.

- The largest institutional parcel in the Planning Area is the Delaware Valley School complex which totals 105 acres.



Open Land

Although the Borough and adjoining parts of the Township are densely developed, open land remains the predominate feature of the Planning Area landscape.

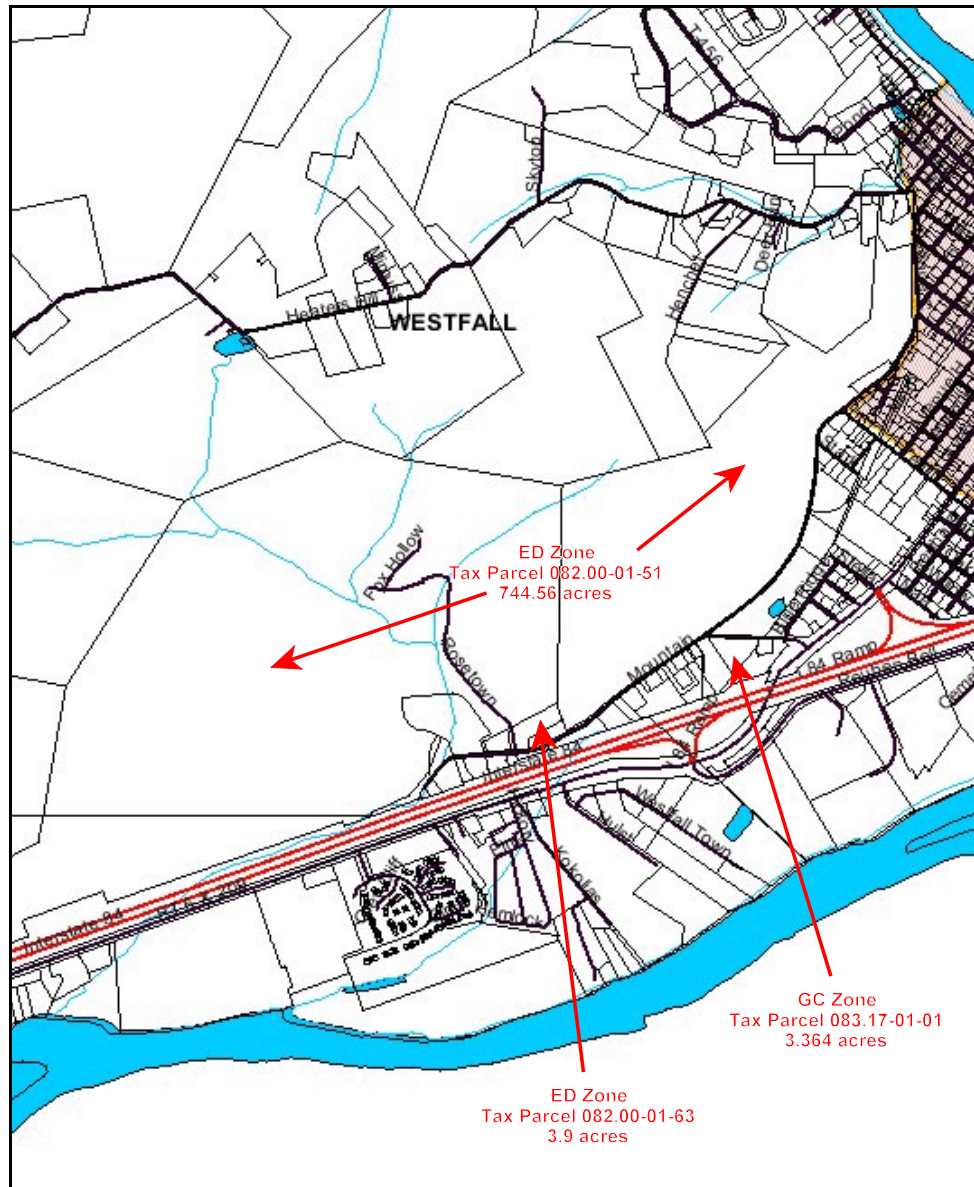


- More than 16,400 of the total 19,400 acres, or 85% of the land in the Planning Area are undeveloped, with the bulk of that being forested.
- Most of the 77 acres of undeveloped land in the Borough is a 63-acre parcel adjoining Airport Park.
- Virtually all of the forest land is held in large parcels and lies above the Allegheny Front, the bluff which dominates the River Valley.
- Most of the forest land is in private ownership, but the Pennsylvania Bureau of Forestry owns 4,246 acres as part of the Delaware State Forest, the Pennsylvania Game Commission owns 165 as part of State Game Lands No. 209, and the National Park Service owns 308 acres as part of the Delaware Water Gap National Recreation Area, totaling 4,719 acres or 24.25% of the total area of Westfall Township. (See *State and Federal Land Ownership County Table*.)
- The state and federal land is included in the recreation category along with the 64-acre Airport Park.

State and Federal Land Ownership (Pike County Office of Community Planning, 2009)	Total Acres	Delaware State Forest	State Game Lands	National Park Service	Total Federal and State Lands	% Federal and State Lands
Blooming Grove	48,192	13,553	7,924	0	21,477	44.57%
Delaware	28,288	2,169	0	7,601	9,770	34.54%
Dingman	37,248	5,489	2,453	3,800	11,741	31.52%
Greene	38,528	5,704	0	0	5,704	14.80%
Lackawaxen	50,304	2,759	5,072	0	7,831	15.57%
Lehman	31,296	3,865	0	7,819	11,684	37.33%
Matamoras	448	0	0	0	0	0.00%
Milford Borough	320	0	0	26	26	8.13%
Milford Township	8,000	858	0	209	1,067	13.34%
Palmyra	22,016	5,073	2,170	0	7,243	32.90%
Porter	37,504	22,899	0	0	22,899	61.06%
Shohola	28,608	1,164	7,643	0	8,807	30.78%
Westfall	19,456	4,246	165	308	4,719	24.25%
Totals	350,208	67,778	25,427	19,763	112,968	32.26%

Katz Settlement Agreement

In 2005 the Westfall Township Board of Supervisors adopted Ordinance 123 which created the ED - Enterprise Zone and the GC - General Commercial Zone applicable to three specific parcels located off of Mountain Avenue. The largest parcel, 745 acres, lies atop the bluff overlooking the Borough and is undeveloped forest land. (See the *Katz Parcels Figure*.)



Katz Parcels (Source: pikegis.org)

The intent of the following sections is to comply with the final settlement of the Westfall Township vs. Katz litigation which culminated in the Court Order dated August 25, 2009 which was issued by the United States Magistrate Judge Thomas Blewitt. The Order obligates the Township to incorporate the specific terms of the Order into both the Westfall Township Comprehensive Plan and the Comprehensive Plan of Pike County. The relevant language of the Order is as follows:

The Township's Comprehensive Plan as an individual entity and/or jointly with

the Matamoras Borough or any other entity shall fully incorporate all terms, rights, benefits and entitlements afforded the Katzes, KATZES, Katz and the Katz Properties contained under the ESA/SAR, Township Ordinance 123 as adopted by the Township BOS on April 27, 2005, the August 2005 Order and this Order. The Township shall ensure that the Comprehensive Plan of Pike County shall also fully incorporate all terms, rights, benefits and entitlements afforded the Katzes, KATZES, Katz and the Katz Properties contained under the ESA/SAR, Township Ordinance 123 as adopted by the Township BOS on April 27, 2005, the August 2005 Order, as modified by this Order, and this Order.

- By virtue of an Equitable Settlement Agreement entered into by the Township in the matters of Katz v. Westfall Township, et. al., No. 0 1 -CV-00 16 and No. 00-CV-3 83, United States District Court for the Middle District of Pennsylvania, the Township became obligated to create new zoning districts for the three properties of David H. Katz and Barbara D. Katz.
- The Agreement required the creation of a new Enterprise Zone Tax Parcel No. 082.00-01-51 and No. 082.00-01-63 and a new General Commercial Zone for Tax Parcel No. 083.17-01-01.
- The Agreement provided for the terms and conditions and standards which would regulate any land development, subdivision and land use in lieu of the Township zoning ordinance and subdivision and land development ordinance.

Ordinance 123 (2005) specifies that:

- *The ED zone (and GC zone) real property as well as any land development, subdivision and zoning issues pertaining thereto shall be exclusively governed by the terms and conditions of the Equitable Settlement Agreement and the Settlement Agreement/Release.*
- *All applications for zoning, land development and/or subdivision approval pertaining to the ED zone shall be considered and determined exclusively by the Court appointed master and any successors as approved by the United States District Court for the Middle District of Pennsylvania in accordance with the terms and conditions of the Equitable Settlement Agreement and the Settlement Agreement/Release.*
- *Any part of the Westfall Township Zoning Ordinance or Subdivision and Land Development Ordinance which conflicts with this Ordinance is hereby repealed in so far as the same is inconsistent with this Ordinance.*
- *The terms and conditions of the Equitable Settlement Agreement and the Settlement Agreement/Release shall solely apply to the real properties within the ED and GC zoning districts and any conflict or inconsistency between the terms of this Ordinance and the terms of the Equitable Settlement Agreement and Settlement Agreement/Release shall be resolved in favor of the Equitable Settlement Agreement and the Settlement Agreement/Release.*

- *In all other respects, the remaining terms and conditions of the Westfall Township Zoning Ordinance and Subdivision and Land Development Ordinance are hereby reaffirmed and ratified as to all other properties within Westfall Township except that the same do not apply to the newly created ED and GC zoning districts.*

Katz - Applicability of Comprehensive Plan and Ordinances

This Comprehensive Plan, any amendment to the Zoning Ordinance, and any amendment to the Subdivision and Land Development Ordinance cannot be applied to the Katz properties in conflict with Ordinance 123. The *Settlement Agreement/Release*, which was adopted by the Township via Ordinance 123, includes specific standards applicable to the ED and GC Zones based on the 1985 Zoning Ordinance and the 1985 Subdivision and Land Development Ordinance as modified by the *Agreement/Release*.

Katz - ED Zone

The ED Zone applies to parcel No. 082.00-01-51 (744.56 acres) and No. 082.00-01-63 (3.9 acres).

- The ED Zone includes as principal permitted uses (among others):
 - A wide range of residential dwelling types including single-family, duplexes/two-family, townhouses, flats/apartments and senior citizen dwellings.
 - Cluster development.
 - Retirement homes, assisted living homes and nursing homes, and health care facilities.
 - Public and private schools and day care centers, and municipal buildings.
 - Parks, playgrounds, campgrounds and other recreation facilities.
 - Resorts, hotels, motels, restaurants and other tourist facilities.
 - Offices, retail stores and flea markets.
 - Places of worship, firehouses and libraries.
 - Excavating, mining and quarrying operations, and forestry.
- The maximum permitted number of residential dwellings is set at 1,500 based on various densities for specific dwelling types.
- Setbacks, open space, circulation, parking, roads and water and sewer are also addressed.

Katz - GC Zone

The GC Zone applies to the No. 083.17-01-01 parcel.

- The GC Zone includes as principal permitted uses (among others):
 - Townhouse/duplex combinations, flats/apartments and senior citizen dwellings.

- Retirement homes, assisted living homes and nursing homes, and health care facilities.
- Public and private schools and day care centers, and municipal buildings.
- Parks, playgrounds, campgrounds and other recreation facilities.
- Hotels, motels, restaurants and other tourist facilities.
- Offices, retail stores and flea markets.
- Places of worship, firehouses and libraries.
- Excavating, mining and quarrying operations, and forestry.
- The maximum permitted number of residential dwellings is set at 40 specified as flats/apartments and/or senior citizen dwellings.
- Hotel/motel uses are limited to 240 units on 1.75 acres along with a 250-seat restaurant on the balance of the property.

Katz - Sewer and Water

A 2005 Order of Court issued by the U.S. District Court for the Middle District of Pennsylvania addressed the provision of sewer and water service to the Katz properties. The Order, among numerous other provisions, includes:

- *The Township shall provide 1,571 EDUs (equivalent dwelling units) of sewage treatment capacity and shall construct the main sewer line to the property line of the Westfall Commercial Property and to the entrance to Rosetown at Rosetown Trail to accommodate the Katz Uses and the Katz Properties.*
- *The Township shall provide 1,571 EDUs of water capacity to the Katz Properties and shall construct the water line to the property line of the Westfall Commercial Property and to the entrance to Rosetown at Rosetown Trail to accommodate the Katz Uses and the Katz Properties. The Township shall enter into one or more contracts with Utilities, all with Katz as third party beneficiary, to provide the water capacity and lines.*
- Details about the timing of the provision of service.
- Requirements to update the Township Act 537 Plan and the Township Comprehensive Plan.
- A prohibition on Township participation in altering the use or capacity of Mountain Avenue.

Land Use	Matamoras Borough		Westfall Township	
	Acres	% of Total	Acres	% of Total
Residential - Single-Family	211.16	48.49%	6791.06	35.81%
Residential - Multi-Family/Townhome	9.42	2.16%	82.07	0.43%
Commercial	16.05	3.69%	442.75	2.33%
Institutional	7.00	1.61%	141.03	0.74%
Forestland/Agriculture	30.30	6.96%	2503.12	13.20%
Recreation (Federal/State/Local/ Community Assoc.)	63.65	14.62%	5817.86	30.68%
Club (Rod & Gun Clubs)	0	0.00%	1828.91	9.64%
Conservation Easement	0	0.00%	662.62	3.49%
Utility/Railroad	0	0.00%	191.53	1.01%
Roadway	97.93	22.49%	503.74	2.66%
Total	435.49	100.00%	18964.69	100.00%

Existing Zoning Potential Build-Out

BUILD-OUT ANALYSIS

Overview

A build-out analysis was conducted to examine the effect of land use policies and implementation strategies. It compares the potential build-out of the Planning Area based on current land use policies and zoning regulations with the build-out scenario that could result from updated policies and regulations that promote conservation design development and preservation of open space.

Matamoras Borough

The minimum residential lot size requirements in the Borough, coupled with the relatively few large parcels available for subdivision, limit the potential effectiveness of conservation design development. A minimum of 5,000 square feet is required for new subdivisions in the R-2 District which essentially encompasses the area available for new development. Based on this, the *Potential Build-Out Tables* show no net benefit with conservation design for Matamoras.

Westfall Township

The Westfall Township Zoning Ordinance currently provides for open space development which permits the reduction of individual lot sizes with setting aside open space. The overall number of dwelling units cannot exceed the underlying density based on the minimum lot size requirement. The standards

Land Use	Matamoras Borough		Westfall Township	
	Acres	% of Total	Acres	% of Total
Residential - Single-Family	211.16	48.49%	5073.06	26.75%
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Commercial	16.05	3.69%	442.75	2.33%
Institutional	7.00	1.61%	141.03	0.74%
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Roadway	97.93	22.49%	503.74	2.66%
Total	435.49	100.00%	18964.69	100.00%

Conservation Zoning Potential Build-Out

are considered density neutral because the Ordinance provides no incentives such as a density bonus for open space (conservation design) development.

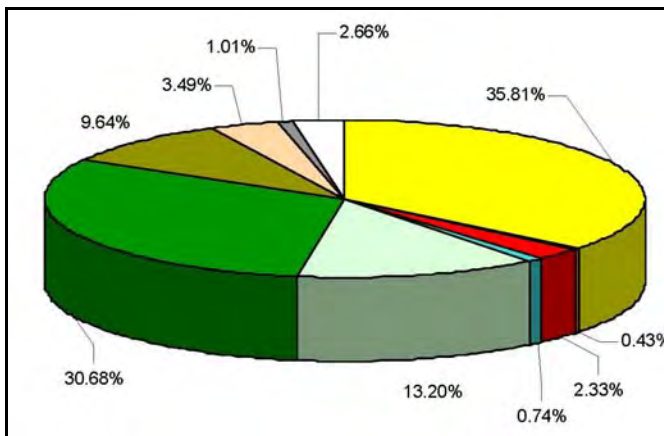
Conventional v. Conservation

The number of single-family homes developed in the Township under the conventional subdivision approach permitted by the Zoning Ordinance would result in the following land use conversions:

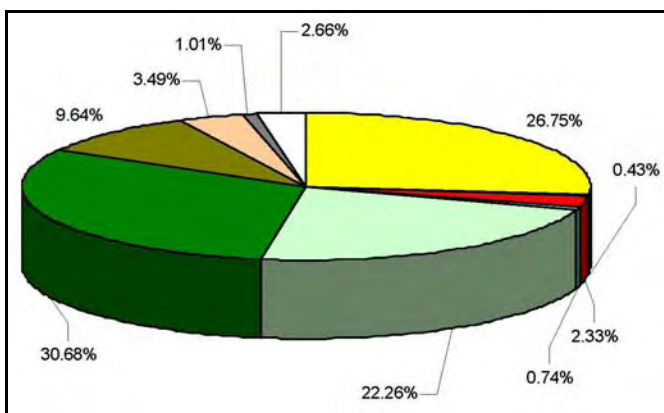
- 5,470 acres of forest/agricultural land to residential use.
- 52 acres of forest/agricultural land to commercial use.
- 2,500 additional single-family homes.

The number of single-family homes developed in the Township under the conservation subdivision approach permitted by the Zoning Ordinance would result in the following land use conversions:

- 3,750 acres of forest/agricultural land to residential use.
- 52 acres of forest/agricultural land to commercial use.
- 2,500 additional single-family homes.



Westfall Land Use - Conventional Subdivision



Westfall Land Use - Conservation Subdivision



Open Space Gain

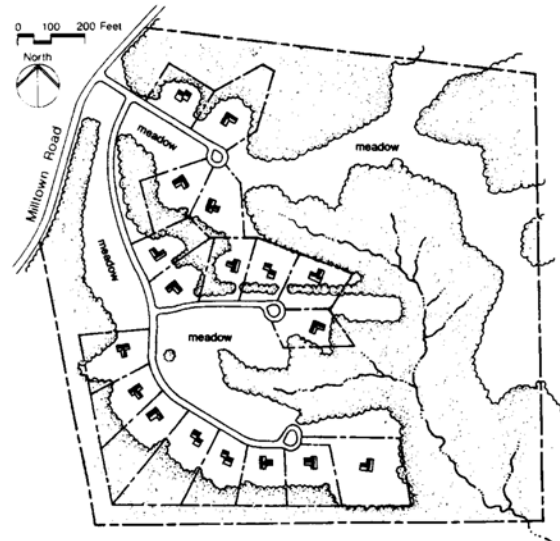
The use of the conservation design approach would result in an estimated 1,720 acres of additional open space in the Township at build-out. Under conventional subdivision practice almost 36% of the Township would be in residential use while the use of conservation design would limit the area to 27%.

Additional open space could be preserved by:¹

- Providing a density bonus for conserving a larger percentage of open space which must be facilitated by allowing smaller minimum individual parcel sizes to enable the higher proportions of open space.
- Making conservation design development the basis for all subdivisions and the only way for developers to achieve full density. Under this approach, there is no density bonus for the standard conservation subdivision with 50% of the unconstrained land designated as open space. That kind of development becomes the basic standard, and is the only way for developers to achieve full density.
- Requiring conservation design in situations where conservation is essential, such as along stream corridors, or where development is proposed on parcels which have been identified as critical for preservation to ensure that possible future greenway connection opportunities are not lost.



18 2-acre Lots in Conventional Subdivision



18 lots Based on 2-acre Density with Open Space

Density Instead of Lot Size

¹For more discussion see *A Review of Westfall Township's Comprehensive Plan and Land Use Regulations with Recommendations to Enhance Natural Resource Conservation and Open Land Preservation*, p. 24, Pike County Conservation District and Pike County Office of Community Planning, 2007.

PLANNING IMPLICATIONS**Overview**

The Matamoras-Westfall Planning Area is faced with both challenges and opportunities in its current land use configuration and careful and continued planning is essential.

- The Planning Area, given its location near the New Jersey and New York metropolitan area and its small town character, clean environment, quality of life, and open land, holds great potential for growth and development.
- With relatively few vacant lots available in the Borough or in existing subdivisions in the Township, most new development will occur on new lots subdivided from open land.
- Many large privately owned tracts of land exist throughout the Township, some owned by hunting clubs. As land values rise the likelihood of development of these properties increases. Local officials must begin an outreach effort and partner with landowners and local conservation organizations to preserve these properties.
- The provisions of Westfall Township Ordinance 123 and the Katz Equitable Settlement Agreement and the Settlement Agreement/Release have a significant and continuing effect on the long term land use of the entire Planning Area.
- Although one large vacant parcel (63 acres) is available, development in the Borough will involve primarily in-fill of existing lots and redevelopment of businesses.
- Commercial development and redevelopment in the Borough should follow a plan aimed at revitalizing the Pennsylvania Avenue business district.
- More residential development in the Planning Area and surrounding municipalities will spawn more pressure for retail/service commercial development, and increased demand for municipal facilities and services.
- Most of the land along Route 6/209 and Pennsylvania Avenue has been developed.
- The challenge is to provide for the essential economic growth and development of the Borough and Township while concurrently conserving its scenic, historic and natural environment and the remaining open land.
- Although there are no guarantees, the Planning Area can presume that land owned by the Pennsylvania Bureau of Forestry, the Pennsylvania Game Commission and the National Park Service, and Airport Park will remain in public ownership and stay undeveloped for many years to come.
- The Borough and Township have an opportunity to supplement these existing park and open space areas by working with private interests that own properties in optimal locations (enabling the creation of open space and trail networks) or that contain valuable resources.

**Potential
for Development**

Although most lots in the Borough are developed, the Matamoras - Westfall Planning Area holds great potential for further development given the hundreds of acres of open land available in the Township. Some parcels cannot be developed because of natural limitations such as poor soils, wetlands and steep slopes. Nevertheless, the suitable land in the Planning Area could be developed into many more residential lots. In any event, the rate of development of new residential subdivisions and the improvement of existing lots in the Planning Area will be governed more by the demand for lots than by the paucity of land. Both municipalities must be prepared to manage whatever development is proposed by adopting, administering and updating the necessary land use control regulations, including innovative techniques such as conservation design and transferrable development rights.

**Existing Land Use and
Environmental Controls**

As authorized by the Municipalities Planning Code, the subdivision and land development ordinance and the zoning ordinance are the principal land use management tools which are available to local municipalities in Pennsylvania.

The subdivision and land development ordinance provides standards for dividing land and for residential and non-residential development projects to ensure the provision of adequate community facilities such as roads, water supply and sewage disposal, utilities, proper highway access, and storm water control.

The zoning ordinance regulates the use of land by dividing a community into districts to separate land use activities (residential, commercial, industrial, etc.); sets standards for lot size, setbacks and building height; includes specific standards for a broad range of land uses including for example: parking, signs, junkyards, mineral extraction, cell towers, and multi-family dwellings, and other general community development and environmental performance standards.

Matamoras Borough and Westfall Township have each adopted a subdivision and land development ordinance and a zoning ordinance, and have amended each as needed over the years. In fact, as part of the current planning process, each municipality will review their subdivision and zoning ordinances and update each as needed to meet current development management needs.

FUTURE PLANNING POLICIES AND ACTIONS

Overview

Planning policies and recommendations are embodied in the Future Land Use Plan and the Plan is intended to accommodate projected growth and provide for needed community facilities and services while preserving the Borough's small town character and conserving the Township's open space and natural resources. It addresses land conservation, sustainable residential development, opportunities for commercial and office development, and

remedies for potential incompatible land uses. The plan is also attentive to state law, which requires municipalities to accommodate all categories of land use or to cooperate on zoning for the Planning Area as a whole.

The Basic Land Use Planning Approach of this *Comprehensive Plan* is to:

- provide incentives for good design and open space preservation as property is developed.
- encourage landowners to participate in local and state programs to preserve open space.
- protect residential neighborhoods and planned subdivisions from incompatible development.
- revitalize the Borough's main street.
- provide appropriate areas to accommodate projected growth.
- conserve and protect valuable natural resources and sensitive environmental areas.
- improve floodplain management to minimize flood damage and address areas of repetitive flooding loss.
- encourage the preservation of historic buildings and sites.

The Matamoras-Westfall Planning Area's proximate location to regional metropolitan areas, attractive natural environment, and quality of life are expected to continue to stimulate residential development similar to the past. Increased demand for retail and service establishments generated by the increasing population of the Planning Area and Tri-State Region is also anticipated.

This *Comprehensive Plan* calls for Planning Area residents and local officials to recognize this growth status and continue to protect the community characteristics essential to the quality of life which is so important to residents and is attracting new residents, while maintaining a compatible local economy. In other words, it is the intent of Matamoras and Westfall officials to conserve and revitalize the Borough's small town character, and accommodate a *fair share* of growth in the entire Planning Area while concurrently preserving open space to the greatest extent possible.

Future Land Use

The development pattern proposed in the Future Land Use Plan is coordinated with the Natural Resource Protection Plan, Historic Resource Protection Plan, Transportation Plan, and Community Facilities and Utilities Plan. In general, the Future Land Use Plan forms a development pattern based on a gradient of density. It promotes the highest intensity of development in the Borough and adjoining areas of the Township where public water and sewer are available or are most feasible in the future.

Higher intensity commercial and industrial uses are directed to the existing commercial zones in the Township around the Interstate 84 Interchange and along the Route 6/209 corridor to continue to serve as a regional retail and service center. Commercial development in the Borough is also directed to existing commercial zones along a revitalized Pennsylvania Avenue and is intended to provide a community focal point for local residents.

Surrounding the Borough and higher density areas of the Township is a transitional area of moderate density residential development. Low density rural residential use predominates in the upland areas of the Township and open space preserved in the development process is connected to state forest lands situated in the northwest section of the Township.

Current Zoning Districts

Matamoras Borough

- R1 Single Family Residential
- R2 General Residential
- C1 Neighborhood Commercial
- C-2 General Commercial
- R Recreation
- I Industrial
-

Westfall Township

- CD Conservation
- R-1 Low Density Residential
- R-2 General Residential
- C-1 Neighborhood Commercial
- C-2 General Commercial
- C-3 Mixed Commercial & Industrial
- ED Enterprise

Current Zoning Districts Affirmed

Based on this approach and all of the elements of this *Comprehensive Plan*, Borough and Township elected officials and Planning Commissioners recognize that the continued enforcement of the zoning ordinances and the subdivision and land development ordinances, continued planning by consulting, reviewing and updating this *Comprehensive Plan*, and periodically updating the ordinances to address changing conditions are the most critical actions required to manage the growth and development which is inevitable for the Borough and Township. The existing zoning districts in the Borough and Township as delineated by the current zoning maps are affirmed as the foundation for future land use plan for the planning area.

The Westfall Township Supervisors specifically recognize that the area remaining for commercial development is limited and additional commercial zones should be considered, particularly those areas along Delaware Drive and Route 6/209 which were originally zoned commercial but were later re-zoned to residential, and which include a number of commercial establishments. In addition, including some low impact commercial uses in non-commercial zones as conditional uses or special exceptions may be an alternative. Given the lack of infrastructure and suitable sites, large scale industrial development is not anticipated.

Residential Neighborhoods

In addition to the residential core in the Borough and surrounding areas of the Township, residences are found in a number of planned or historically evolved developments and on individual lots throughout the Township. Local officials recognize that the Future Land Use Plan must allow for all types of commercial and manufacturing uses. However, this *Comprehensive Plan* must also afford to existing residences and new residential development protection from incompatible uses and the *externalities*, that is, negative effects, of unrestrained commercial and industrial development. This is best accomplished by continuing to maintain separate residential areas, applying environmental, development and operational performance standards to commercial and industrial uses, and establishing increased lot sizes, setbacks, and buffers where such uses adjoin residential development.

This should, however, not preclude the use of mixed use development techniques such as planned residential development and traditional neighborhood development. Allowing a mix of dwelling types and retail and service establishments internal to large residential development is a good means of providing needed commercial uses close to residences and reducing traffic on public roads.

Residential Policies and Actions

- Continue to provide protection for residential areas by maintaining separate residential and nonresidential zoning districts, applying environmental, development and operational performance standards to commercial and

industrial uses, and establishing increased lot sizes, setbacks, and buffers where such uses adjoin residential development.

- Allow higher density residential development only in areas where public water supply and public sewage disposal is available.
- Encourage the use of zoning and subdivision and land development ordinance provisions to effect conservation design development to conserve open land, conserve sensitive natural areas, preserve historic resources and maintain community character.
- Consider requiring conservation design in certain districts and/or areas as a means of conserving open space.
- Allow for the integration of retail and service establishments in large residential developments.
- Continue to allow a reasonable range of home occupations consistent with residential neighborhoods.

Nonresidential Development

This *Comprehensive Plan* recognizes that commercial, manufacturing and institutional uses are important to maintaining the economic and social health of the Borough and Township. While the type, location and intensity of such uses in the Planning Area have changed over its development history, local residents rely on such establishments for employment, for goods and personal services, and for community facilities and services.

These uses require good highway access and should be primarily located along Route 6/209 and Pennsylvania Avenue with less intense commercial uses allowed in other areas. Buffering standards are important to ensure compatibility with adjacent residential areas, and design standards and guidelines should be created to foster attractive and well-landscaped projects as opposed to unimaginative and conventional strip centers. Pedestrian access and interconnections should be emphasized.

Nonresidential Policies and Actions

- The Borough and Township zoning ordinances include a broad range of nonresidential performance standards which must be continually reviewed and updated to address changing development patterns and ensure community and environmental protection.
- Carefully evaluate the range of commercial uses in the Borough's downtown area in terms of revitalization efforts.
- Consider Borough-Township cooperative zoning to allocate commercial and industrial land uses throughout the Planning Area instead of in each municipality.
- Coordinate commercial zoning standards between the Township and Borough.
- Maintain up to date design guidelines for commercial, industrial, and institutional development to encourage the most efficient use of commercial land and development consistent with community character.

- Allow commercial, manufacturing and institutional land uses only in appropriate districts based on compatibility with surrounding land uses, access potential, and logical extension of utilities.
- Do not make standards so onerous that commercial and manufacturing development is discouraged.
- Require nonresidential development to consider the physical characteristics of the site as part of the design to protect environmentally sensitive areas.

Commercial Design Standards and Guidelines

Design guidelines, along with development standards and permit approval requirements for specific location and site details can be used to retain community character. Standards and design guidelines in rural areas should consider historic design trends in the built environment and should specifically address issues surrounding the massing, form, materials, and color of new buildings or structures. Zoning performance standards in Pennsylvania generally cannot be used to govern the specific architectural appearance of buildings. Design guidelines, which can be suggested by the municipality and voluntarily adopted by the developer, can be effective for ensuring building designs are consistent with community character.

Site design zoning standards should include, for example, maximum impervious cover, landscaped setbacks between buildings and the road, modest parking lot size, interior landscaping for larger parking lots, sign requirements, and vegetated buffers along property lines. A critical requirement is the retention of existing vegetation to the greatest extent possible. Development standards for lighting, circulation, parking, landscaping, and noise should be consistent with the rural area.

- Allow the clearing of vegetation and grading only after a development plan has been approved.
- To the extent that zoning cannot adequately govern design, prepare and promote design guidelines for commercial, manufacturing, and institutional development to encourage the most efficient use of commercial land and development consistent with community character.
- Allow for a variety of professional and personal services to be conducted as home based businesses in all areas provided nuisance elements are controlled.
- Ensure that *no-impact home-based businesses* as defined by the MPC are allowed as principal permitted uses in all zoning districts in the Borough and Township.
- Encourage area economic development organizations to include efforts for the retention of existing business, improvement of the small business climate, and the promotion of tourism instead of simply committing resources to *attracting industry*.

Forestry

This *Comprehensive Plan* recognizes the historical and continuing importance of forestry enterprises to maintaining healthy woodland while providing income for the owners of larger parcels to maintain their land. Forestry activities are encouraged throughout the Township provided such operations are conducted in accord with sound forest management practices and environmental regulations. Landowners manage their forests for a variety of reasons including income from timber sales, wildlife habitat, recreation, water quality protection, bio-diversity, and timber for long-term investment. Improper harvesting and management practices often raise stream water quality and other environmental concerns with local residents and local officials. It is critical for public acceptance of forestry, environmental quality and the long-term viability of the industry and forest resources that logging professionals and individual landowners use best management practices when harvesting and for long-term forest health.



Forestry-Related Business



The Pennsylvania Municipalities Planning Code (MPC), at §603(c)(7), states that *zoning ordinances may not unreasonably restrict forestry activities* and goes on to require that in the Commonwealth, *forestry activities . . . shall be a permitted use by right in all zoning districts in every municipality*. The Code defines *forestry as the management of forests and timberlands when practiced in accord with accepted silvicultural principles, through developing, cultivating, harvesting, transporting and selling trees for commercial purposes, which does not involve any land development* (buildings such as sawmills and wood products manufacturing are treated as separate uses). To be consistent with the MPC *forestry* must be classified as a principal permitted use in all zoning districts.

Forestry Policies



- Review the forestry standards in the Westfall Zoning Ordinance to ensure that they are reasonable, and not so onerous as to discourage forestry enterprises and can be enforced. Essential elements include:
 - requirements for logging plans and the use of good forest management practices
 - road and property line setbacks for landings
 - road access and drainage requirements
 - mandating compliance with environmental laws
- Include *forestry* as a principal permitted use in all zoning districts in Westfall and Matamoras to comply with the MPC.
- Provide ample opportunity for the location and development of *value added* enterprises that use the plentiful forest resources available in the Planning Area.
- Encourage the local economic development organizations to work with the forest industry to promote and grow forestry related enterprises, particularly in the realm of *value added* products.

Mineral Extraction

This *Comprehensive Plan* recognizes the need to provide for *the reasonable development of minerals* and encourages such operations in appropriate locations. The primary minerals of importance in the Planning Area are sand and gravel and quarry stone. The Pennsylvania Municipalities Planning Code clearly recognizes mineral extraction as a lawful use. Along with other community effects, such uses can have impacts on water supply sources and are governed by state statutes that specify replacement and restoration of affected water supplies. In addition, the Planning Code now severely limits the range of development and operational standards which can be applied to mineral extraction by local municipalities, with location standards the primary tool available to the Township.

Planning Code §603(l) states that *zoning ordinances shall provide for the reasonable development of minerals in each municipality*. The Code definition of minerals is: *Any aggregate or mass of mineral matter, whether or not coherent. The term includes, but is not limited to, limestone and dolomite, sand and gravel, rock and stone, earth, fill, slag, iron ore, zinc ore, vermiculite*

and clay, anthracite and bituminous coal, coal refuse, peat and crude oil and natural gas. The Code, at §603(b) allows zoning ordinances to regulate mineral extraction, but only to the extent that such uses are not regulated by the Pennsylvania Surface Mining Conservation and Reclamation Act, the Noncoal Surface Mining Conservation and Reclamation Act, and the Oil and Gas Act. These Acts regulate such things as setbacks, dust, noise, blasting, water supply effects, and reclamation.

Mineral Extraction Policies

- Update the mineral extraction standards in the Westfall Zoning Ordinance to ensure conformity with the MPC.
- Confirm that proposed mineral extraction operations will comply with state environmental regulations.
- To the extent possible under the terms of the Planning Code, ensure via cooperative Borough/Township zoning that mineral extraction operations are located in suitable areas where impacts will be minimized.
- Adopt zoning standards to ensure that mineral extraction is controlled to the greatest extent possible within the limitations of the Planning Code.
- Monitor the evolving case law applicable to natural gas extraction and regulate to the extent possible.

Environmental Protection

Development and environmental protection, as well as conserving open land and natural resources, need not be mutually exclusive. While a clean environment, abundant open land, and natural resources are key elements of the quality of life in the Matamoras-Westfall Planning Area, one must recognize that growth is inevitable and can contribute positively to a healthy community. The goal is to strike a balance between development and preserving the essential character of the Planning Area. Development practices which recognize the importance of the local built and natural environment will ensure the continuation of the quality of life that residents enjoy and which is so attractive to new residents. Concurrently, land owners and developers will be able to provide the home sites and businesses that a growing population demands.

The intent is to ensure *environmentally friendly* development within the context of the existing zoning districts. State and federal regulations address many aspects of resource conservation and environmental protection, and these regulations should be the foundation - the base from which local municipal regulations should be built. Local standards must be consistent with and be coordinated with state and federal requirements. In some cases, the zoning ordinance can simply reference the other applicable standards.

Local Authority for Regulation

The Pennsylvania Municipalities Planning Code (MPC) authorizes land use planning and management tools for the Commonwealth's municipalities. Compliance with the MPC, along with case law, dictates the legality of local regulations. For this reason, it is very important to remember that all land use management tools must be prepared and administered within the bounds of the MPC and current case law. In addition, the Second Class Township Code and the Borough Code provide authorization for special purpose ordinances aimed at protecting public health, safety and welfare. Other state laws, such

as the Floodplain Management Act and Stormwater Management Act, mandate local regulation of resources. In all cases, the municipal solicitor should be involved in reviewing any changes to municipal plans and ordinances.²

Integrated Approach

Given the range of authorizing state statutes, municipal open land, natural resource and environmental regulations are found throughout a number of ordinances. While this may appear problematic at first glance, the integration of such standards in various ordinances is important because a certain ordinance may govern one type of development while another governs a different type. For example, the subdivision and land development ordinance governs how land is divided and improved while the zoning ordinance governs the specific uses on the land. In some cases a special purpose ordinance may be more effective than including standards in the zoning ordinance. The important point is consistency of standards in all ordinances.³

Range of Standards

The Borough Zoning Ordinance and the Township Zoning Ordinance include a range of environmental standards. The two municipalities must periodically review and update local environmental standards to ensure the most effective protection. The possible range includes:

- Environmental impact analysis requirements for large scale and environmentally problematic uses.
- Retention of existing vegetation on development sites.
- Soil stabilization and landscaping.
- Stream, lake and wetland buffers.
- Stormwater best management practices including quality treatment and infiltration.
- Floodplain management.
- Hydrogeological studies for proposed uses with large groundwater consumption.
- On-site sewage disposal system management.
- Limitations and special standards for development on steep slopes.

Open Land Preservation

Why is the preservation of open land important for a community? The value of open lands extends beyond monetary worth. Residents know that these open lands, whether agriculture, forest land, hillside, ridge line or park, affect community livelihood, property values, and recreational opportunities. While

²A Review of Westfall Township's Comprehensive Plan and Land Use Regulations with Recommendations to Enhance Natural Resource Conservation and Open Land Preservation, p. 5, Pike County Conservation District and Pike County Office of Community Planning, 2007.

³Ibid., p. 5.

Note About Open Space:

Open space is the land and water features of the natural landscape that have not been developed for intensive human uses, such as residential neighborhoods, business districts and industrial sites. Open spaces include, but are not limited to, wildlife areas, ridgelines, river and stream corridors, wetlands, parks and recreation areas, as well as productive forestry and agricultural lands. Open space can be publicly or privately owned and managed for production, conservation or outdoor recreation. Open space can protect and enhance environmental quality, provide wildlife habitat, and provide locations for active and passive recreation. An open space network refers to a system of large open spaces and connecting corridors called greenways.

the value may be difficult to quantify, we know open lands:

- *Provide agricultural (and forestry) jobs and sales.*
- *Boost property values for surrounding developed areas.*
- *Offer a scenic backdrop for a tourist economy.*
- *Form a link to a historic past.*
- *Offer recreation opportunities.*
- *Provide habitat for native plants and wild animals.*
- *Replenish groundwater and act as a filter to improve water quality.*
- *Enhance the quality of life of area residents.*⁴

Open land and natural areas are key ingredients of the area's rural-recreational landscape, and local and county officials must encourage the conservation of open land if this character is to be maintained. Conceivably, all areas of privately owned land which are not wetlands or are not extremely steep, or not already protected by easement, could be developed, using central sewage disposal if necessary. Fortunately, as evidenced by this *Comprehensive Plan* and the land use management ordinances, coupled with the County Scenic Rural Character Preservation Program, private conservation easements, and landowner commitment to conservation, there is a continuing effort aimed at open land conservation.

Fiscal Benefits of Open Land Preservation

The Penn State College of Agricultural Sciences Cooperative Extension, in Extension *Circular 410 - Fiscal Impacts of Different Land Uses, The Pennsylvania Experience*, reports on a study conducted in three rural townships in Adams County, Lebanon County, and Perry County. (See the following *Cost of Community Services by Land Use Table*.) The study found that:

- *Land uses affect the size of the local government, the types of services it offers, the types of equipment it must purchase, and the taxes it must levy.*
- *Land use also affects the number of students in the local school district, the sizes and number of school buildings, the number of teachers, and the taxes and tax rates the school levies.*
- *The overall fiscal impact of a land use depends on both its (tax) revenue and its (municipal) expenditure impacts.*
- *Residential land, on average contributed less to the local municipality and*

4

Santa Barbara County 2030: The Open Lands,
p.2,http://www.countyofsb.org/plandev/pdf/comp/programs/Newsletters/open_lands_newltr/value_all.pdf

Cost of Community Services by Land Use				
Township In:	\$ revenue collected : \$ spent on services			
	Resid	Comm	Indus	Open
South Central Townships				
Bethel Lebanon Co.	1 : 1.08	1 : 0.07	1 : 0.27	1 : 0.06
Carroll Perry Co.	1 : 1.03	1 : 0.06	—	1 : 0.02
Maiden Creek Berks Co.	1 : 1.28	1 : 0.11	1 : 0.06	1 : 0.04
Richmond Berks Co.	1 : 1.24	1 : 0.11	1 : 0.06	1 : 0.04
Straban Adams Co.	1 : 1.10	1 : 0.17	1 : 0.05	1 : 0.06
Philadelphia Area Townships				
Bedminster Bucks Co.	1 : 1.12	1 : 0.006	1 : 0.04	1 : 0.04
Buckingham Berks Co.	1 : 1.04	1 : 0.16	1 : 0.12	1 : 0.08
North Central Townships				
Bingham Potter Co.	1 : 1.56	1 : 0.26	1 : 0.15	1 : 0.15
Stewardson Potter Co.	1 : 2.11	1 : 0.37	--	1 : 0.15
Sweden Potter Co.	1 : 1.38	1 : 0.07	--	1 : 0.08
Western Township				
Allegheny Westmoreland Co.	1 : 1.06	1 : 0.15	1 : 0.14	1 : 0.13
Source: <i>Calculating a Cost of Community Services Ratio for Your Pennsylvania Community</i> , Pennsylvania State University, 1998				

school district than it required back in expenditures.

- *Commercial, industrial, and farm- and open land contributed more to the local municipality and school district than they took, thus helping to subsidize the (service) needs of residential land.*
- *If growth must occur, commercial and industrial development has a potentially beneficial impact on the tax base as long as it does not dramatically raise the demand for services.*
- *When farmland is converted for residential purposes . . . the land will be converted from a net contributor to the municipality and school district into a net drain.*
- *Even with preferential assessments, farmland ends up subsidizing the educational costs of residential land and plays a positive economic role in the community.*

The Penn State data represents a cross section of communities in terms of level of development, from very rural townships in Potter County to highly developed townships in the Philadelphia area. The conclusion in all reported townships was consistent: ***The cost of services to residential development exceeds the amount of tax revenue generated.***

In fact, some communities in southeastern Pennsylvania have found that the purchase of conservation easements to limit residential development is a more economical approach than providing facilities and services to new residents. The cost of schools is the most important factor when

the amount of tax revenue generated from a single-family dwelling is compared to the cost of educating one student. (See the *Cost / Revenue Analysis for Delaware Valley School District Sidebar*.)

Nevertheless, residential development has always been, and will continue to be an integral part of the character of the Planning Area. The important point of the Penn State studies is not that residential development must be discouraged, but that there must be a balance between open land, residential development, and commercial development. Commercial development provides the tax base necessary to support the services required for residential development.

Innovative Zoning for Conservation

As is the case with all newly adopted provisions, the efficacy of standards for land conservation, along with any inconsistencies, will be evidenced when a municipality first applies the standards. It is also important to note that there

Cost / Revenue Analysis for Delaware Valley School District (based on 2004-2005 school year data)

Step 1. Calculate the number of homes in the development on a hypothetical 100-acre property using an effective density based on 2-acre zoning.

$$100 \text{ acres} \times .443 \text{ homes/acre} = 44.3 \text{ homes}$$

Step 2. Calculate the number of public school students in the development based on the average number of public school students per home throughout the Delaware Valley School District.

$$44.3 \text{ homes} \times 1.6 \text{ public school students/home} = 70.8 \text{ public school students}$$

Step 3. Calculate the cost to educate public school students per year based on average cost per pupil.

$$\$7,222 \text{ cost per pupil} \times 70 \text{ students} = \$505,540/\text{year}$$

Step 4. Calculate the school tax revenues per year in the development based on average \$190,000 house.

$$\begin{aligned} \$190,000 \text{ house} \times .25(\text{assessment}) &= \$47,500 \text{ assessed valuation} \\ \$47,500 \text{ valuation} \times .094 \text{ mil tax rate} &= \$4,465 \text{ tax revenue/home} \\ \$4,465 \text{ tax revenue/home} \times 44 \text{ homes} &= \$196,460.00 \end{aligned}$$

Step 5. Calculate the annual surplus or shortfall per year to educate 70 students from the development.

$$\$196,460.00 \text{ (revenue/year)} - \$505,540.00 \text{ (cost/year)} = \$309,080.00 \text{ shortfall}$$

Step 6. Calculate the cost to purchase conservation easements on the hypothetical 100 acre property based on the average per acre cost for the purchase conservation easements in Pike County.

$$100 \text{ acre property} \times \$4,000/\text{acre} = \$420,000$$

Step 7. Calculate the *break even period* which is the number of years it would take for the annual shortfall to equal the cost to purchase the conservation easement on the 100 acre farm. After the break even period, the need to cover the annual shortfall from other revenue sources would be avoided.

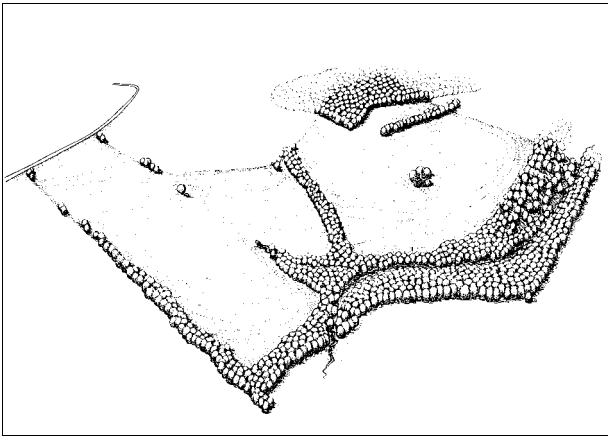
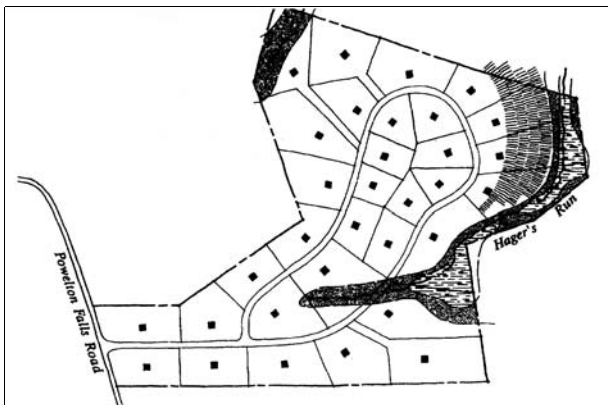
$$\$420,000 \text{ cost of conservation easement} \div \$309,080 \text{ shortfall per year} = 1.4 \text{ years}$$

(Pike County Office of Community Planning and Milford Experimental Forest in consultation with Michael Frank, Heritage Conservancy, author of *Opportunity Knocks*. Reference data obtained from: Delaware Valley School District Business Office, Pike County Assessment Office, Pike County Treasurer, and Extracted Dynamic Data Systems.)

is no one best method to accomplish the objective of conserving open land. The intent of the following discussion is to point out innovative approaches that are used by many municipalities. In the end, the elected officials of each municipality must determine which approach and standards are best suited to the community.

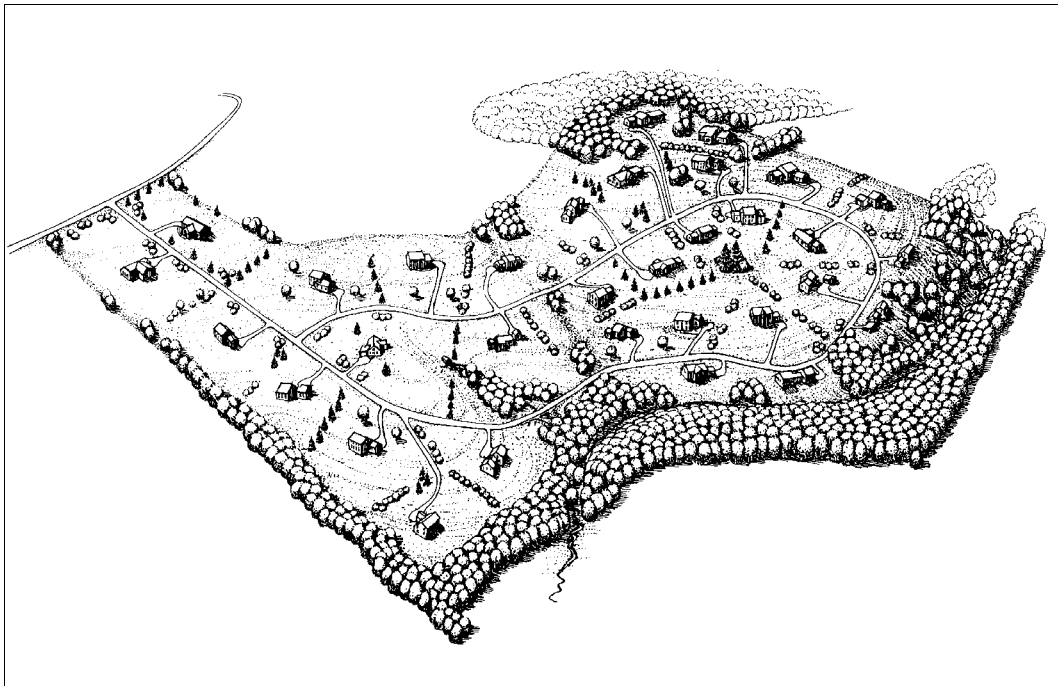
Conservation Subdivision Design

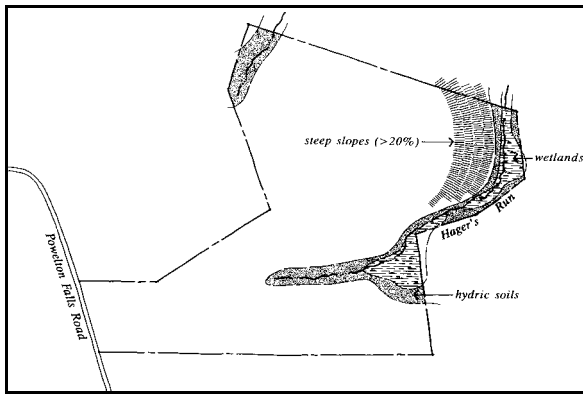
Westfall has included conservation design development in both the Township Zoning and Subdivision Ordinances as a method for conserving open space under the provisions for *open space development*. Given the limited number of larger parcels available for development, this technique has not been included in the Borough's Ordinances.

*Before Development**Yield Plan*

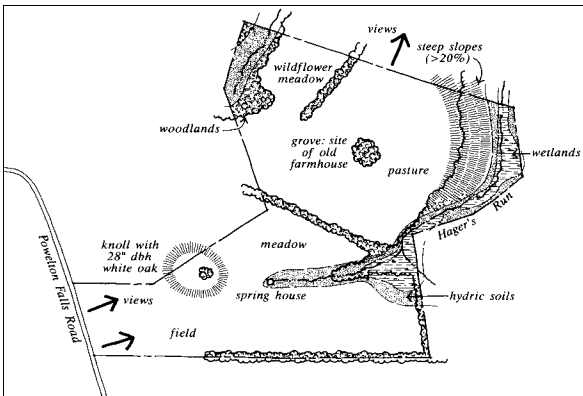
Based on the density set in the ordinance, conservation design permits the same number of units on a parcel as a typical subdivision, but with a reduction in minimum lot size. The balance of land needed to maintain the density established by the ordinance is set aside as permanent open space. Open land and natural areas are protected by shifting development to more appropriate areas of the site. In short, the development is designed around the natural features of the project parcel. In addition to maintaining open land, conservation design reduces development costs (and commitment of resources) given shortened road and water and sewer line length, minimizes long term maintenance costs of such improvements, and limits environmental affects such as soil disturbance and storm water. The same design process can be applied to multi-family and commercial development.

The Natural Lands Trust, a nationally known land conservation organization located in Media, Pennsylvania (Delaware County), suggests that the conservation design concept be taken to a higher level by providing incentives (or disincentives) to encourage the conservation of open land and establishing specific techniques for the design of open space subdivisions.

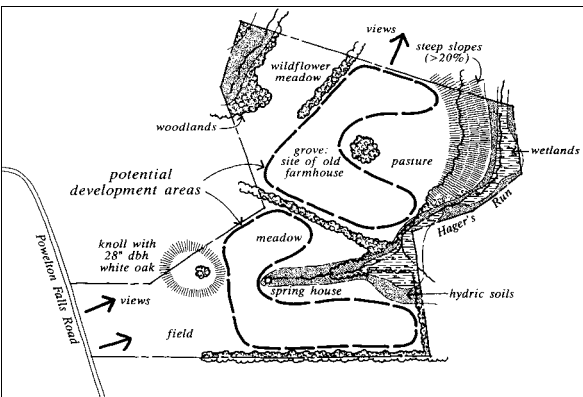
*With Conventional Development*



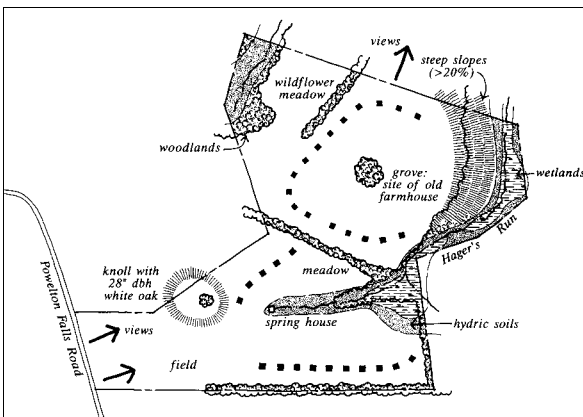
Identifying Primary Conservation Areas



Identifying Secondary Conservation Areas



Identifying Potential Development Areas



Locating Potential House Sites

The process is presented in detail in the handbook, *Designing Open Space Subdivisions, A Practical Step-by-Step Approach*, published by the Natural Lands Trust. (See the accompanying figures.) Incentives could include allowing higher density for open space design; a disincentive would be the reduction in density if a traditional lot layout is used in place of the open space design. In fact, some communities have mandated the use of this technique for all development or in certain zoning districts.

Conservation Design in Practice

Conservation design development is practiced most widely in areas where little open space remains, such as southeastern Pennsylvania where residents know what they have lost to rampant development. Consequently, conservation subdivision design has emerged in that region as an important method to preserve what little open space remains. The design process is also being embraced by many municipalities in Monroe County and Pike County where the influx of new residents from nearby metropolitan areas is driving the demand for new housing and subdivisions.

I want my piece of the pie, or I want room to spread out are common desires voiced among new residents. The problem is that as this pattern continues, the sprawl that the emigrating urbanites left behind, or escaped, is beginning in Pike County and will ultimately change the very character which is so attractive to new residents.

Conservation Design Process

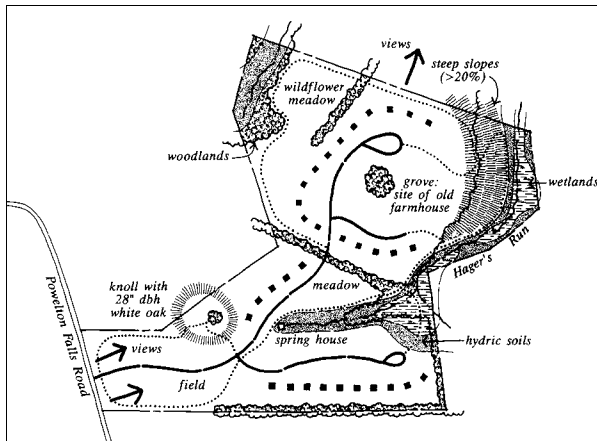
The design process involves the following steps: (See the Figures from *Designing Open Space Subdivisions, A Practical Step-by-Step Approach*.)

1. Yield Plan - the number of units which could be developed on the site using the traditional subdivision approach.
2. Identification of all potential open space areas including primary conservation areas such as . . .

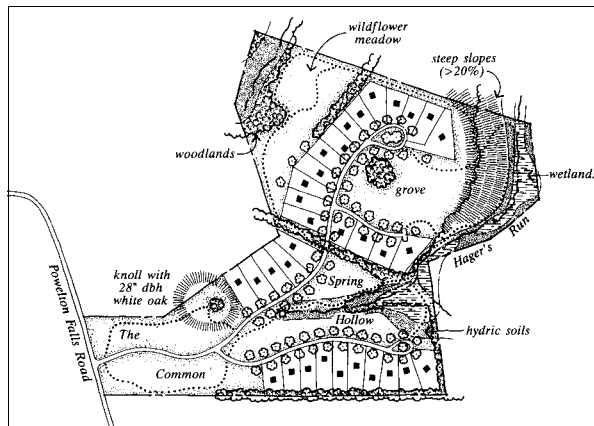
- ⇒ Soils suitable for on site sewage systems
- ⇒ Water bodies
- ⇒ Floodplain
- ⇒ Wetlands
- ⇒ Steep slopes

and secondary conservation areas such as . . .

- ⇒ Mature woodlands
- ⇒ Prime farmland



Designing Roads and Trail Links

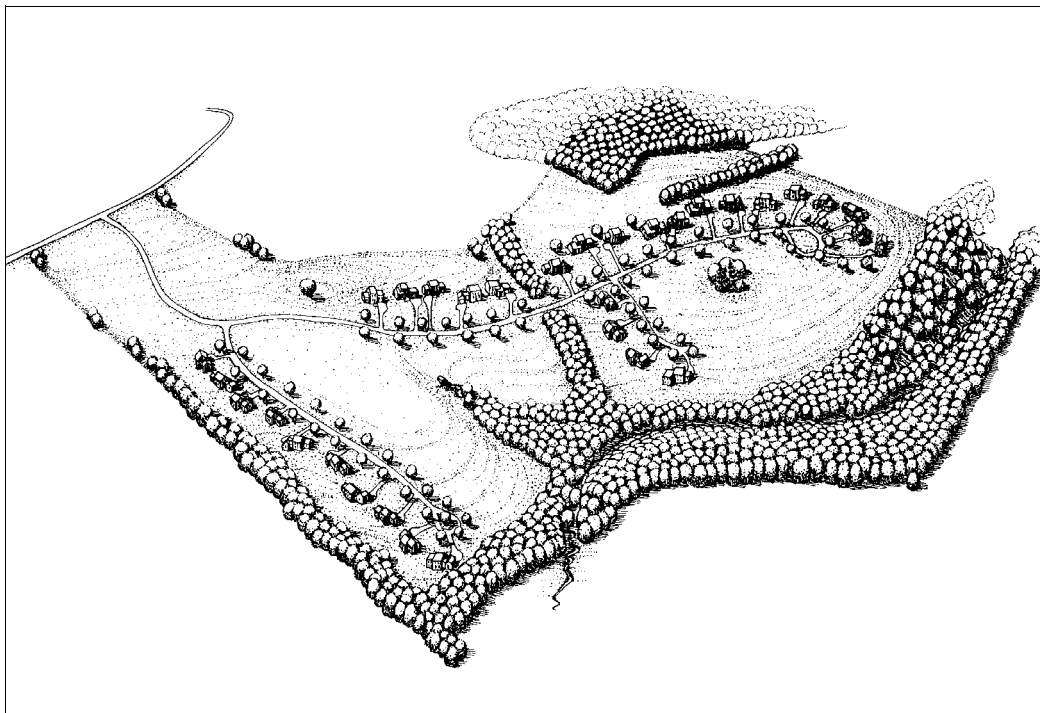


Drawing in the Lot Lines

- ⇒ Significant wildlife habitats
- ⇒ Historic, archeological, and cultural feature
- ⇒ Views into and out from the site
- ⇒ Aquifers and recharge areas

3. Identification of potential development areas -- Where should the houses be logically located on the site?
4. Location of potential house sites -- Where should individual units be located within the development area?
5. Design of road alignments and trails -- How is access best provided with the least impact on conservation areas?
6. Drawing in the lot lines at the reduced lot size results in the conservation of the designated open land.

The open land set aside in the conservation design subdivision would also be coordinated with the *Map of Conservation Opportunities* which is included as part of this *Plan*. This is intended to create an interconnected network of preserved open land.



With Open Space Design

Purposes for Conservation Design:

- To conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, flood plains and wetlands, by setting them aside from development.
- To provide greater design flexibility and efficiency in the siting of services and infrastructure, including the opportunity to reduce length of roads, utility runs, and the amount of paving required for residential development.
- To reduce erosion and sedimentation by the retention of existing vegetation, and the minimization of development on steep slopes.
- To provide for a diversity of lot sizes, building densities, and housing choices to accommodate a variety of age and income groups, and residential preferences, so that the community's population diversity may be maintained.
- To implement adopted municipal policies to conserve a variety of irreplaceable and environmentally sensitive resource lands.
- To implement adopted land use, transportation, and community policies.
- To protect areas with productive agricultural soils for continued or future agricultural use, by conserving blocks of land large enough to allow for efficient farm operations.
- To create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity.
- To provide for the conservation and maintenance of open land to achieve the above-mentioned goals and for active or passive recreational use by residents.
- To provide an option for landowners in order to minimize impacts on environmental resources (sensitive lands such as wetlands, flood plain, and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings, and fieldstone walls).
- To provide standards reflecting the varying circumstances and interests of individual landowners, and the individual characteristics of their properties.
- To conserve scenic views and elements of the rural working landscape, and to minimize perceived density, by minimizing views of new development from existing roads.

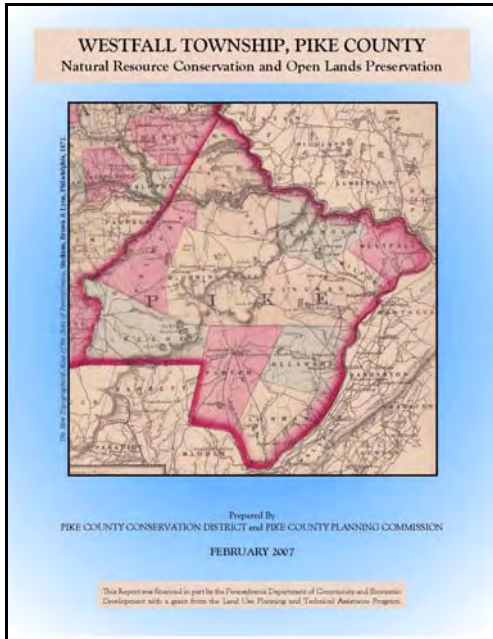
Regulate Density Instead of Lot Size

A key concept associated with conservation design is to focus on residential density instead of minimum lot size. In a standard subdivision the land is simply cut into as many lots as possible while meeting the minimum lot size requirement. Under conservation design, which is based on unit density instead of minimum lot size, the size of individual building lots is reduced, while the total number of lots does not exceed the density which is based on the underlying minimum lot size. In addition, constrained land areas (e.g., wetlands, floodplain and steep slopes) are deducted prior to calculating the number of units permitted.

The important question is - *Do we really care about minimum lot size provided the number of units does not exceed the established density?* In conservation design, the maximum lot size is the critical element, as it really defines the minimum open space that must be conserved. Individual building lots can be quite small if community water and sewage disposal are provided.

Conservation Design Policies and Actions

In 2007, the Pike County Conservation District and the Pike County Office of Community Planning issued the *Review of Westfall Township's Comprehensive Plan and Land Use Regulations with Recommendations to Enhance Natural Resource Conservation and Open Land Preservation*. The *Review* provides detailed recommendations for updating the Township's conservation design standards and the recommendations will provide the foundation for any updates.



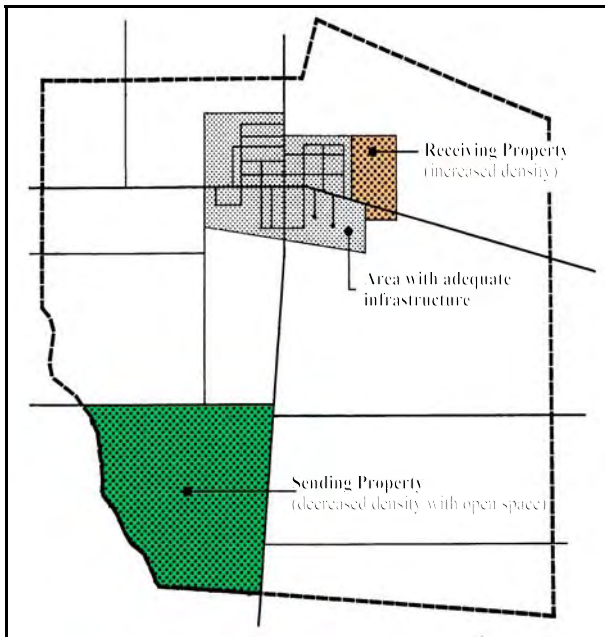
Key recommendations in the *Review* include:

- Principal Permitted Use - Classify standard subdivisions as conditional uses and require the developer to show why conservation design is not viable.
- Regulate Density Instead of Lot Size - Add more design flexibility to the Ordinance by allowing smaller lot sizes in cases where both central water supply and central sewage disposal are provided.
- Parcel Size - In association with smaller minimum lot sizes, consider a 4-acre minimum parcel size for conservation subdivision design in the CD District.
- Density Calculation - In addition to the *yield plan*, allow the *adjusted tract acreage* procedure for calculating density whereby the number of dwelling units is determined after deducting areas of constrained. Require the same constrained land deductions for lot size in standard subdivisions to put both techniques at par in terms of dwelling unit yield.
- Density Incentives - Make conservation design the basis for all subdivisions and the only way for a developer to achieve full density. Those who elect to use cookie-cutter designs would achieve a lower overall density.
- Requiring Conservation Design - Consider requiring conservation design in situations where conservation is essential and to ensure an interconnected network of open space.
- Open Space Amount and Quality - Strengthen the standards by:
 - specifying that the minimum open space requirement be set as a percentage of the net unconstrained land area.
 - adding a consolidated and detailed listing of the specific types of uses permitted in the open space.
 - making a clear distinction between open land and recreation facilities in the definition of open space in Article II.
- Open Space Ownership/Access - Allow some private ownership of conserved open space to encourage large landowners to use conservation design.

- Resident Access to Open Space - Specify the minimum percentage of the open space to be directly accessible to the residents of the development.
- Multi-Family Housing - Consider allowing two-family and multi-family dwellings at the same density as single-family in all zoning districts where conservation design development is permitted.
- Retail/Service - In larger residential developments, allow limited types of retail and service establishments to reduce the number of vehicle trips.

Transferable Development Rights

Transferable development rights (TDR) is a free market tool authorized via zoning for preserving forest land, open space, and natural resources. The traditional approach to preservation has been twofold: 1) public purchase of threatened property, either in fee or by purchase of conservation easements, and 2) placing zoning restrictions on development. TDR programs offer a third option by allowing the owner of open land to sell the development rights to another property owner through the private real estate market.



TDR – Sending Property / Receiving Property
Source: Chester County Planning Commission, 1997

TDR is not the same thing as conservation design development. Both TDR and conservation design involve the shifting of density, but conservation design involves the reorganization of development density on the same property, whereas TDR involves the transfer of development rights from one property to another. (See the *TDR – Sending Property / Receiving Property Figure*.)

Under TDR, which must be included in a zoning ordinance, the development rights are voluntarily severed from a sending property and are sold on the open market to a developer who uses the rights to increase density on a receiving property. The zoning ordinance establishes the parameters for the TDR program. A density bonus can be provided as an incentive and the number of development rights is determined after deducting the area of constrained land akin to the conservation design process. Once the development rights are severed, the sending property is protected from development by a conservation easement.

This Comprehensive Plan, adopted jointly by the Borough and Township, provides the planning and legal foundation for the use of TDR across municipal boundaries. Because a receiving property must be located in an area with adequate sewage disposal, water supply and other infrastructure required to handle the increased density, applying TDR to the Planning area as a whole, combined with careful planning for central sewage, will provide substantial opportunity for the preservation of open space.

TDR Potential Benefits:

- TDR redirects development from areas where development is not appropriate to areas where development makes the most sense.
- TDR preserves open space at little or no public expense.
- TDR ensures that landowners suffer no serious property value reductions that may accompany other zoning approaches (such as down-zoning used to protect open space).
- TDR allows large groups of parcels (e.g., entire agricultural areas, sensitive watersheds, scenic vistas, historic districts) to be conserved in contrast to parcel-by-parcel clustering techniques.

Source: Transfer of Development Rights, Brandywine Conservancy, 2003, p. 5

TDR in Palmyra Township, Pike County

The Palmyra Township Supervisors recently added TDR and conservation design provisions to their zoning ordinance, which are now being applied to the redevelopment of the former White Beauty View property. A combination of single family lots and townhouses are proposed on the parcel which is served by a central water system and a central sewage disposal system. Forty percent of the White Beauty View tract is proposed to remain as open space, and another 56 acres situated off Route 390 will be preserved as one large block of open space. As an incentive to conserve large blocks of open space, a density bonus is provided for TDR.

The conservation design approach, combined with the optional transfer of development rights, gives a municipality a very progressive tool to conserve large areas of open land by shifting development to locations with adequate infrastructure and enable conservation-minded landowners to preserve their properties. In fact, an entire sending property could be preserved with the density transferred to the receiving property where individual lot sizes could be reduced and important conservation areas would also be conserved.

Traditional Neighborhood Development

In years before interstate highways and urban sprawl, small villages and towns served as the centers for community activities and commerce. Matamoras is a good example. Traditional neighborhood development (TND) is another tool authorized by the Pennsylvania Municipalities Planning Code for inclusion in a zoning ordinance. TND enables the development of compact communities with a variety of housing types, community facilities and services, and neighborhood commercial establishments.

A key element is pedestrian friendly design that allows residents to walk to centrally located community facilities, parks and stores. The residential density would be based on a maximum density set by the zoning ordinance, yet individual lots could be very small to allow a substantial proportion of the development to be preserved as open space. The open space, accessible to residents, adds to the appeal of the TND and conserves important natural resources. Similar to conservation design and transferable development rights, TND should be considered for inclusion in any zoning ordinance where larger parcels are available for development.

Considerations for Conservation Design, TDR and TND

Based on the *Map of Conservation Opportunities* included in this *Plan* and the overall community goals and objectives, Planning Area officials will consider the following when evaluating the use and location of any conservation design, transferrable development rights or traditional neighborhood development provisions proposed for inclusion in Borough and Township ordinances.

- Ability of the Borough and Township to work cooperatively on zoning to enable intermunicipal transfer of development rights.
- Availability of, or potential to provide, adequate infrastructure - roads, water supply, sewage disposal.
- Identification of areas of open space critical to preserving community character.
- Landowners interested in preserving open space.
- Need to preserve and/or the effect on environmentally sensitive areas.

Advantages Offered by Conservation Easements:

Private Ownership: The property remains in private ownership and continues to contribute to the local tax base. The landowner may choose to live on the land, sell it, or pass it on to heirs.

Owners Satisfaction: Gives the landowner the satisfaction that the land will remain unchanged.

Flexibility: Easements are flexible and can be written to meet a particular land-owner's needs while protecting the property's resources.

Permanency: Most easements are permanent, remaining in force when the land changes hands. The easement holder ensures that the restrictions are maintained.

Tax Reduction: There are significant tax advantages if easements are donated rather than sold.

Charitable Taxes: The donation of a conservation easement to a land trust is treated as a charitable gift of the development rights. The donation creates a charitable tax deduction, equal to the value of the conservation easement, on the landowner's Federal and State income tax returns.

Estate Taxes: Estate taxes are significantly lower, sometimes making the difference between heirs holding onto the family land or selling it to pay inheritance taxes.

Property Taxes: Conservation easements will sometimes lower property taxes, a result of reduced valuation on property subject to the conservation easement.

Minimizes Effect of Development: Minimizes other impacts of residential development such as increased population, traffic, and demand for community facilities and services.

- Effect on neighboring properties.
- Including adequate standards to minimize on-site and spillover effects of more compact development.

Conservation Easements

A conservation easement is a legal agreement that is voluntarily entered into between a landowner and a land trust or government agency. The easement may be sold or donated by the property owner and places permanent restrictions on the use or development of land in order to protect its conservation values. In addition to government agencies, community based non-profit organizations are also acting to preserve land and rural character by accepting donations or acquiring conservation easements. Such organizations range in size from the Nature Conservancy, a nationwide organization, to small organizations with Board members from the local community. One such local organization, the Delaware Highlands Conservancy, based in Hawley, PA, operates in Pike and Wayne Counties in Pennsylvania, and Delaware and Sullivan Counties in New York. The Conservancy holds conservation easements on 10,000 acres, and participated in the conservation of another 1,500 acres.

Agricultural Land Preservation

Agricultural security areas, authorized by the Agricultural Area Security Law, PA Act 1981-43 (Act 43), are one step in the process of preserving agricultural lands and are initiated by landowners whose combined parcels total at least 250 acres. The parcels must be viable agricultural land or woodland and the agricultural security area (ASA) may be comprised of non-contiguous tracts at least ten acres in size. ASA's have been formed in Pike County in Dingman, Lackawaxen and Westfall Township with almost 4,650 acres enrolled. The Westfall Township ASA includes 925 acres.

ASA's provide protection from local ordinances which restrict farming practices and nuisance ordinances unless the local municipality can clearly demonstrate a direct public purpose for the protection of the public health and safety. The

Agricultural Security Area Criteria

- Noncontiguous farm parcels must be at least 10 acres in size. The farm tracts needed to create a new 250 acre or larger agricultural security area do not have to be under the same ownership or even be located in the same municipality. The Agricultural Area Security Law (Act 43 of 1981) allows for the creation of joint municipality agricultural security areas.
- The property should be viable agricultural land. Cropland, pasture, and woodland can all be included in an agricultural security area.
- At least 50% of the land should be in Soil Capability Classes I-IV, as defined by the county soil survey.
- The property must be zoned to permit agricultural uses.

Source: www.agriculture.state.pa.us

ASA designation also restricts land condemnation procedures by state, county and local governments without approval by the State Agricultural Lands Condemnation Approval Board. The ASA program is voluntary and not permanent, with each ASA reviewed every seven years. Individual landowners are free to sell their property and it can be developed at any time.

In other words, the ASA Program affords protection to agriculture, but is no real guarantee that the land will be preserved. Nevertheless, landowner participation in the ASA Program demonstrates an interest in continuing agricultural use of the land, and the Township will promote ASA's. (See the *Agricultural Securities Areas Sidebar*.)

The Pike County Agricultural Land Preservation Program was initiated in March 2006 by the Board of Commissioners. In addition, \$500,000 from the Scenic Rural Character Preservation Program was allocated to leverage state funds for the purchase of agricultural conservation easements. Land must be part of an ASA to be eligible for agricultural easement purchase. While woodland can be included in an ASA, a parcel of land qualifies for the purchase of an easement only if it supports an active agricultural operation on at least half of the parcel.

Tax Incentives Clean and Green

Differential assessment laws enable counties to assess agricultural land and forest land at its agricultural and forest use value instead of its fair market value. The Act 319 *Clean and Green* Program (*The Farmland and Forest Land Assessment Act of 1974*) is the most widely used in the Commonwealth with hundreds of thousands of acres enrolled statewide. The legislative intent of the Act 319 was to protect open land from development and insulate the landowners from tax increases from rising property values. The amount of tax

revenues lost from the land enrolled in the program must be shifted to the other taxpayers in the municipality to place the tax burden on those developed properties which generate the greatest demand for services.

Clean and Green is most effective and finds more participation in areas which have been recently reassessed. Generally, in counties which have not reassessed for many years, there will likely be little difference in the market value and the agricultural use value, diluting the interest in the program.

The Clean and Green Program has found widespread use in Pike County. In Westfall Township, almost 8,565 acres, some 45% of the total private land area, are enrolled in the Program. Once assumed to be cost prohibitive, the value of land in Pike County has risen to where the financial penalty is no longer a deterrent to removing land from the program. Large private holdings, including

Act 319 *Clean and Green* Program

- A ten-acre minimum parcel size or \$2,000 annual agricultural product sales is required.
- Development is precluded without penalty.
- If the landowner develops the property, the tax savings over the prior seven years must be paid in addition to a penalty of six percent.
- Three categories of land are eligible -
 - Agricultural Use - actively used for producing an agricultural commodity.
 - Agricultural Reserve - noncommercial open space land open to the public free of charge for recreational opportunities.
 - Forest Reserve - must contain trees capable of producing timber or wood products.
- Act 156 of 1998 amended Act 319 to allow a base acre, which may include a residence, farm building or other accessory building, to also qualify for the preferential assessment.

hunting-fishing clubs and summer camps, represent much of the large contiguous open spaces that maintain the rural quality of the County. These lands, many of which are in Act 319, are susceptible to development pressure.

Owning large amounts of land in the County is becoming an increasingly difficult proposition, particularly for hunting clubs. Decreasing club membership, waning interest in hunting, increasing costs of operating camps, and the overall increasing tax burden, hamper the owner's ability to maintain their land.

Specific Actions for Open Land Conservation

- Consider incorporating conservation design as a preferred option for residential development and providing density incentives as a means of encouraging conservation design.
- Evaluate providing for the use of transferable development rights and traditional neighborhood development in the Borough and Township using cooperative zoning to direct development to areas with adequate water supply and sewage disposal.
- Support the efforts of local land conservation organizations such as the Delaware Highlands Conservancy.
- Encourage and support private landowner efforts to maintain large tracts as open space.
- Cooperate with landowners and the County Agricultural Land Preservation Program in the creation of agricultural security areas and the acquisition of agricultural easements.
- Form a Township Open Space Committee to conduct education and outreach to encourage landowners to conserve land through conservation easements, TDR, and other available means.
- Consider a local municipal referendum on a modest earned income tax and other financing options to fund open space conservation.

KEY IMPLEMENTATION STRATEGIES

Overview

A plan is successful only if the policies it posits are put into action. This Land Use Plan can only be implemented by the combined effort of residents, landowners, and local officials. The following initiatives are key:

Cooperative Zoning

Two or more municipalities working together can manage land use from a regional perspective, and this is a very powerful tool to direct development to the most appropriate locations. This approach, authorized by the Pennsylvania Municipalities Planning Code if based on a multi-municipal comprehensive plan, allows great flexibility. Each participating municipality can adopt and administer its own ordinance or can adopt and administer a joint ordinance. A joint ordinance is somewhat less flexible because an ordinance amendment requires action by each participating municipality. This *Matamoras-Westfall Comprehensive Plan* will enable the Borough and Township to undertake cooperative zoning.

Planning Code Provisions for Cooperative Zoning

- §302 authorizes multimunicipal plans.
- Article VI provides the basic authority for zoning.
- §1006-A(b.1) directs the courts to *consider the availability of uses under zoning ordinances within the municipalities participating in the multimunicipal comprehensive plan within a reasonable geographic area and . . . not limit its consideration to the application of the zoning ordinance on the municipality whose zoning ordinance is being challenged* in terms of providing for all legitimate uses.
- Article XI enables municipalities to enter into intergovernmental agreements for cooperative planning and zoning.

Zoning cannot be used to exclude particular uses from a municipality, a dogma long held firm by the courts. In other words, a local municipal zoning ordinance must provide reasonable opportunity for the development of all legitimate uses including such activities as adult businesses, cell towers, solid waste disposal facilities, jails, and drug treatment centers.

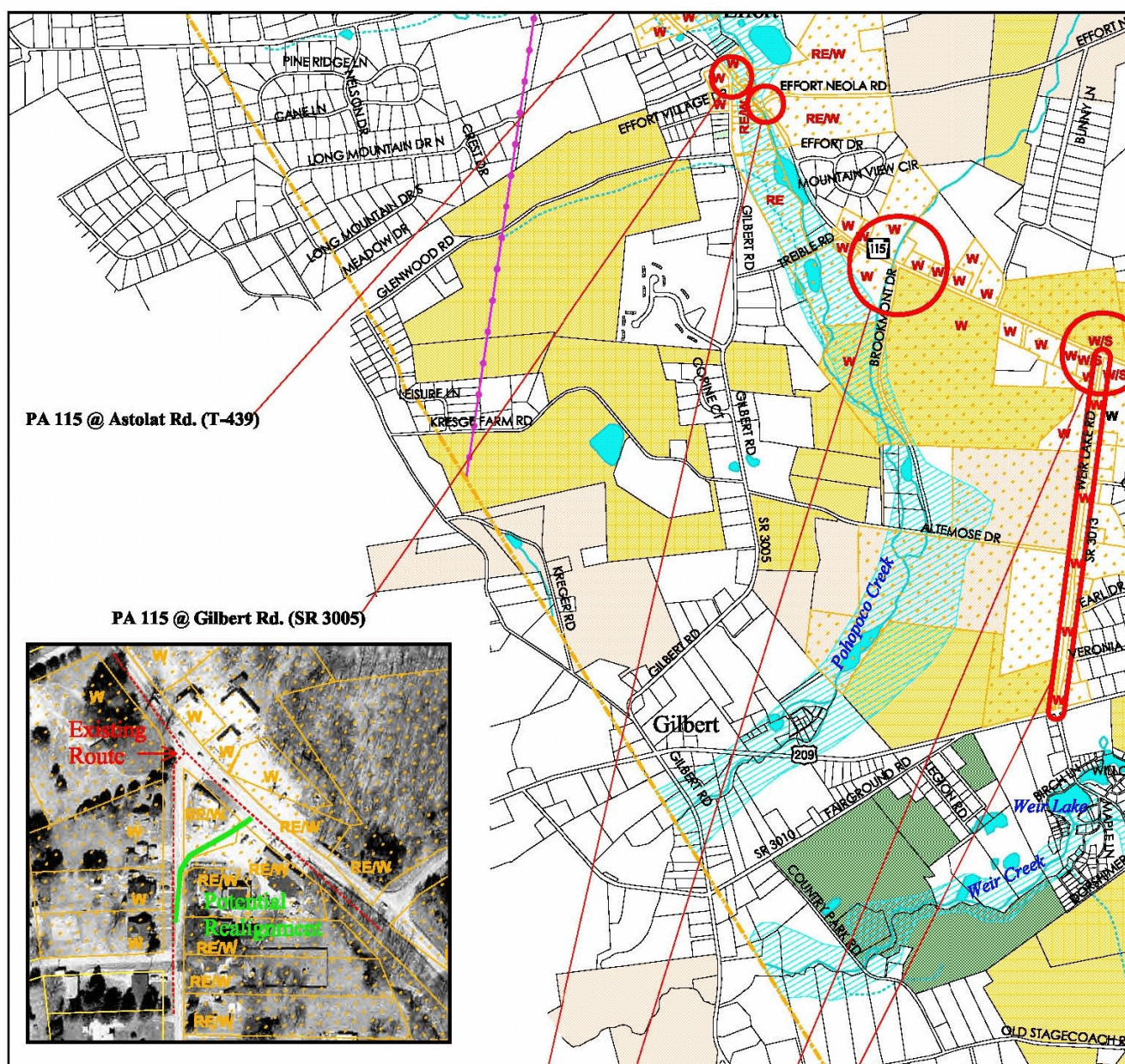
Cooperative zoning enables participating municipalities to spread the range of legitimate uses around the entire area, each not having to provide for every use within individual municipal boundaries. The MPC requires a joint comprehensive plan and formal inter-municipal implementation agreements between all municipalities participating in cooperative zoning. Other benefits derived from cooperative zoning include the ability to address land use on an area wide basis, less duplication of effort, shared manpower and decreased staff costs, and the option of using one zoning hearing board.

Cooperative Zoning Actions

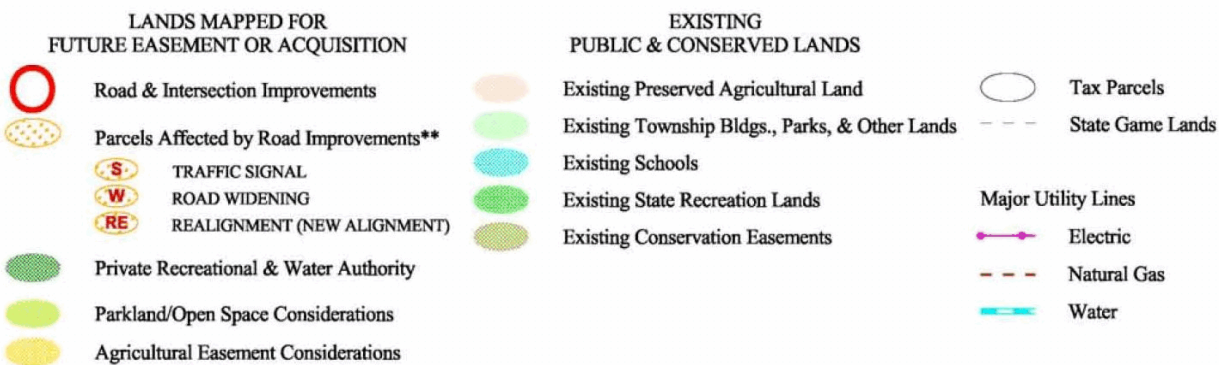
- Following the adoption of the *Comprehensive Plan*, appoint a Borough-Township ad hoc committee to consider cooperative zoning and make recommendations to the Borough Council and Township Board of Supervisors.
- Develop a cooperative zoning plan based on existing land use, current zoning districts, potential impacts of land use types, and available or proposed infrastructure.
- If deemed beneficial, enter into intermunicipal agreements and make the necessary zoning changes.
- Include the uses allowed in the Westfall Township ED and GC Zoning Districts in the evaluation of providing the Planning Area's *fair share* of land uses.

The Official Map

Article IV of the Pennsylvania Municipalities Planning Code grants the authority to municipalities to adopt an official map. The official map shows the location of areas which the municipality has identified as necessary for future public streets, recreation areas, and other public grounds, or for open space. By showing the area on the official map, the municipality puts the property owner on notice that the property has been identified for future acquisition for a public facility or purpose or for open space. The municipality may refuse to issue a permit for any building or development on the designated parcel; however, the municipality has up to one year to purchase the property, or an easement in the case of open space, upon notice by the owner of intended development.



Excerpt, Official Map, Chestnuthill Township, Monroe County, PA



This little used land use management tool can be invaluable for minimizing the cost of public facilities and open space acquisition. The Borough and Township should consider the adoption of an official map as part of its long term planning for community facilities and open space preservation. By setting aside funds for the eventual fee purchase or easement acquisition of priority open land areas, municipal resources can be used to the best long term advantage, ensuring that open land preservation is a coordinated effort rather than uncoordinated reactions to unanticipated needs.

What should be shown on the Official Map?

The official map should show existing public lands, public roads and other public facilities and anticipated municipal facility needs and parcels for potential open space acquisition in fee or by easement. For example, the municipality could designate a specific parcel for a municipal park or building, or intersections requiring improvement can be shown to ensure that additional building improvements do not add to the cost of right-of-way acquisition.

What are the benefits of the Official Map?

- *Provides for the coordination of public and private goals* - Property owners are informed, up front, of long range municipal goals for roads, parks, other public facilities and conservation easements. This allows development plans to be adjusted before detailed and costly plans are prepared.
- *Provides an effective method for implementing the Comprehensive Plan, the Open Space Plan and other planning goals* - Most municipalities rely primarily on their zoning and subdivision ordinances to advance their future land use goals. The official map provides an additional and highly effective tool to ensure that a municipality is developed in accord with its land use policies. It is particularly effective for achieving transportation and community facility goals. The implementation of an open space or park and recreation plan can benefit from the designation of existing and proposed parks, related facilities and conservation easements on the official map.
- *The municipality can plan ahead to provide community facilities, parks and open space important to the community* - By setting aside funds for the eventual purchase or easement of the identified areas the municipality can use limited resources to the best long term advantage. Priorities can be established instead of reacting to unanticipated needs undertaking uncoordinated acquisitions.
- *Provides support for grant applications* - When the municipality applies for grants or other funding, the official map can provide an advantage. Including specific features on the official map indicates a commitment to purchase the land or easement and/or make improvements. For example, mapping future parks or recreation facilities demonstrates that the municipality has planned ahead for these improvements, and could be considered when grant applications are reviewed.

Official Map Actions

- Consider an official map for the Borough and the Township as part of the cooperative zoning planning process.
- Include on the maps needed community facilities and road and intersection improvements, and critical open space areas identified in this Comprehensive Plan.

- Prepare and adopt the official map and required ordinance in accord with Planning Code Article IV.

SPECIFIC ZONING ORDINANCE CHANGES

Each Zoning Ordinance

- Include the uses allowed in the Westfall ED and GC Districts in the evaluation of providing the Planning Area's *fair share* of land uses which could enable allowing fewer residential uses in commercial districts.
- Review, update and add standards (§124-20 - Performance Standards in Matamoras Borough and Article 5 - Environmental Protection in Westfall Township) to ensure adequate provisions for:

Yards, Buffers and Screening
Landscaping
Operations and Storage
Radioactivity or Electric Disturbance
Noise
Vibration
Lighting and Glare
Smoke
Odors
Other Forms of Air Pollution
Surface and Ground Water Protection
Storm Water Management and Soil Erosion Control
Waste Materials
Settling and/or Storage Ponds and Reservoirs

Matamoras Borough Zoning Ordinance

- Evaluate the range of uses allowed in the C-1, C-2 and I Districts to ensure compatibility with existing uses and appropriateness of location.
- Review and update the District Intent for each District to be consistent with any changes in uses.
- Assess the possibility of eliminating the small C-1 and C-2 Districts which are surrounded by the R-1 District.
- Include landscaping standards in §124-20 for nonresidential uses and multi-family dwellings and in §124-18 for parking lots, and link the standards to the SALDO landscaping requirements.
- Determine if and where accessory windmills are appropriate in the Borough, and include the necessary standards in §124-15.

Westfall Township Zoning Ordinance

- Provide a Schedule of Uses for each zoning district to list all uses allowed in the district classified as permitted by right, special exception, conditional use and accessory. This will complement the current tables and facilitate the understanding and use of the Ordinance.
- Include a Schedule of Uses for the ED and GC Districts to ensure the full details are part of the Zoning Ordinance.

- Evaluate the appropriateness of residential uses in the C-1, C-2 and C-3 Districts in terms of reserving adequate areas for commercial and industrial development.
- Include in §402,A standards for wind energy facilities (wind farms).
- Consider updating the landscaping standards (§804) and buffer requirements (§803,D) for nonresidential development, multi-family dwellings and parking lots.

NATURAL RESOURCES PROTECTION PLAN

INTRODUCTION

Overview

Located along the Delaware River, the Matamoras-Westfall Planning Area rises from the River Valley beyond the bluff line (the Allegheny Front) to the interior wooded highlands. This landscape gives the Planning Area its distinctive character and is an integral part of its unique history attracting residents and recreation visitors. The Borough and Township, and all of Pike County, have long been blessed with an abundance of natural resources—clean water, forests, and wildlife—providing a high quality of life for many years. Access to the Delaware River and the large expanses of private forest land and open space, combined with thousands of acres of State Forest Land, and the clean environment, are critical to the Planning Area's quality lifestyle.

Although the open space and forest land is extensive, the natural resources and environmental quality of the Planning Area are very fragile. Clean plentiful water, pure air, open space, vegetation and wildlife can be irreparably damaged by development undertaken without concern for the natural environment and careful planning and land use control. As the area continues to grow, it is incumbent upon the Borough and Township to work together to preserve the health, safety, and welfare of its residents, as well as the identity and heritage of the community. Natural resource protection is a necessary step in accomplishing this task.

The Plan

Protection of natural resources is an important issue as expressed by Borough and Township residents. The Natural Resource Protection Plan addresses concerns related to land and water resources. It is intended to introduce contemporary conservation and management practices to derive the maximum benefit for the health and safety of Planning Area residents and visitors.

NATURAL RESOURCES GOAL AND OBJECTIVES

Natural Resources Goal:

Conserve natural resources and open space and use the resources in a way to sustain the area's economy, including maintaining a strong connection to the Delaware River.

Without careful planning and management, the use of the natural resources and sensitive environmental areas in the Matamoras-Westfall Planning Area can lead to the decline of community character and the quality lifestyle it affords, with eventual direct threats to the environment and public health and safety. Of special concern are streams, ground water, forest and soil resources. If the quality of the area's natural resources are diminished, the

The purpose of conservation: The greatest good to the greatest number of people for the longest time.
- Gifford Pinchot

Recognize the right and duty of this generation to develop and use our natural resources, but I do not recognize the right to waste them, or to rob by wasteful use, the generations that come after us.
- Theodore Roosevelt

If we learn, finally, that what we need to "manage" is not the land so much as ourselves in the land, we will have turned the history of American land-use on its head.
- Gaylord Nelson, Founder of Earth Day

quality of life and the local economy will suffer.

OBJECTIVES:

Conservation and Sensitive Natural Areas

Conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, flood plains and wetlands, by setting them aside from development.

- Identification - Identify sensitive natural areas such as wetlands, surface water, groundwater recharge areas, woodlands, steep slopes, poor soils and flood plains, and adopt regulations to protect such areas by requiring resource sensitive development.
- Critical Resource Areas - Promote the conservation of open space within the Planning Area and the County and actively promote the long-term preservation and maintenance of valuable natural resource areas through public negotiated acquisition, private dedication of easements, and other cooperative efforts.
- Land Use Ordinances - Evaluate and develop land use ordinances to minimize effects on natural resources with the goal of maintaining open space to the greatest extent possible while allowing a reasonable density of development.
- Development Incentives - Adopt and implement municipal policies to conserve a variety of irreplaceable and environmentally sensitive resource lands, including provisions for reasonable incentives to create a greenway and trail system for the benefit of present and future residents.
- Conservation Design - Use *conservation subdivision design* to cluster residential development away from important natural, historic, scenic and cultural features, and preserve the resulting open space.
- Transferable Development Rights - Use transferable development rights to direct development to locations with adequate infrastructure and enable conservation-minded landowners to preserve their properties.
- Area Wide Cooperation - Coordinate environmental preservation efforts with neighboring jurisdictions, and establish an action plan targeting environmental concerns that require a regional approach.
- Economic Development - Encourage local economic development groups to make natural resource protection an integral part of all promotion efforts.

Water Supply and Quality and Surface Water Quality

Protect the supply and quality of drinking water and protect surface water quality.

- Source Water - Identify important source water areas and inform consumers about the protection of their drinking water.
- E & S Control - Reduce erosion and sedimentation by requiring compliance

with DEP regulations

- Stormwater - Adopt an up-to-date stormwater ordinance to control runoff through the use of BMP's.
- Water Quality - Consider the impacts of residential and nonresidential development on water quantity and quality and encourage the use of best management practices.
- Sewage Disposal - Monitor the effectiveness of on-lot sewage disposal systems and evaluate central sewage disposal as a means of correcting any widespread problems.
- Well Ordinance - Apply well construction standards with a well ordinance in areas not served by community water supply.
- Community Water Supplies - Apply well head protection standards to maintain good drinking water quality.

Wildlife Habitat

Protect critical wildlife habitat areas.

- Pike County Natural Heritage Inventory - Protect sites of rare, threatened, and endangered species as identified in the Pike County Natural Heritage Inventory.
- Forest - Conserve large forested areas to protect wildlife habitat.
- Corridors - Protect important wildlife corridors, consisting of networked open space areas and stream corridors.

Ridge Lines and Scenic View Sheds

Conserve ridge lines and scenic viewsheds.

- Development Standards - Consider measures that will preserve the characteristics of important ridge lines and scenic viewsheds by limiting the amount and type of clearing associated with development.

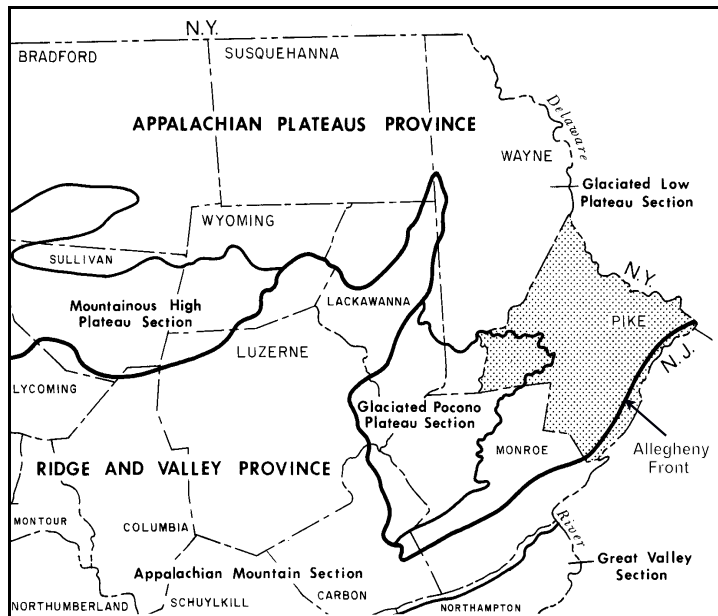
EXISTING CONDITIONS

Overview

The discussion of existing conditions provides an inventory of the Planning Area's natural features, issues related to their current state, and protections afforded by the Borough and Township and other regulatory agencies. The inventory includes physiography, topography, and geology; soils; forest and vegetative cover; watersheds, streams and lakes; wetlands; floodplain; and critical habitat. The assessment of existing conditions forms the basis of future planning policy recommendations and implementation strategies. The various elements of the natural environment must be conserved because the environment has a finite, limited capacity for development. And, given the interrelationship of all elements of the environment, a change in one element will result in an often unexpected effect on another element.

Physiography and Topography

The uplands of Westfall Township and most of Pike County are located within the Glaciated Low Plateau Section of the Appalachian Plateaus Province, a



Physiographic Divisions of Northeastern PA



The Allegheny Front

land classification based on geologic formations and landscape characteristics. The Glaciated Low Plateau Section of Pennsylvania occupies the northeast corner of the state stretching from Pike and Monroe counties west to Tioga County in north-central Pennsylvania. Characterized by rounded hills and valleys formed by fluvial and glacial erosion and glacial deposition, local relief is low to moderate. The relatively level River Valley lies below the Allegheny Front, the escarpment which parallels the Delaware River and which dominates the landscape.

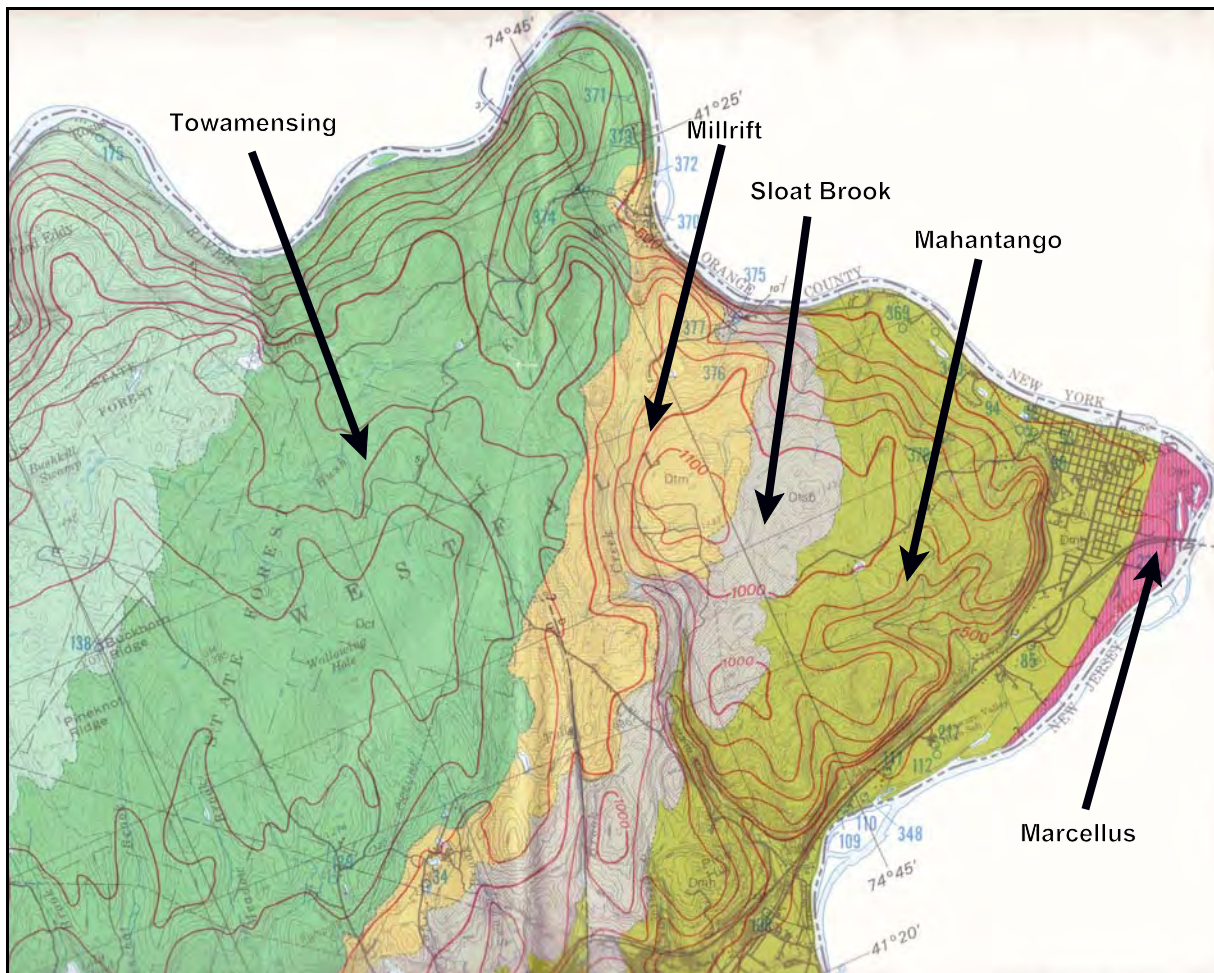
Elevations in the Planning Area rise from 400 feet above sea level along the River, with a rapid increase to 800 feet atop the escarpment, to almost 1,500 feet at the summit of Buckhorn Ridge near the border of Shohola Township. The steepest slopes in the Planning Area are obviously found along the escarpment with additional steep slopes found most consistently on ridge tops and along the stream and other drainage corridors.

Planning Implications: Steep Slopes

Steep slopes in the Borough are not an issue and most of the Township falls below the 25 percent steep slope threshold, so steep slopes are not significant in terms of limiting overall development. Nevertheless, disturbance of steep slopes and vegetation alters topography and drainage, contributes to slope instability and erosion, and the increased stormwater runoff diminishes groundwater recharge and exacerbates flooding.

Although development on steep slopes is technically feasible, development costs increase dramatically as the slope increases. Environmental concerns also escalate. For example, soil erosion control and stormwater management are more difficult on steep slopes because rainfall run-off volume and velocity increase. In addition, on-site, subsurface sewage disposal systems require special engineering design on slopes over eight percent and are entirely prohibited if the slope exceeds twelve percent.

Enhanced protection measures are needed to maintain slope stability, prevent



Geologic Formations

erosion, and ensure a safe and adequate groundwater supply.

Geology and Hydrology

Geology, the underlying fundamental natural feature, shapes other features including topography, soils, vegetation, and hydrology. The physical characteristics and geographic patterns exhibited by these features are in large part a result of underlying geologic formations and processes along with the more recent glaciation. Groundwater supply is also largely dependent on geology.

The geology of the Planning Area and the region is characterized as follows:

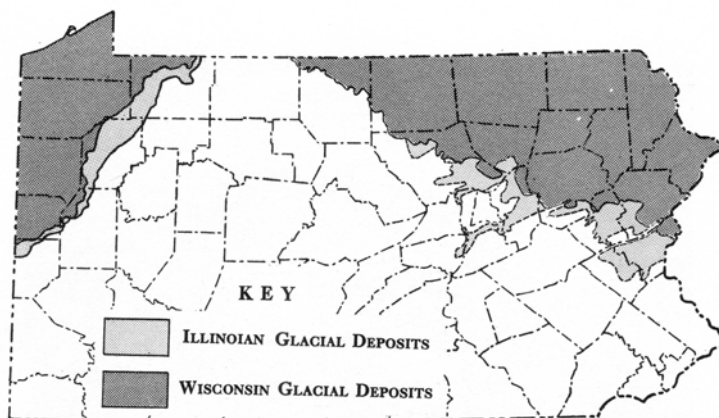
- The region's geologic structure is folded. The underlying rock types are primarily sandstone, siltstone and shale. Pike County as a whole is underlain by rocks of the Devonian Age which are 365 to 405 million years old.
- Rocks which outcrop in the Planning Area are of the Catskill, Trimmers Rock, Mahantango, and Marcellus Formations, bedrock types coinciding with topography as exposure changes along with elevations. The Catskill Formation is associated with the higher elevations while the Marcellus is found in the lowest parts of the River Valley, with the other formations exposed at intervening elevations.

- The exposure of the formations transverses the Planning Area in an southeast / northeast direction.
- Water is in abundant supply. Geologic formations and their aquifer yields are as follows:¹
 - Catskill Formation (Towamensing Member) - Excellent supplies for domestic wells; median yield is 30 gal/min. Adequate supplies for non-domestic wells. Soft water. Maximum thickness 1,625 feet.
 - Trimmers Rock Formation (Mill Rift Member and Sloat Brook Member) - Adequate supplies for domestic wells. Median yield is 20 gal/min for domestic wells and 60 gal/min for non-domestic wells. High manganese concentrations in places. Maximum thickness 1,825 feet.
 - Mahantango Formation - Adequate supplies for domestic and nondomestic wells. Median yield is 20 gal/min. Slightly basic, soft to moderately hard water. Maximum thickness 2,450 feet.
 - Marcellus Formation - Not a major aquifer in Pike County. Maximum thickness 950 feet.

Glaciers in Pike County

The glaciation in Pike County has had considerable effect on the soils and groundwater water supply by depositing varying depths of overburden on the underlying rock formations.

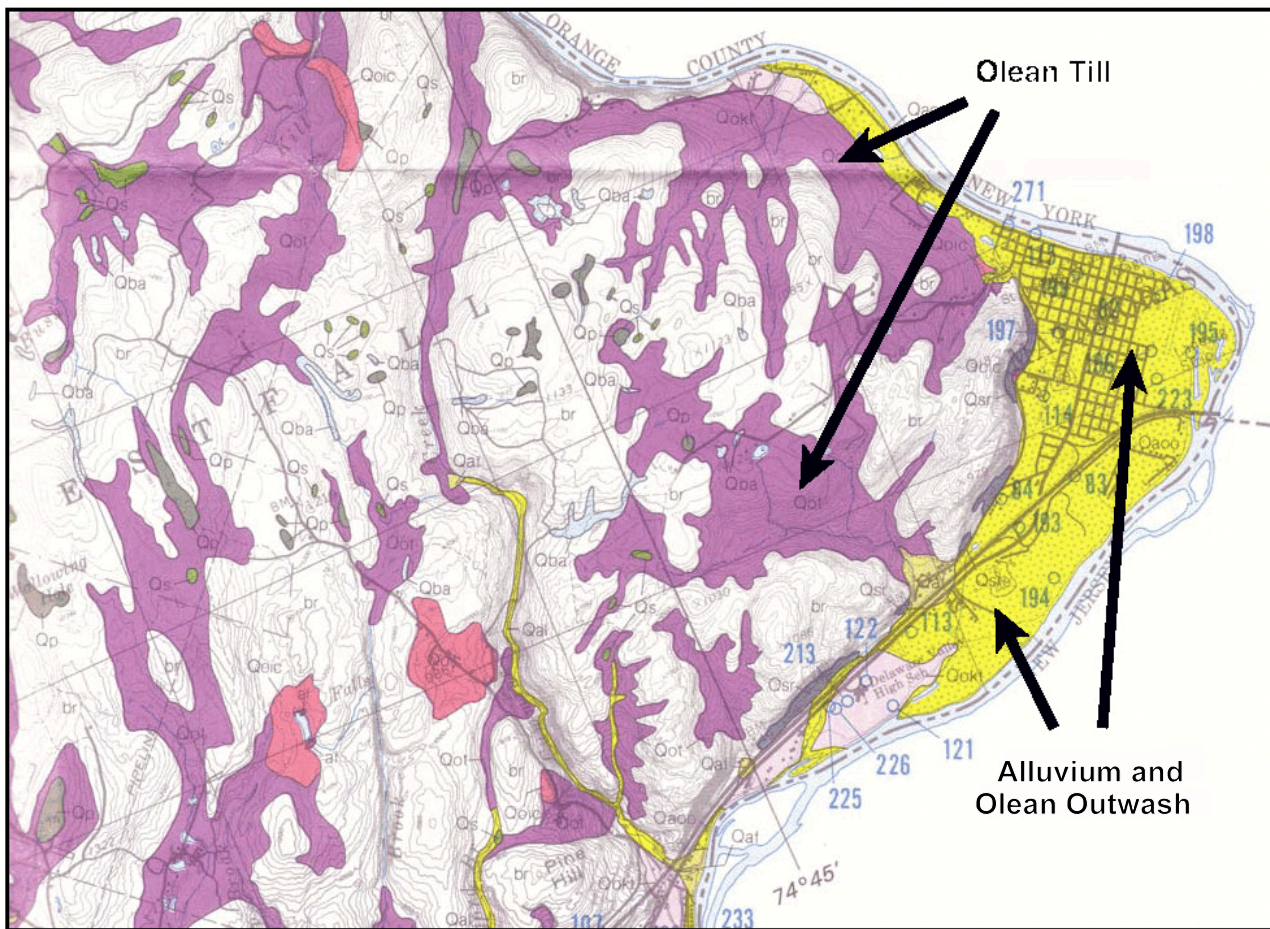
The 1969 *Soil Survey of Pike County* notes: *Pike County was covered by at least two great continental ice sheets. The most recent one, called the, Wisconsin glacier, retreated about 12,000 to 14,000 years ago (after having formed some 70,000 years ago). (See the Glacial Deposits in Pennsylvania Figure.) Features typical of a glaciated landscape, such as drumlins, eskers, and terminal moraines, are not conspicuous. There are, however, some small gravelly kames adjoining on the plateau. Many of the small valleys are filled with glacial drift. The river valleys are filled with stratified sand and gravel in which the content of silt and clay is low. These materials were laid down in rapidly running water that carried away the finer materials.*



Glacial Deposits in Pennsylvania (Source: *Pennsylvania and the Ice Age*, Commonwealth of Pennsylvania, 1962.)

Generally, throughout the uplands the glacial material was derived from the preglacial soils and from rocky materials that were broken off and ground up by the glaciers. The loose material was overridden by the glaciers and some of it was carried in the glacier when the ice melted, leaving the surface covered by unconsolidated deposits that had been derived mainly from the local bedrock. These deposits range in thickness from a few inches to hundreds of feet.

¹ *Water Resources Report 65, Groundwater Resources of Pike County, Pennsylvania*, Pennsylvania Topographic and Geologic Survey, D. K. Davis, 1989, Plate 1, and p. 8.



Significant Glacial Deposits

Muck and peat occur in the many kettles and closed depressions that were formed when the ice melted or the stream valley became blocked. These depressions were filled with water; plants grew and died in them; and organic remains accumulated in some places to a thickness of tens of feet.

The time since the Wisconsin glacier retreated and exposed these materials to weathering and soil formation has been so short that only indistinct soil horizons have formed. There is very little evidence of the formation and movement of clay in the soils formed in glacial till. Iron compounds have been oxidized, however, and enough weathering has taken place to form weakly expressed soil colors that differ from those of the glacial till.

Significant Glacial Deposits

Much of the Planning Area is covered by material deposited by the Wisconsin Glacier.² While these deposits typically yield groundwater of good quality and more than adequate supply, the rapid percolation rates can result in groundwater contamination.

- Olean Till is found primarily on lower slopes and stream valleys with depths of 6 to 200 feet. This unsorted and non-stratified mixture of clay, silt, sand,

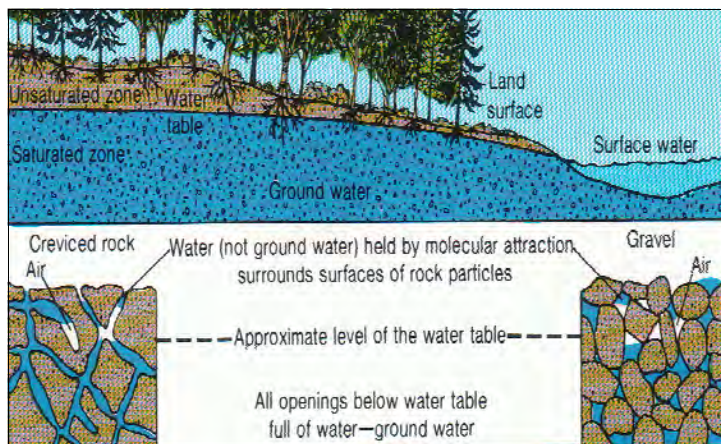
²Water Resources Report 65, *Groundwater Resources of Pike County, Pennsylvania*, Pennsylvania Topographic and Geologic Survey, D. K. Davis, 1989, Plate 2.

pebbles, cobbles and boulders is reported as a good aquifer with a median yield of 28/gal/min for domestic wells.

- Most of the River Valley is Covered with Alluvium and Olean Outwash. *Outwash consists of unconsolidated, stratified sand and gravel, and some boulders. Alluvium consists of only silt and very fine grained sand on floodplain surfaces and coarser material in stream channels. Combined thickness ranges from several feet to 501 feet in Matamoras. Probably the best aquifer in Pike County. Non-domestic wells have reported yields up to 350 gal/min.*

Groundwater

Groundwater is subsurface water in the saturated zone - the zone in which all



the spaces or interstices in the rocks, ideally, are filled with water under pressure equal to or greater than atmospheric pressure. Rocks that are capable of yielding usable supplies of water to wells or springs are called aquifers. Ground water occurs in joints, bedding planes, faults and other fractures in the rock. The extent to which the rock is fractured, its density and size will all contribute to its ability to store and move water. In unconsolidated rock, water is stored and moves through the openings in these deposits. In consolidated rock aquifers, water moves primarily through fractures, joints and along bedding planes.³

Water Bearing Geology

Matamoras Borough and Westfall Township rely entirely on groundwater for domestic water supply, with most of the supply pumped from deep wells. The Matamoras Water Authority supply and distribution system serves the Borough and adjacent sections of the Township. Two of the Authority's four active well sites are located in the Borough in the Alluvium and Olean Outwash and two are in Westfall Township in the Mahantango Formation.

The balance of the Township is served by wells sited on individual lots or by small private water companies. Based on available studies and with long term consumption primarily residential and commercial, and large areas of undeveloped land for recharge, it appears that the overall supply of groundwater in the Planning Area and all of Pike County should be adequate to sustain development and meet the needs of the foreseeable future.

Groundwater Recharge

Groundwater Resources of Pike County concludes that the average groundwater recharge rate in Pike County is 915,000 gallons per day per square mile.⁴ Most groundwater in Pike County and the Planning Area moves from upland and hillside recharge areas down gradient with discharge to

³ *Water Resources Report 65, Groundwater Resources of Pike County, Pennsylvania*, Pennsylvania Topographic and Geologic Survey, D. K. Davis, 1989, p. 11.

⁴ *Ibid.*, p. 10.

Groundwater Recharge Rates

In 1989, the Pennsylvania Topographic and Geologic Survey estimates in *Water Resources Report 65, Groundwater Resources of Pike County, Pennsylvania*, that in Pike County *the average groundwater discharge is estimated to be about 635 (gal/min)/m², twice the amount estimated for most areas of Pennsylvania*. Based on this, groundwater recharge in Pike County is about 900,000 gallons per day per square mile of land area.

In 1964, the U.S. Geological Survey reported that a conservative estimate for recharge in the Highlands of the Delaware River Basin was 750,000 gpd/sq mi. (*Water Resources of the Delaware River Basin*, Geological Survey Professional Paper 381, U.S. Department of the Interior, Parker, Gerald G, et. al., 1964, p. 91.)

In 1982, a Delaware River Basin study of the Upper Delaware Basin reported:

- a recharge rate of about 1,000,000 gpd/sq mi for the Upper Pocono Plateau. (*Special Groundwater Study of the Upper Delaware River Basin Study Area III, Volume I*, Delaware River Basin Commission, Wright Associates, R.E., 1982, p. 3-10.)
- normal year recharge rates in the Upper and Lower Pocono Plateaus range from 900,000 to 1,000,000 gpd/sq mi and during a normal year, recharge to the Catskill formation, which underlies Pike County, is about 930,000 gpd/sq mi. (*Special Groundwater Study of the Upper Delaware River Basin Study Area III, Volume II*, Delaware River Basin Commission, Wright Associates, R.E., 1982, p. 8-3.)

streams. Alluvial and glacial deposits are also good recharge areas. Comparison of this recharge rate to the volumes of groundwater extracted for residential and commercial use, the only significant water uses in the Planning Area (and County), indicates that *no long term decline in (ground) water levels has occurred... although cones of depression can extend a few thousand feet from heavily pumped wells during the summer*.

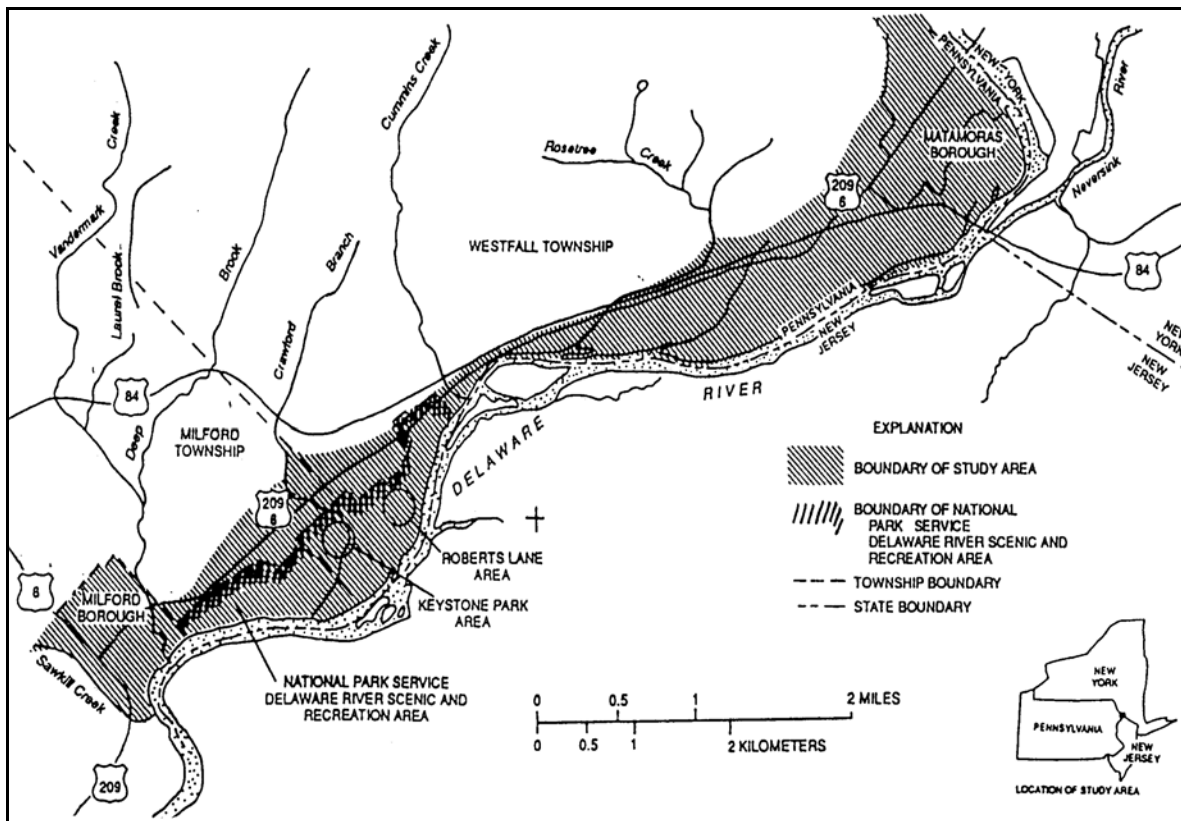
Planning Area Groundwater Recharge

Given the land area of 30.3 square miles, average groundwater recharge in the Planning Area, using a conservative factor of 65% undeveloped land, is estimated to range from 14,800,000 to 19,700,000 gallons per day. Engineers typically use an estimate of 250 gallons per day per dwelling unit when designing water systems and, applying this factor to the number of dwelling units in the Planning Area, about 2,200, yields an estimated 550,000 gallons per day in residential water use. Commercial water use would add additional amounts, but the total is well below the estimated recharge rate.

Planning Implication: Need for Groundwater Conservation

However, this is not to suggest that residents and local officials should ignore the important issues of localized groundwater supplies and groundwater conservation. This is particularly important as development occurs. Wells near large water uses can be drawn down resulting in inadequate supply. Increases in impervious areas such as buildings, driveways and roads inevitably leads to more stormwater runoff and less groundwater recharge. In addition, given the characteristics of aquifers, development in the region can also affect local groundwater availability. Potential contamination of groundwater can also reduce the supply of potable ground water.

Simply stated, groundwater availability is a regional issue and adequate supply is not a valid reason for postponing or avoiding action to ensure continued adequate supply.



Nitrogen and Chloride Study Area

Nitrogen and Chloride Aquifer Study⁵

The U.S. Geological Survey, in 1994, published a study that assessed the effect of septic systems and road and parking lot runoff on groundwater quality in the glacial outwash and kame-terrace aquifer underlying the Route 6/209 corridor between Milford and Matamoras. Nitrates and chlorides from these sources can move through the soil into the groundwater and elevate concentrations above the safe drinking water limits - 10 mg/l for nitrates and 250 mg/l for chloride. While no critical levels of nitrates were identified and chlorides were largely relatively low, the study does show the vulnerability of the sand and gravel aquifer. The study noted that *groundwater quality in the glacial aquifer is threatened by salts and nutrients*. Chlorides in wells near an old tanning business in Westfall Township registered chloride concentrations up to 680 mg/l from contamination via discharge to a septic system.

- Nitrate concentrations ranged from 0.05 to 5.1 mg/l (median of 1.1 mg/l).
- More nitrogen originated from septic tanks than road runoff.
- Chloride concentrations in the non-contaminated areas ranged from 2.1 to 32 mg/l (median of 17.5 mg/l).
- Concentrations were related to septic system density and proximity to major roads.
- *Elevated nitrate concentrations in groundwater are possible in the boroughs of Milford and Matamoras given the density of septic systems.*

⁵ *Geohydrology of, and Nitrogen and Chloride in, the Glacial Aquifer, Milford-Matamoras Area, Pike County, Pennsylvania*, Water Resources Investigations Report 93-4109, U.S. Geological Survey and Pike County Planning Commission, L.A. Senior, Lemoyne, PA, 1994.

The Pike County Planning Commission and the Pike County Conservation District continued a limited sampling program from 1991 through 1998 to assess changes in nitrate and chloride concentrations. The raw data appeared to show no significant increases; however, no scientific analysis of the data was ever conducted.

**Planning Implications:
Groundwater Quality**

No less important is the issue of water quality. No significant groundwater contamination problems have been reported in the Planning Area. However, the potential for groundwater contamination is always present. Bacterial contamination can occur from malfunctioning on-lot sewage systems or poor livestock husbandry. Hydrocarbons can eventually reach groundwater from oil spills or leaking storage tanks, and nitrates and chloride can infiltrate as run-off from roads and parking lots, sewage systems, and farm fields. Similar to conservation of ground water supplies, quality protection must be addressed.

The Matamoras Water Authority conducts routine water quality monitoring in accord with state requirements and water quality is good. However, given the reliance on groundwater for domestic purposes, in combination with the extensive use of on-site disposal systems, it is vital that groundwater quality be carefully monitored throughout the entire Planning Area. Proper siting, design, installation and maintenance of on-site disposal systems and water supply wells, and groundwater quality, must continue to be a municipal concern and proper land use controls must be applied to protect groundwater recharge areas from potential contaminants.

Land Use and Water Quality and Quantity

Surface water and groundwater quality and quantity can be affected by land use in the following ways:

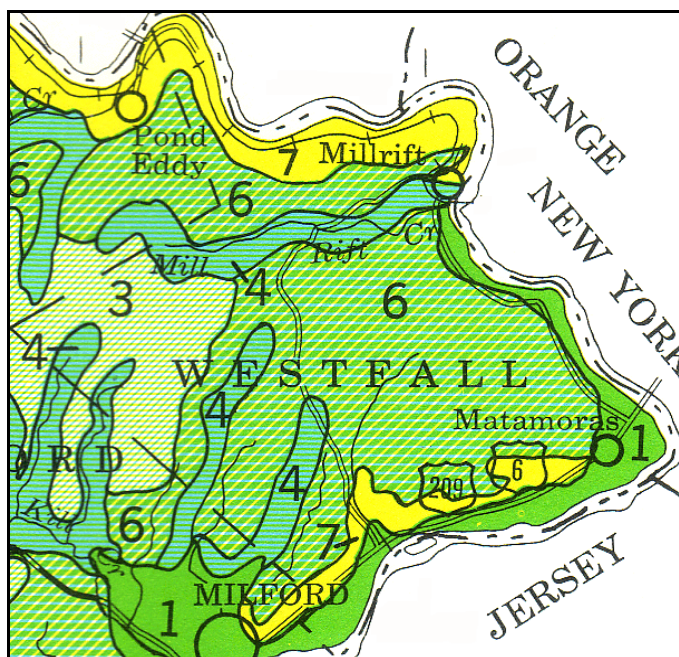
- Large amounts of sediment can enter streams from farms and construction sites, and pollutants can wash off lawns, parking lots, and industrial properties.
- Removing vegetation adjacent to streams (riparian buffers) can increase stream bank erosion, raise water temperature, and allow non-point source pollutants to enter the stream.
- Channelizing streams during development can result in stream bank erosion and increase flooding and siltation problems downstream.
- Solvents and other liquids associated with non-residential development can leak or be spilled onto the ground, and eventually reach the groundwater.
- Homeowners who dispose of toxic household cleaners, pesticides, oil and other similar products can cause surface water and groundwater contamination as well.
- Failing on-lot sewage disposal systems can allow partially treated sewage to reach surface or ground water.
- Groundwater recharge can be hindered as impervious surfaces increase with development.
- Stormwater systems that remove stormwater quickly from a site and direct it into nearby streams reduce the amount of precipitation that infiltrates the ground (and eventually the underlying aquifers) and increases stream bank erosion and downstream flooding.

Source: *Upper Hanover Township Comprehensive Plan*, 1994, Montgomery County Planning Commission.

Soils

The land's suitability for development largely determines the character of a community's land use, and the most basic component of the land is its soil. Beyond the basic function of the production of food and fiber, soils may either limit or foster community growth depending upon specific soil characteristics. Soils influence local vegetative cover, hydrology, and land use patterns and activities. The *Conservation Opportunities Map* accompanying this *Plan* shows steep slopes, wetlands, hydric soils and floodplain, all of which affect soil suitability for development.

Variables in the formation of soils include climate (precipitation and temperature affecting weathering), biological activity in the forming soil, the parent material (e.g., bedrock vs. glacial material), topography (e.g., steep slopes vs. flood plain), and time. Given this complexity, it is understandable that a number of soil series (i.e., groups of soils formed from a particular parent material and exhibiting similar soil horizons) and many different soil types are found in the Planning Area.



Soil Associations (Source: Pike County Soil Survey.)

The soils have been evaluated for planning purposes by the U.S. Department of Agriculture, Natural Resources and Conservation Service (NRCS) for suitability for such uses as agriculture, community development, recreation, and sewage disposal. This detailed information is reported in the digital *Soil Survey of Pike County, Pennsylvania*, which should be consulted for site specific information. Five of the seven major soil associations identified in Pike County are found in the Township and are shown on the *Soil Associations Figure*, and are described in the *Soil Associations Table*.

The origin of formation of soils in the Planning Area resulted in the soil characteristics effecting sewage disposal alternatives -- permeability, depth to bedrock, high water table due to fragipan and stoniness. Most of the parent material of the soils in the Planning Area were glacial till and outwash sand and gravel, resulting in stoniness in many areas and the occurrence of fragipan that inhibits the downward movement of water.

SOIL ASSOCIATIONS

- | | |
|---|--|
| 1 | Chenango-Tunkhannock-Tioga association: Deep, well-drained, nearly level to gently sloping, dominantly gravelly soils on low terraces in major stream valleys |
| 3 | Wurtsboro-Mardin-Swartswood association: Deep, moderately well drained and well drained, gently sloping to sloping, loamy soils on the uplands |
| 4 | Volusia-Tughill-Morris-Norwich association: Deep, somewhat poorly drained to very poorly drained, nearly level to sloping, loamy soils having concave slopes; in valleys and closed depressions on uplands |
| 6 | Dekalb-Manlius-Oquaga association: Moderately deep and deep, well-drained, gently sloping to steep, very stony and shaly soils on uplands |
| 7 | Stony land-Rushtown association: Chiefly steep, stony and shaly areas along the river bluffs |

It is important to remember that each of the broad associations is comprised of a variety of soil types of varying characteristics. The soil series is the most specific and consists of soils with similar horizons in terms of color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in profile. Some soils are more suitable for development than others and site specific investigations are required. The soil data shows that many Planning Area soils are severely constrained for development.

SOIL ASSOCIATIONS
<u>Association 1 - Chenango-Tunkhannock-Tioga</u> <ul style="list-style-type: none"> - most nearly level to gently sloping terraces and flood plain deposits - stratified silt, sand and gravel, some cobbles; deep and well drained - most have been cleared and farmed, later developed as the Borough, much of the best farmland in County
<u>Association 3 - Wurtsboro-Mardin-Swatswood</u> <ul style="list-style-type: none"> - gently sloping to sloping soils of the uplands formed in gray glacial till and very stony - only small areas were cultivated - fragipans exist in many areas
<u>Association 4 - Volusia-Tughill-Morris-Norwich</u> <ul style="list-style-type: none"> - upland areas where surface drainage is slow to very slow - developed in red and gray glacial till derived from siltstone and sandstone, fairly large areas are stony - fragipans in many areas or are poorly drained - severely for development limited due to high water table
<u>Association 6 - Dekalb-Manilus-Oquaga</u> <ul style="list-style-type: none"> - extensive in Westfall Township - gently sloping to steep along streams or on high ridges where glaciers left only a thin layer of till or residium - some are moderately deep to deep and well drained but often stony
<u>Association 7 - Stony Land - Rushton</u> <ul style="list-style-type: none"> - steep and very steep areas adjacent to the Delaware River Valley - includes the major escarpments facing the River and sides of valleys cut into eastern edge of the uplands - mostly exposed shale, siltstone and sandstone bedrock - droughty Rushton soils are found at the foot of the slopes in deposits of shale chips - vegetation is sparse
Source: <i>Pike County Soil Survey</i> , U.S. Department of Agriculture, 1969

Soils: Findings

- Soil conditions, along with slope and underlying geology, pose severe limitations to septic absorption throughout the Planning Area. Poorly renovated effluent from existing sewage systems on poor soils poses a threat to the quality of surface waters and groundwater supplies. This is of particular concern for sewage systems installed prior to DEP sewage regulations adopted in the early 1970's.
- Soils with limiting zones at depths of twenty inches or more may be suitable for a sand mound, as determined by field investigations. This is evidenced by the number of dwellings constructed since 1970. As DEP researches and permits new on-lot sewage disposal system, more areas may become suitable for on-lot sewage which relies on soils.
- Poor soil conditions in much of the Township's uplands present a major challenge to the traditional development type consisting of single-family dwellings with on-lot septic. Site-specific investigations are required to identify suitable areas.
- Shallow seasonal high water tables and hydric soils are found throughout the Planning Area in low-lying areas, along watercourses, and where a *perched* water table lies above bedrock or a fragipan. Hydric soils are formed under



Typical Profile of
River Valley Soil

persistent conditions of saturation, flooding or ponding during the growing season to develop anaerobic conditions in the upper part. These soils are often indicative of a wetland.

- Hydric soils and shallow seasonal high water tables are unsuitable for development due to the risk of damage to structures caused by seepage of water and generally wet conditions. The poor stability of these soils results in inadequate support for structures. These soils also serve as important groundwater recharge areas and should be left undisturbed.
- Most soils in the River Valley are deep and well drained, and represent most of the good agricultural soils in the Planning Area. Most have been developed.
- The well drained River Valley soils are comprised of stratified silt, sand and gravel, and some cobbles. On-lot sewage systems may appear to be working, but in some cases percolation rates are too rapid with potentially poor renovation of septic effluent prior to reaching the water table.

Planning Implications: Soils

- Problems associated with soil erosion and sedimentation are exacerbated by development of steep slopes and removal of vegetative cover.
- Limitations for septic absorption, aging and unmaintained on-lot sewage systems on poor soils, and the lack of sufficient ground for on-lot septic replacement threaten to contaminate soil and groundwater.
- Local subdivision and land development ordinances and zoning ordinances can include standards to conserve hydric soils and shallow seasonal high water tables.
- Local standards for erosion and sedimentation control must be linked to The Pike County Conservation District and Pennsylvania Department of Environmental Resources requirements.
- Long-term maintenance of on-lot sewage systems is critical.

Forest and Vegetative Cover



View from Buckhorn Fire Tower

Forest and other natural vegetative cover are important for many reasons and large contiguous, undisturbed tracts are desirable to provide habitat for interior forest species and establish migration corridors for wildlife. Fragmentation of forests and vegetation leaves small, isolated communities that degrade wildlife communities and ecosystem health.

- *Large contiguous forested tracts in Pike County play an extremely important role in the protection of the current high quality and exceptional value watersheds and water resources.*
- *Forest canopy along stream and river corridors provides shade to minimize the warming of stream temperatures and reduce impacts to fish and other aquatic species.*
- *Forested riparian corridors help sustain stream and lake water*



63-acre Parcel Adjacent to Airport Park



Airport Park Along the Delaware



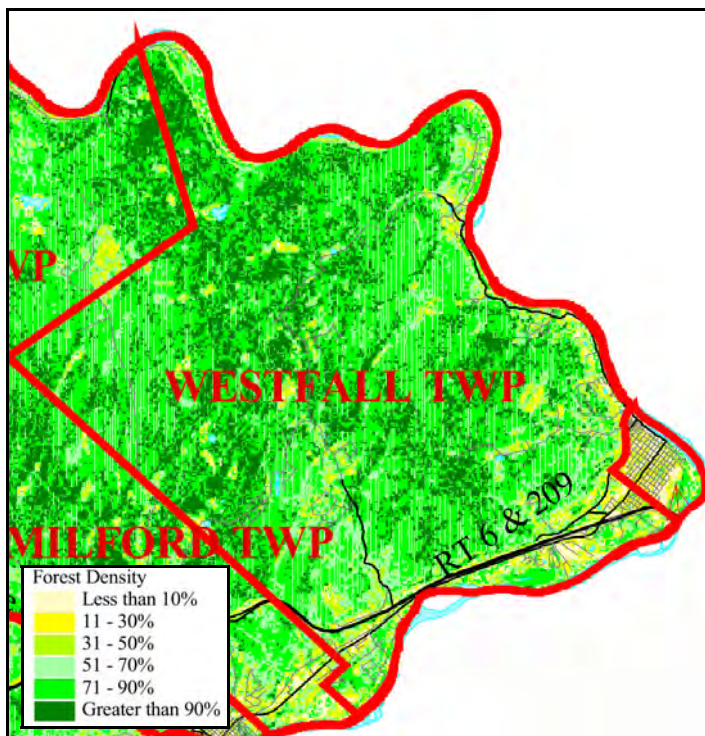
State Forest in Westfall Township

quality by acting as nutrient filters and stabilizing soil against erosion.

- Forested lands are part of the rural character and scenic relief that defines Pike County.
- Large forested tracts with proper forest management and good timber operations support the local forest products industry.
- Undeveloped, forested landscapes allow for relatively high rates of infiltration or groundwater recharge and decrease stormwater runoff.⁶

Westfall Township, and the Planning Area as a whole, remain largely forested owing to the large holdings of the Pennsylvania Department of Conservation and Natural Resources (DCNR) and a number of private landowners. The analysis of forest and vegetative cover indicates that:

- The Borough is almost fully developed with the exception of a 63 acre parcel adjacent to Airport Park which is grassland, and the riparian area of Airport Park which is forested.
- Forest density throughout Westfall Township is generally greater than 70% with areas of 90% to 100% in some of the large private and state tracts.



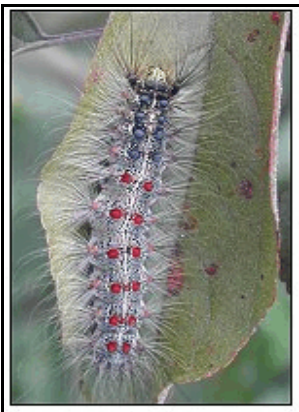
Forest Cover (Source: Pike County Comprehensive Plan)

- Vegetation of the uplands of the Planning Area is associated with the mixed oak forest type. *Before the devastating chestnut blight, it was called the oak-chestnut forest.*
- *With the loss of the once magnificent chestnut the common element of this Pocono forest is the blend of three oak species: black, red, and white. Frequently, white pine trees mingle among these three dominant oaks, as do scarlet and chestnut oaks.*
- *The (other) common trees of the mixed oak forest include red maple, tulip-tree, American beech, white ash, basswood and shagbark hickory. Other large trees that occur with some regularity include sugar maple, black cherry, black gum, pitch pine, and hemlock. In places where the forest has been clear-cut or farmed recently, some of the sunloving trees, such as gray birch, the aspens, and red cedar, persist.*

⁶Pike County Comprehensive Plan, p. 6-5.

- *There are relatively few sub-canopy tree species. Growing among the replacement saplings, one might find hornbeam, hop hornbeam, sassafras, dogwood, and shadbush (juneberry).*⁷
- A variety of shrubs are found in the Planning Area including among many others, blueberry, huckleberry, mountain laurel, sheep laurel, rhododendron, sweet fern and witch hazel.
- Herbaceous plants include a variety of wildflowers and ferns.
- In many areas, the over-population of white-tailed deer has resulted in poor forest regeneration and the loss of many understory herbaceous species and the expansion of invasive species.

Forest Pests



Gypsy Moth Caterpillar



Wooly Adelgid on Hemlock

Long-term forest pest management is a concern in the eastern United States, including Pike County and the Planning Area. Two pests of particular concern in the planning area are the gypsy moth and the wooly adelgid.

Severe infestations of the gypsy moth caterpillar have occurred in the region in recent years, damaging thousands of acres of forest. According to the Pennsylvania DCNR, 333,335 acres were damaged throughout the state in 2005, mostly in the northeast. DCNR has instituted an aerial suppression program. Local officials will continue to partner with Pike County and the DCNR and consider a joint suppression program with neighboring municipalities.

Infestations of the hemlock wooly adelgid are also problematic, especially in the Township's hemlock forested stream corridors. Destruction to hemlock stands over the long term could negatively impact stream systems and water quality. The DCNR has increased efforts to control the hemlock wooly adelgid by improving surveying techniques (the General Hemlock Survey provides data at the township level), expanding its biological control program, and instituting a chemical suppression program to protect select, high-value trees in state and federal lands. In addition, the National Park Service (NPS) is conducting extensive research in the Delaware Water Gap National Recreation Areas. The Township can look to the NPS, the PA DCNR Division of Forest Pest Management, the Pennsylvania Cooperative Suppression Program, Pike County, and the USDA Forest Service for information and assistance on forest pest management.

Planning Implications: Forest Land

Despite infestations of the gypsy moth, hemlock wooly adelgid and other forest pests, and past development, the Planning Area has a healthy, diverse and expansive forest ecosystem. Although state forest land is relatively secure, there is no guarantee that land in private ownership will remain forested. Nevertheless, the opportunity to preserve large tracts of forest and vegetative cover remains. Planning Area and County officials must continue to take action to preserve its large forest expanses while opportunities still exist.

⁷ *The Poconos, An Illustrated natural History Guide*, Oplinger, C. S. And Halma, R., Rutgers, 1988, p. 53 - 54.

- *Development of forested lands can fragment habitat for plant and animal species unique to Pike County and Pennsylvania.*
- *Removal of forested riparian corridors has implications on water quality and clarity.*
- *Loss of these resources could have implications on quality of life and tourism.*
- *Poor forest management and timber harvest operations can have lasting impacts on the long range sustainability of . . . forests.*
- *Improper development and management of forest resources can allow invasive species to proliferate.*⁸

Wetlands

Wetlands have in past times been considered wastelands, and, as a result, it is estimated that over half of all wetlands in the nation have been lost to development. Wetlands are an integral part of the environment and provide such benefits as groundwater recharge, stormwater control, surface water quality improvement and habitat for unique plant and animal species. The environmental value of wetlands in the Township is significant and the development which does occur must provide for the conservation of wetlands.



Typical Pike County
Emergent Wetland

A wetland, as defined by the *US Army Corps of Engineers' Federal Manual For Identifying and Delineating Jurisdictional Wetlands* is any area which supports hydrophytic plants (adapted to growth in saturated soil), contains hydric soils (wet soils) and where water is present at or near the surface of the soil at some time during the growing season. Site specific investigations must be conducted by trained individuals to accurately delineate wetlands. Given the national interest in wetland conservation, and the overlapping jurisdiction of federal and state agencies (U.S. Army Corps of Engineers, Environmental Protection Agency, U.S. Fish and Wildlife Service, and the PA Department of Environmental Protection) wetland delineation and protection has evolved into a complex regulatory process.



Forested Wetland
Cummins Hill Road

In recent years the identification and protection of wetlands have surfaced as key elements of environmental protection. Three common types of wetlands have been identified in Pennsylvania but other unique types exist.

- Emergent - vegetation includes freestanding, non-woody plants such as cattails, reed canary grass, and rushes.
- Scrub-shrub - characterized by woody plants less than twenty feet in height.
- Forested - presence of trees such as red maple, hemlock, yellow and river birch, pin oak and ash over twenty feet tall.

⁸ *Pike County Comprehensive Plan*, p. 6-5.

The National Wetlands Inventory (NWI) Maps, published by the U.S. Fish and Wildlife Service, are the best tools for the preliminary identification of wetlands. Wetlands are superimposed over USGS 1:24,000 scale topographic maps and are identified and classified based on vegetation, visible hydrology, and geography. The accuracy of the maps is described as being at the ninety-five percent confidence level, but local experience indicates that the maps are not accurate for detailed site planning and site specific investigations are necessary for a final wetlands determination. (A composite of the NWI maps is included on the *Conservation Opportunities Map* included with this *Plan*.) In addition to the NWI maps, hydric soils descriptions found in the Pike County Soil Survey provide an indication of wetland locations.

The Planning Area, primarily the Township, contains extensive wetlands, which is not surprising given the geology and effect of glaciation. Wetlands in the Planning Area are identified with three ecological systems:

- Lucastrine - associated with lakes.
- Palustrine - located in upland areas.
- Riverine - associated with rivers or streams.

Scattered throughout the planning area, the most extensive wetlands are found on State Forest Land. Wallowing Hole and the headwaters of Bushkill Creek and Cummins Creek are large wetland areas on State Forest Land. Other large wetlands are found at the headwaters of Bush Kill Creek and Cummins Creek. Many small wetlands are not identified by the NWI or USGS mapping and identification requires a detailed field survey typically conducted as part of the development application process.

Wetland Regulation

Wetlands are protected by the federal Clean Water Act, which regulates the discharge of dredged and fill material into *waters of the United States*, including wetlands. Activities that are regulated include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry. Activities within a wetland typically require permits from the U.S. Army Corp of Engineers and the Pennsylvania Department of Environmental Protection.

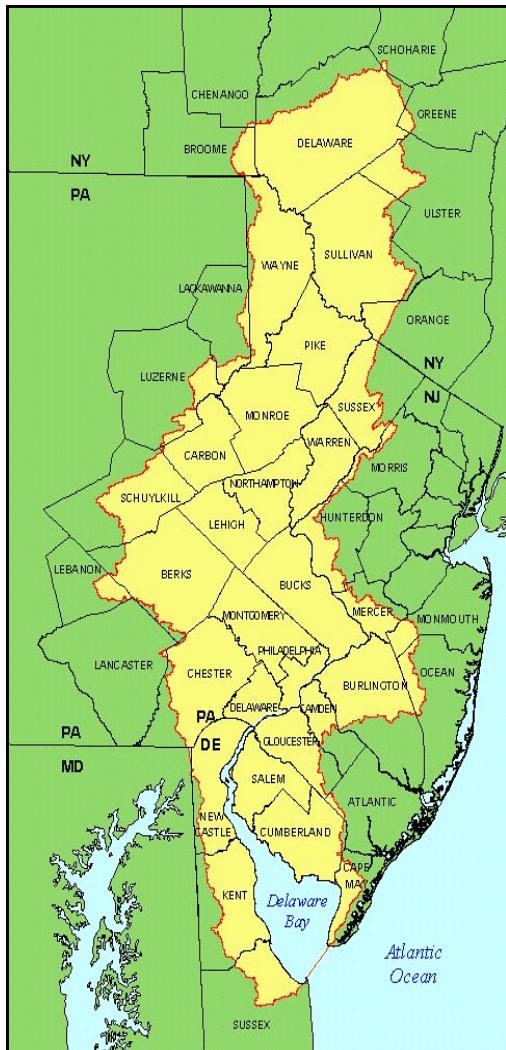
The basic premise of the federal wetlands protection program is that no discharge or dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment, or if the waters would be significantly degraded. A permit applicant must demonstrate that steps have been taken to avoid wetland impacts where practicable. Impacts must be minimized and compensation may be required for any remaining unavoidable impacts via the restoration or creation of wetlands.

Planning Implications: Wetlands

- The presence of wetlands will temper, but not significantly limit, the overall development of the Planning Area.
- State and federal regulations protect wetlands, but currently do not require a buffer around wetlands. Local municipalities can include wetland

protection and buffers in zoning and subdivision and land development ordinances to augment federal wetland regulations.

- *Potential encroachment into, filling in or draining of wetlands during development inhibits the continued important values and functions of wetlands.*
- *Disturbance of wetlands and surrounding areas by development increases the potential for introduction of non-native Invasive plant species that crowd out beneficial native wetland plants.*
- *Development adjacent to wetlands can release pollutants that impact the water quality and the groundwater recharge capacity of wetlands.*
- *Groundwater withdrawals can impact water levels that would otherwise sustain wetlands, particularly during dry periods.⁹*



Delaware River Watershed

Watersheds and Surface Waters

A watershed (or drainage basin) is an area of land that contributes overland flow and groundwater to a common stream or water body. It includes the surface of the land, the streams that drain the land, and the underlying soils, geology and groundwater. Groundwater stored in an aquifer eventually reaches the surface again through a seep or spring or direct discharge to a stream. Each is critical to ensuring the proper function of the watershed and the hydrologic cycle. Watersheds are defined by drainage divides (ridge lines), which direct surface and groundwater down the valley and into the stream channel or water body. Ridge lines separate adjacent watersheds.

The Borough and Township, along with all of Pike County, lie within the Delaware River Watershed. The Township drains to a number of sub-watersheds, the principal ones being Bush Kill Creek, Cummins Creek, and Vandermark Creek via Deep Brook. The Borough drains directly to the Delaware River.

Stream size, flow and water quality are directly related to the watershed's natural features (soils, vegetation, etc.) and land use and quality of development. These factors influence the flow and accumulation of stormwater runoff, as well as infiltration, groundwater storage and seepage, and filtration of pollutants. The protection of headwater and smaller streams is important to the health of the entire watershed.

Stream Classification

All of the streams in Pike County are classified as *high quality* or *exceptional value* under the Pennsylvania Water Quality Standards. Water quality in Pike County ranks as one of the highest in the entire Commonwealth. In the case of the Planning Area, Bush Kill Creek (Mill Rift) Watershed and the Deep Brook

⁹ *Pike County Comprehensive Plan*, p. 6-14.

Watershed are classified as *exceptional value* with the balance of the watersheds *high quality*.

Water Quality Regulation

The Pennsylvania Department of Environmental Protection has developed antidegradation water quality standards for all surface waters in the Commonwealth. These standards, which are designed to safeguard the streams, rivers, and lakes throughout Pennsylvania, include water quality designations and associated water quality regulations necessary to protect the existing quality and ecology of the streams and water bodies and their use for water supplies and recreation.

Special protection beyond basic standards is provided for streams designated as *exceptional value waters* or *high quality waters*. *Exceptional value* streams are those that constitute an outstanding national, state, regional or local resource. These streams are granted special protection from potentially harmful activities. *High quality* streams are those that have excellent quality waters and environmental or other features that require special protection.

Wastewater treatment plant effluent and any other discharges to streams classified as *high quality* are permitted solely by DEP and only if the discharge is the result of necessary social and economic development, water quality standards are maintained, and all existing uses of the stream are protected. This has the effect of requiring all wastewater treatment plants to provide tertiary treatment to meet discharge criteria. In addition, DEP allows stream discharge only if soil based disposal alternatives are not feasible. Any stream classified by DEP as *exceptional value waters* must be maintained at existing quality and may not be degraded, thereby precluding any wastewater discharge to the stream.

DRBC Regulation



The Upper Delaware

The Delaware River Basin Commission (DRBC) adopted Special Protection Waters (SPW) regulations in 1992 for point source (or “end-of-pipe”) discharges and in 1994 for non-point source pollutant loadings carried by runoff to protect existing high water quality in areas of the Delaware River Basin deemed “to have exceptionally high scenic, recreational, ecological and/or water supply values.” The SPW regulations . . . initially applied to a 121-mile stretch of the Delaware River from Hancock, N.Y. downstream to the Delaware Water Gap, and its drainage area, but now the entire 197-mile non-tidal Delaware River is protected by SPW anti-degradation regulations.¹⁰

Within the drainage area to Special Protection Waters, DRBC approval is required for new and expanding industrial and municipal wastewater treatment plants when the proposed facility is designed to discharge a daily average rate of 10,000 gallons a day or more.

- All non-discharge/load reduction alternatives, including land application such as spray irrigation, must be fully evaluated and rejected because of technical and/or financial infeasibility.
- As defined by a list of seven or eight parameters it must be shown that no measurable change to existing water quality will result.

¹⁰ *Special Protection Waters, Keeping the Clean Water Clean*, Delaware River Basin Commission, 2008.

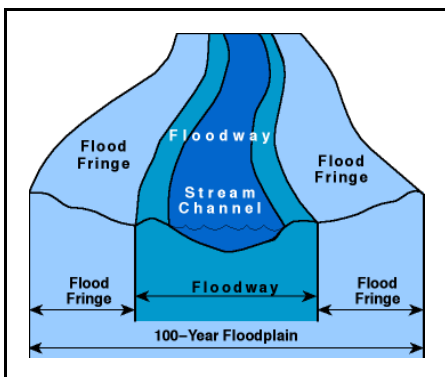
- Treatment must use Best Demonstrable Technology which is defined for municipal facilities by 30-day average effluent criteria for seven parameters plus ultraviolet light disinfection.
- Projects must have an approved Non-Point Source Pollution Control Plan (NPSPCP) that describes the Best Management Practices that will be used at the project site and service area to control the increases in non-point source pollutant loadings resulting from the project.

Planning Implications: Watersheds and Surface Waters

- Maintaining good water quality is critical to the quality of life in the Planning Area. In addition to supporting the local tourism and recreation economy, good quality streams and well-conserved watersheds are a good measure of overall environmental quality.
- In order to protect the good water quality, development must be carefully managed. The balance between good water quality and future growth and development will require meticulous consideration to weigh the impact on water quality against the need for economic growth, and the added expense for water quality protection technology against the need to protect water quality.
- State and federal regulations go a long way to protect water quality, but local municipalities often adopt additional standards such as buffers and conservation subdivision design to afford additional protection.
- The clearing of vegetation along streams during the development process increases the potential for surface run-off, erosion and siltation, and downstream flooding.
- Excessive stormwater runoff introduces pollutants into the stream system, increases peak flows, damages stream banks and increases downstream flooding.
- Continued updating and enforcement of on-lot sewage disposal, stormwater and soil erosion control and other water quality regulations is critical.

Floodplain

During the period of early settlement and later development of most regions, waterways played a key role as transportation routes and later as a source of power for operating grain mills, sawmills, and other industries. In addition, the land located along streams and rivers was conducive to development - soils are generally fertile for agriculture and the terrain relatively level, facilitating the construction of roads and buildings. Those stream-side areas often developed into settlements and then expanded as the population grew. This is precisely the pattern of development in the River Valley in Matamoras Borough and Westfall Township.



Floodplain Cross Section

However, an often unanticipated problem with river/stream valley settlement is flooding. As development continued and natural drainage patterns were altered, increases in stormwater run-off heightened the potential for flooding and property damage.

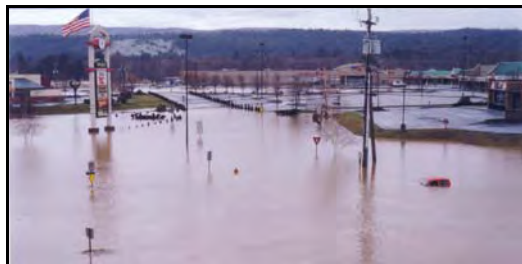
Floodplain Regulations Both the state and federal government now administer programs for flood control and flood plain development and provide certain regulatory standards which local municipalities must adopt in order for property owners to be eligible for flood insurance. The Pennsylvania Flood Plain Management Act (Act 166 of 1978) requires local municipal participation in the flood plain management program, or state funding allocations such as Liquid Fuel Funds can be withheld.

The Borough and Township have each adopted flood plain regulations which comply with state and federal requirements. Local municipal regulations range from a total prohibition of flood plain development to requirements for flood-proofing and the elevation of buildings. The Borough and Township regulations:

- Prohibit development in General Floodplain Areas within fifty-feet of the top-of-bank of the watercourse without proper state and federal permits.
- Allow residential structures in floodplain areas if the lowest floor is elevated at least 1.5 feet above the 100-year flood elevation.
- Allow nonresidential structures to be flood-proofed or elevated.



I-84 Underpass - 2005 (Westfall Twp)



K-Mart Plaza - 2005 (Matamoras EMA)



Airport Park - 2006 (Matamoras EMA)

Floodplain Maps

The National Flood Insurance Program is administered by the Federal Emergency Management Agency (FEMA) which also has prepared and issued the maps which identify flood prone areas throughout the Country. (See the *Conservation Opportunities Map*.) Flood hazard areas are identified for the *100-year flood* which is a flood event of a magnitude which is expected to be equaled or exceeded once on the average during any 100-year period. This is a long term average period between such floods and such floods can occur at shorter intervals or conceivably in the same year. Areas of 500-year floods and 100-year floods of less than 1-foot depth are also shown.

Planning Area Flood Zones

The 100-year flood area in the Borough is largely confined to below the top of the River bank except for the low lying areas adjacent to Airport Park and approaching the pedestrian tunnel under I-84. However, most of the Borough is included in the 500-year flood area.

Most of the developed part of Bell Manor in Westfall is outside the 100-year zone but is included in the 500-year zone. The 100-year zone extends under the I-84 underpass into the Mountain Avenue and Blue Ridge Avenue areas and to the Pennsylvania Welcome Center area. Much of the River side of I-84 is included in the 100-year zone with the balance in the 500-year zone or subject to 100-year floods of less than 1-foot depth. Fortunately, the Delaware Valley School complex is not in the 100-year zone.



Westfall Twp Building - 2005 (Westfall Twp)

PA Ave & 10th - 2005 (Matamoras EMA)

Welcome Center - 2005 (Matamoras EMA)

The area along Delaware Drive in the vicinity of the Township Building is also in the 100-year flood zone as are the river flats upstream of the Westfall Township and Milford Township border. The FEMA maps show no flood zones associated with the Bush Kill, Cummins Creek or other streams.

Planning Area Flooding

The Borough and Township have had a long history of flooding resulting from both high River levels and ice jams resulting in significant damage to public and private property. The floods of 2005 and 2006 extended beyond the FEMA 100-year flood zones. Flooding will certainly continue as it has in the past due to periodic heavy rains and continued upstream development. In terms of preventing floods there is little the Borough or Township can do. The municipalities can, however, concentrate on minimizing risks and flood damage.

Planning Implications: Floodplain

Construction and development in the 100-year floodplain is currently regulated by the Borough and Township. These regulations apply only to the 100-year floodplain identified on the Flood Insurance Rate Maps or where revision to the floodplain is warranted by a flood study and approved by the Federal Insurance Administration.

The regulations are the minimum required floodplain development standards required by state and federal flood insurance programs. In critical floodplain areas where the health, safety and welfare of residents are at stake, municipalities can go beyond these minimum standards and consider stronger floodplain regulations to protect residents over the long term. The Borough and Township should consider reviewing current floodplain ordinances to determine if changes are warranted for areas with repetitive flood damage.

Natural Areas

The Planning Area's large expanses of forest cover, prevalence of wetlands, and surface water features provide diverse habitat for an abundance of plant and animal species. The *Pike County Natural Heritage Inventory*, compiled by the Pennsylvania Science Office of The Nature Conservancy, documents the best natural areas in the county and the locations of all known animal and plant species of special concern (endangered, threatened, or rare). The inventory also identifies areas that represent good examples of habitat types that are relatively rare in the county or that provide exceptional wildlife habitat. The purpose of the inventory is to guide planning and conservation efforts and to assist in prioritizing areas to be protected. Specific species names are suppressed in the report to prevent collection by the public. According to the *Natural Heritage Inventory*, numerous threatened, rare and endangered plant and animal communities exist in the Planning Area.

Statewide Significance Areas of statewide significance for protection of biological diversity:

- Millrift Cliffs and the Millrift Flats - ranked first and second, respectively, of the 7 most critical sites in Pike County for receiving protection or ensuring continued protection in the future.

Millrift Cliffs - acidic cliff community with good population of a state-endangered plant dependent on the cool wet cliffs; 1 of only 2 locations in the State.

Millrift Flats - 2 natural communities and 5 rare moths.

- Mashipacong Shale Cliff - good quality shale cliff community with a plant rare in the State; located across from Delaware Valley School complex.
- Matamoras Cliffs - an excellent shale cliff community with a good population of plant which is rare in the State.

MILLRIFT CLIFFS - The Acidic Cliff Community is located along the Delaware River and contains an excellent population of a state-endangered plant species. The site should be protected for its biological importance and for its scenic contribution to the Delaware River area. Although a road and several houses occur along the top of the cliff, the impact appears to be minimal at present. However, attempts to log and build new housing have placed the plant species in jeopardy. It is important that water quality and flow pattern not be changed if the species is to remain on the wet cliff face. Diversion of overland and subsurface flow and logging east of the road will adversely impact the species. It is strongly recommended that further development and logging be prevented east of the road and be carefully scrutinized within the entire watershed outlined on the map. TNC (The Nature Conservancy) has begun to pursue conservation easements in this area and the county and township should encourage conservation among the various landowners.

MILLRIFT FLATS - This Xeric Central Conifer Forest is an unusual occurrence along a sandy alluvial terrace in Pennsylvania. This fact and the five animals of special concern make this site a high priority for protection. A few houses have encroached on the natural community and may become a prime development area soon. This area should be protected through conservation easements, tax incentives to landowners or through purchase. The entire watershed which offers a scenic view of the river and also contains a small natural community on the slopes above Millrift Flats should also be included in any protection plan.

Planning Implications: The Planning Area's woodland habitat is relatively healthy, as large and diverse areas of vegetation remain. However, steps should be taken to ensure that large contiguous forest communities remain in tact.

Wetland and aquatic habitats, and in particular habitats identified by the Natural Heritage Inventory, are most at risk from direct development or watershed disturbance. This includes degradation due to encroaching development, logging and forestry operations, and contamination from wastewater and stormwater runoff.

Protection of habitat and Natural Heritage Inventory sites requires a combination of local municipal environmental regulations and state and federal resource management and use regulations. For its part, the Borough and Township need to strengthen ordinances related to environmental resource protection and promote open space protection among landowners.

Areas designated as Conservation/Open Space on the Future Land Use Plan and Park, Recreation & Open Space Plan include properties that contain sites identified in the Natural Heritage Inventory. Some of these sites are on private land and will require an outreach effort to inspire voluntary protection by the land owners (e.g. establishment of conservation easements). It is the responsibility of the PA DCNR and National Park Service to mitigate impacts on habitats within their jurisdictions.

FUTURE PLANNING POLICIES AND ACTIONS

Overview

The following future planning policies and recommendations are measures intended to achieve the Planning Area's natural resource protection goals. These policy recommendations will guide future decisions and actions related to natural resource protection.

Environmental Protection

Development and environmental protection, as well as conserving open land and natural resources, need not be mutually exclusive. While a clean environment, abundant open land, and natural resources are key elements of the quality of life in the Planning Area, one must recognize that growth is inevitable and can contribute positively to a healthy community.

NOTE:

Much of the discussion in the following sections was taken from the reports prepared by the Pike County Conservation District and the Pike County Office of Community Planning titled *A Review of Westfall Township's Comprehensive Plan and Land Use Regulations with Recommendations to Enhance Natural Resource Conservation and Open Lands Preservation*.

The goal is to strike a balance between development and preserving the essential character of the Planning Area. Development practices which recognize the importance of the local environment will ensure the continuation of the quality of life that residents enjoy and which is so attractive to new residents. Concurrently, land owners and developers will be able to provide the home sites and businesses that a growing population demands.

The intent is to ensure *environmentally friendly* development within the context of the existing zoning districts. State and federal regulations address many aspects of resource conservation and environmental protection, and these regulations should be the foundation on which local municipal regulations are built. Local standards must be consistent with and be coordinated with state and federal requirements. In some cases, the zoning ordinance can simply reference the other applicable standards.

Local Authority for Regulation

The Pennsylvania Municipalities Planning Code (MPC) authorizes land use planning and management tools for the Commonwealth's municipalities. Compliance with the MPC, along with case law, dictates the legality of local regulations. For this reason, it is very important to remember that all land use management tools must be prepared and administered within the bounds of the MPC and current case law. In addition, the Second Class Township Code provides authorization for special purpose ordinances aimed at protecting public health, safety and welfare. Other state laws, such as the Floodplain Management Act and Stormwater Management Act, mandate local regulation of resources. In all cases, the municipal solicitor should be involved in reviewing any changes to municipal plans and ordinances.

Integrated Approach

Given the range of authorizing state statutes, municipal open land, natural resource and environmental regulations are typically found throughout a number of ordinances. While this may appear problematic at first glance, the

integration of such standards in various ordinances is important because a certain ordinance may govern one type of development while another governs a different type. For example, the subdivision and land development ordinance governs how land is divided and improved while the zoning ordinance governs the specific uses on the land. In some cases a special purpose ordinance may be more effective than including standards in the zoning ordinance. The important point is consistency of standards in all ordinances.

The Borough and Township ordinances include a broad range of environmental standards. The Township will periodically review and update its environmental standards to ensure the most effective protection. The possible range includes:

- Environmental impact analysis requirements for large scale and environmentally problematic uses.
- Retention of existing vegetation on development sites and soil stabilization and landscaping.
- Stream, lake and wetland buffers.
- Stormwater best management practices including quality treatment and infiltration.
- Floodplain management.
- Hydrogeologic studies for proposed uses with large groundwater consumption.
- On-site sewage disposal system management.
- Limitations and special standards for development on steep slopes.

Topography and Geology

Preservation of topographic and geologic features is important for maintaining natural drainage patterns, slope stability, erosion control, and surface and groundwater quality. The following policy recommendations are intended to promote the protection of these features:

- The preferred approach is conservation design which sets steep slopes aside as conservation areas.
- Strictly limit site disturbance of steep and very steep slopes – tree and vegetation removal, soil removal, grading.
- Exclude 100% of very steep slope (slopes 25%+) areas from lot area determination.
- Exclude 50% of steep slope (slopes 15%-25%) areas from lot area determination.
- Limit the use of very steep slopes to open space and passive recreation.

Preservation/Conservation Techniques

Comprehensive Planning - enables counties, boroughs, and townships to create a vision for the future which can focus on open land preservation.

Maximum Lot Size Standards - limits the amount of land devoted to a use as a means to preserve agriculture.

Lot Averaging Standards - overall density is maintained while the individual lot size varies.

Flexible Lot Size - sets lot size based on the availability of public water supply and/or sewage disposal.

Transferable Development Rights - the right to develop is sold from areas to be preserved to areas where development is encouraged; the overall area density development remains the same. Units which would be constructed on the *sending* property are developed on the *receiving* property, and the *sending* property is preserved.

Overlay Zoning - applies special standards in addition to the underlying zoning district for areas of special concern (e.g., floodplain, prime farmland, steep slopes).

Riparian Buffers - areas of vegetation left undisturbed along streams and lakes.

Greenways - corridors of public and private lands preserved as open space, often along streams.

Open Space and Natural Area Acquisition - conservation easements or fee simple title acquired by public bodies or conservation organizations. Permanently limits uses of the land in order to protect its conservation value.

Wellhead and Aquifer Protection - special standards wells and groundwater sources to protect water quality.

Sewage Facilities Planning - conducted in accord with DEP regulations and aimed at assuring adequate sewage disposal and water quality protection.

Floodplain Management - local regulations based on National Flood Insurance Program standards to minimize flood related damages to structures.

Stormwater Management - local regulations based on area wide plans to minimize stormwater runoff.

Erosion and Sedimentation Control - coordination with County Conservation District to minimize soil loss and protect water quality.

Differential Assessment - agricultural and forest land is assessed at its value for agriculture/forestry instead of the fair market value; e.g., Act 319 Clean and Green.

- Prohibit buildings or structures on very steep slopes.
- Establish design and performance criteria for buildings or structures on steep slopes including submission of detailed site, grading and drainage plans..
- Set a maximum building envelope size.
- Limit final slopes of cuts and fills to fifty percent.
- Preserve rock outcrops and unique geologic features.

Improving Stormwater Management

All of the streams in the Planning Area are classified as Special Protection Waters (PA Code title 25, Chapter 93, Water Quality Standards) and land development projects are subject to a number of state and federal water quality standards that relate to stormwater management. Significant changes have recently be instituted in state requirements and Pike County is currently developing a county-wide stormwater management plan.

Any inconsistency between local and state requirements and county planning may result in project delays as applicants face conflicting design standards. In order to ensure that local stormwater management standards are consistent with State water quality antidegradation requirements, Act 167 (Stormwater Management Act), Federal National Pollutant Discharge Elimination System (NPDES) requirements for stormwater discharges associated with construction activities, and DRBC's Special Protection Waters regulations, stand-alone stormwater ordinances should be adopted.

Preserve Existing Hydrologic Conditions

The key is to promote development practices to minimize post-development runoff rates and volumes and the need for artificial conveyance and storage facilities.

- Preserve natural drainage features such as vegetated drainage swales, channels, valleys, or depressions where water normally ponds.
- Minimize earth disturbance and preserve natural vegetation to the greatest extent possible by conforming plans to existing topography.
- Minimize impervious surfaces to the maximum extent possible.
- Disconnect impervious areas by directing runoff to areas where it may either infiltrate into the soil or be filtered through vegetation.

Maintain Groundwater Recharge

Simple provisions are critically important in areas where groundwater use is increasing dramatically and stormwater is too often simply considered a problem.

- Require the use of infiltration to provide groundwater recharge whenever possible in recognition that stormwater as an important resource to maintain groundwater supplies.
- Ensure that any infiltration does not pose a threat to groundwater quality.

Maintain Water Quality

Measures must be required to prevent degradation of surface water quality from pollutants carried in stormwater discharges such as vegetative filter strips, infiltration basins, bioretention areas and wet detention ponds.

Reduce Erosion and Stream Scouring

As storm flows increase, the velocities in streams increase. Both the volume and rate of stormwater discharges must be managed to prevent physical degradation of receiving waters, such as stream bank erosion and channel scour.

Control Flooding

Flooding and stormwater problems are caused by excess stormwater quantity. While some over-bank (typically 2-year to 10-year storm events) and extreme (25, 50, and 100-year) flooding events are inevitable the goal of stormwater management standards is to control the frequency of occurrences so that

damages to existing infrastructure are not exacerbated by upstream development.

Inspection and Maintenance

Without regular inspections during construction and proper and long term maintenance, stormwater infiltration devices, detention basins, pollution control and other facilities will not function properly, often with problematic or even disastrous downstream effects. Even the addition of homes within a residential subdivision can have serious effects on neighbors if facilities are inadequately constructed and maintained.

- Include standards to address inspection during construction, long term ownership, maintenance agreements for privately owned stormwater facilities and specific maintenance schedules.
- Make the failure to maintain any facility an ordinance violation and to provide the authority for enforcement and correction.

Groundwater Conservation and Protection

Methods available for local municipalities to conserve the groundwater supply and protect quality are well documented, and have been successful in many areas of the Commonwealth. Details of available methods, the authority for action, and sources of assistance are detailed in *Groundwater Protection and Management in Pennsylvania*.¹¹ The Report recommends the following five-step process to develop and put into place an effective groundwater protection program:

- Involve the community by organizing a committee of interested individuals from the community, and neighboring communities, if appropriate.
- Determine sources and uses of the community's water supply and define the proposed groundwater protection areas.
- Identify possible contamination sources-past, present, and future-in the groundwater protection areas.
- Establish goals and priorities based on an evaluation of the groundwater threats.
- Implement appropriate management measures, including plans for future needs.¹²
- Sponsor an annual well water testing program and compile and map the results.

In addition to evaluating the applicability of the five-step formal planning process, other local municipal actions include:

¹¹ *Groundwater Protection and Management in Pennsylvania, An Introductory Guide for Citizens and Local Officials*, League of Women Voters of Pennsylvania Citizen Education Fund and Water Resources Education Network Project, R. Merideth, J. R. Drohan, C. W. Abdalla, J. R. Jessen, E. D. Stevens, 2001, Third Edition.

¹² *Groundwater Protection and Management in Pennsylvania*, p. 13.

Zoning

- Link dwelling unit densities to the quality of the land by identifying environmentally sensitive areas as part of the development process.
- Include standards for identification and protection of environmentally sensitive areas – recharge areas, floodplain, steep slopes, wetlands, riparian buffers, etc. – and update as necessary.
- Provide incentives for conservation subdivision design where full development density is permitted, individual lot sizes are reduced, a certain percentage of open space is set aside, and sensitive natural areas are preserved.
- Allow planned residential development and transfer of development rights as a way to shift development away from sensitive environmental areas.
- Require a hydrogeologic study for any proposed use which will withdraw large quantities of groundwater.
- Require detailed water quality protection plans for any commercial or manufacturing use which have the potential for groundwater contamination.
- Adopt well head protection standards that limit potential contaminating activities in zones around community wells.

Sewage Enforcement

- Continuing the strict enforcement of the on-lot sewage disposal program.
- Evaluating the benefit of an on-lot sewage system management program.

Stormwater Management

- Require stormwater infiltration as the option of choice to maximize groundwater recharge.
- Address stormwater quality (nutrient and pollutant removal) along with quantity.

Well Construction and Protection

The use of individual water wells in the Borough is prohibited by ordinance. The Township should consider the adoption of a well ordinance because there is no state regulation for the construction of private wells. The ordinance would require permits for drilling and making major repairs to water wells. One of the most critical provisions would be to establish a 100-foot isolation distance from sewage disposal fields and a 50-foot setback from septic tanks because state law, while requiring sewage fields to maintain the 100-foot isolation distance from wells, sets no converse minimum. The well ordinance should also:

- Require isolation distances from other potential contamination sources such as buildings, driveways, sewer lines and underground petroleum storage tanks.
- Specify casing size, material, length and height above grade.
- Require a well cap and casing grouting.
- Set minimum water quantity and quality standards and require testing.
- Require bacterial testing for all new wells with a report submitted to the municipality and disinfection prior to use.
- Require all water users located within the service area of a central water supply system to connect to such system except where the applicant provides documentation that the central system cannot provide an adequate and safe supply.
- As a means of building a data base, requiring well drillers to submit copies of the state Water Well Completion Report which includes details about new wells – depth, depth to water bearing zones, static level, yield, and type of aquifer.

Soils

Soils play an important role in the hydrological cycle, allowing infiltration of stormwater and recharge of groundwater sources, and are important determinants of vegetation type and cover. Soils can also inhibit development due to wet conditions (hydric and seasonal high water table soils are not suitable for development) or due to unsuitability for on-lot sewage disposal. Policy recommendations aimed at preserving soils and promoting sound development are as follows:

- Strictly limit soil removal, especially on steep and very steep slopes.
- Prohibit building on hydric soils and shallow seasonal high water tables.
- Exclude 100% of hydric soils from lot area determination.
- Exclude 50% of shallow seasonal high water tables from lot area determination.
- Continue enforcement of on-lot sewage regulations to ensure proper location and installation of on-lot sewage systems.

Soil Erosion and Sedimentation Control

Pennsylvania DEP Chapter 102 and other regulations administered through the Pike County Conservation District govern soil erosion and sedimentation control. A plan is required for any earth disturbance in Special Protection Watersheds regardless of size.

- There is no need to include detailed design standards for specific soil erosion controls in either the SALDO or the zoning ordinance.

- The key is to require an approved soil erosion and sediment control plan in the SALDO as a condition of preliminary plan approval for all major subdivisions and all land developments, and in a zoning ordinance for any use involving earth disturbance.

Forest and Vegetation

Maintaining natural vegetation not only preserves rural character, but also has numerous environmental benefits, not the least of which are reducing stormwater, preserving surface water quality, and maintaining groundwater recharge. The best approach is to set specific standards for maintaining natural vegetation and require the developer to show why the existing vegetation within prescribed setback or buffer areas, and the entire parcel for that matter, cannot be maintained to the greatest extent possible.

- Include specific standards in the SALDO to govern preservation of vegetation during the development process.
- Also include standards in the zoning ordinance to manage development activities which are not governed by the SALDO, clearing for a parking lot for example.
- Prohibit clearing of vegetation until a land development plan is approved. (The section would be written to limit timber harvesting in the buffer to selective cut only in accord with a forestry management plan so as not to preclude reasonable forestry enterprise and the balance of the tract.)
- Protect dense and mature forested areas especially on steep and very steep slopes, along stream courses, and in headwater (first order) drainage areas.
- Protect the diversity of vegetative cover and native plant communities.
- Promote the establishment of large contiguous areas of permanently protected forests including, but not limited to, areas identified on the Park, Recreation & Open Space Plan and areas containing natural and scenic resources.
- Encourage the use of native species and prohibit the use of invasive plants.
- Participate in County and State forest pest suppression programs.

Wetlands

Wetlands provide unique habitat and serve as important groundwater recharge areas, filtering water before it enters an aquifer. Wetland buffer areas are necessary to ensure proper filtration of runoff prior to its entry into the wetland system. Buffers also diminish the opportunity for degradation of the wetland itself, and provide edge habitat for transitional wetland species.

- Prohibit disturbance of wetlands and within a 100-foot wetland buffer area.
- Exclude 100% of wetlands from lot area determination.
- Exclude 50% of wetland buffer area from lot area determination.

**Watersheds
and Surface Waters**

- As part of all development applications, obtain detailed wetland data that identifies wetlands that are not captured by the NWI.

Protection of watersheds is imperative for ensuring a safe and sufficient water supply and maintaining water quality. Healthy stream ecology relies upon certain water quality levels and stream flows and streams must be protected from pollutants, high sediment loads, stormwater runoff, and excessively low base flows.

Local policies that protect individual natural features, including steep slopes, soils, forests and vegetation, wetlands, and floodplain, also advance the health of watersheds and streams, and more specifically, support the State's anti-degradation policies. In addition to policy recommendations related to the protection of these individual features, the following apply:

- Prohibit disturbance within a 100-foot riparian buffer surrounding streams and other surface water bodies.
- Exclude 50% of the riparian buffer (outside of the FEMA 100-year floodplain) from lot area determination.
- Limit the extent of impervious cover and promote the use of pervious materials.
- Require comprehensive stormwater management that incorporates alternative systems and methods, including Best Management Practices (BMPs), stormwater recharge techniques, and control of non-point source pollution.
- Integrate utilities and development planning: Water supply and wastewater systems are an important part of watershed planning, affecting water balances and overall watershed health. A coordinated growth pattern, where development is directed to areas that have existing sewer and water infrastructure, or are programmed to have such infrastructure, will help to safeguard water supply and quality.
- Conduct aquifer studies to determine water quality and availability of potable water.

Floodplain

Floodplain is important for its natural functions of flood flow conveyance, stream channel formation and water filtration. Building within floodplain areas upsets flood conveyance and increases risks to human life and property. While many municipalities prohibit development in floodplain, this may be impractical for the flood prone areas of the Township, particularly on the River-side of I-84. Much of this area is zoned commercial and a complete prohibition of development would result in loss of land value, and this may be challenged given that state and federal regulations allow development in accord with elevation and flood-proofing standards. At a minimum local flood regulations should:

- Require the elevation of nonresidential structures instead of allowing flood-proofing.

- Prohibit developments of special concern within the 100 year floodplain and in all areas subject to flooding.
- Hospitals, jails or prisons, nursing homes, senior citizen housing, and similar such facilities.
- Mobile home parks and subdivisions.
- Sewage treatment facilities.
- Any activity used for the production or storage of certain specified dangerous materials or substances; or the maintenance of a supply of a specified volume.
- Permit installation of utilities and public infrastructure (i.e roads, stormwater management facilities) only if no feasible alternative location exists and only if Best Management Practices are employed to achieve minimal floodplain disturbance.
- Minimize impervious cover (i.e. paved areas and surfaces that do not allow for infiltration of water) within the 100-year floodplain.
- Ensure that improvements to existing buildings and structures will not increase the 100-year flood elevation and require flood proofing of permitted improvements.

Habitat and Natural Areas

Protection of habitat is accomplished by maintaining and promoting the health and diversity of natural areas as follows:

- Protect critical habitat areas through protection of topography and geology, soils, forest and vegetative cover, wetlands, floodplain, watersheds and streams.
- Protect as open space those properties that contain sites identified in the Pike County Natural Heritage Inventory.
- Establish a networked system of large contiguous areas of open space.
- Establish a network of riparian corridors and greenways.

Ridge Lines

An integral part of the community character of the Planning Area are the wooded ridge lines and scenic vistas visible from the major highways passing through the area. Preserving these resources requires a balance between private property rights and the public good. Much of the value in a lot may be associated with the view it affords and zoning standards may affect that value.

Simply stated, the most direct means of preserving ridge lines and scenic vistas is via fee-simple public ownership of the land. However, given the cost of land this is really not an option. Conservation easements, which are far less costly, can afford the same protection as public ownership. Working with willing land owners who want to protect their property, Planning Area local

officials, concerned citizens and local land trusts should cooperate to protect these properties with conservation easements.

Protecting ridge lines and scenic vistas through zoning is somewhat problematic given that regulating purely for aesthetics has long been found suspect by Pennsylvania courts unless directly related to the public health, safety and welfare. Zoning in a state-recognized historic district is a good example of aesthetic regulation upheld by the Commonwealth's courts. The Township's reliance on the natural environment and open space for much of its economic well being and maintenance of property values may provide the foundation for some reasonable development standards for preservation of ridge lines and scenic views.

Ridge lines and scenic vistas are often associated with steep slopes. However, a community should not attempt to enact aesthetic criteria that would artificially limit density in the guise of steep slope protection, especially if density is already limited on this basis under other ordinance provisions. Regulations that allow for the same density, but require design that addresses aesthetic issues on a secondary level, are far more likely to be supportable in court.

Ridge line development can be regulated at two levels - when existing lots are developed and when new building lots are created. The first is a matter of zoning and the second is typically addressed in subdivision regulations. Addressing ridge line protection in new subdivisions is a relatively straightforward matter with conservation subdivision design. Areas of concern can be mapped and protected with easements and the lots can then be clustered in other areas. Building and clearing restrictions can also be imposed (e.g., by designating building envelopes) as part of the subdivision approval. All this can be accomplished without necessarily affecting density.

Dealing with existing lots, however, is far more difficult. The lots may have been purchased or platted to maximize views. Any restriction on such views may be perceived as an infringement, not only on property rights, but also on the value of the land. It may not be possible on a given lot to achieve a design that will maximize the value of the views for all parties because it is too small, too steep or otherwise limited. In any case, ridge line and scenic vista protection standards for existing lots must be considered carefully in terms of balancing private property rights with a clearly stated public purpose. In doing so some communities have considered:

- Requiring conditional use approval for development site clearing in designated ridge line and scenic vista protection areas.
- Setting standards for the location of structures to allow for views from the structure but minimize exposure.
- Limiting lighting to minimize visual effects.
- Establishing structure screening standards and tree cutting and pruning limitations.

Upper Delaware National Scenic and Recreational River

River Management Plan

The *Upper Delaware River Management Plan* provides a detailed history of the federal designation of the River, the management planning process, local participation in the process, and the development of the *Land and Water Use Guidelines*.

One of the influences on the growth and development of the northeastern Pike County area over the past thirty-five years has been the federal study and eventual designation of the Upper Delaware River as part of the National Scenic and Recreational River Program. The River Corridor extends 75 miles north from Cherry Island at Mill Rift in Westfall Township to Hancock, New York and encompasses 55,575 acres, but only 30 acres are federally owned. The National Park Service web site reports approximately 250,000 annual visitors to the Upper Delaware which adds significantly to the local economy.

A reflection of the area's rural character and quality environment, and the long-term conservation of that character and environment, the 1978 designation recognized the importance of the River Corridor to the heritage of the entire nation.

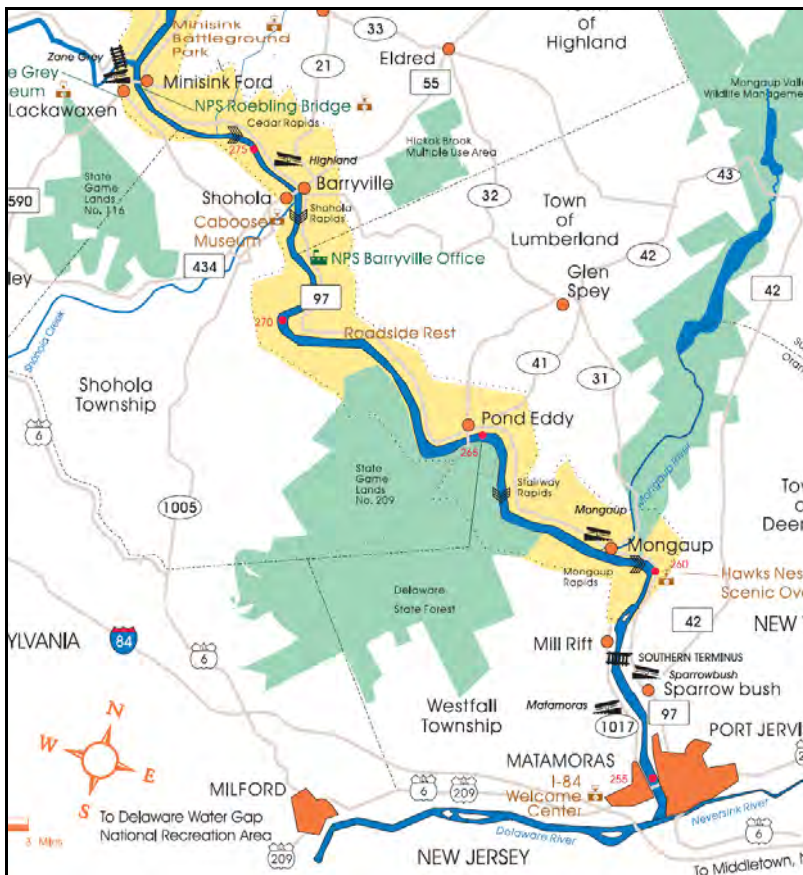
As part of the cooperative planning process undertaken by participating local municipalities, the five affected counties, the two states, the Delaware River Basin Commission and the National Park Service, *Land and Water Use Guidelines* were developed to advise local municipalities in their land use control efforts to continue to protect the River Corridor by restricting inappropriate development. This approach was undertaken in response to local demand for continued basic local authority over land use control and community development decisions as an alternative to widespread land acquisition by the National Park Service.

The *Land and Water Use Guidelines* provide a range of goals and objectives for conserving the integrity of the Upper Delaware Corridor while at the same

time sustaining its continued economic viability. Rather than prescribing specific actions required of local municipalities, the *Guidelines* allow a range of alternatives and performance standards to meet a specific River Corridor conservation goal. Alternatives include such performance standards as minimum lot size and width, building setbacks, and ridge line development limitations, and regulations for parking, signs and the types of uses permitted in the River Corridor.

Substantial Conformance

Following the development of the *Land and Water Use Guidelines*, the Upper Delaware Council and the NPS conducted a *substantial conformance* review of all of the local municipal land use ordinances in the Corridor. Federal land acquisition is severely limited in municipalities in substantial conformance where land use regulations are deemed adequate to afford Corridor protection. In those municipalities not in substantial conformance, the NPS can acquire land



The Upper Delaware in Pike County (Source: Upper Delaware Council.)

threatened by development which is not consistent with the *Land and Water Use Guidelines*.

The Westfall Township Zoning Ordinance was found to be in substantial conformance given the inclusion of a section with specific requirements for the Upper Delaware Corridor governing setbacks from the River, lot width along the River, ridge line protection and lot coverage. In addition, the Conservation and Low Density Residential Zoning Districts allow only those types of uses which are consistent with the *Land and Water Use Guidelines*.

Upper Delaware Council

Westfall Township participates in the Upper Delaware Council (UDC). The UDC as formed in 1988, is a consortium of local riparian municipalities, the two states, and the Delaware River Basin Commission that works with the National Park Service to protect the integrity of the River Corridor. The Council coordinates local interests on such issues as River flows, ridge-top protection, recreational use of the River, flooding, proposed power lines, the Route 97 Scenic Byway, and cell towers. The UDC also administers an annual competitive technical assistance grant program of some \$25,000 for participating municipalities and other organizations in the Corridor for land use planning and other River-related programs. The UDC awarded \$3,000 to Westfall Township for this *Comprehensive Plan*.

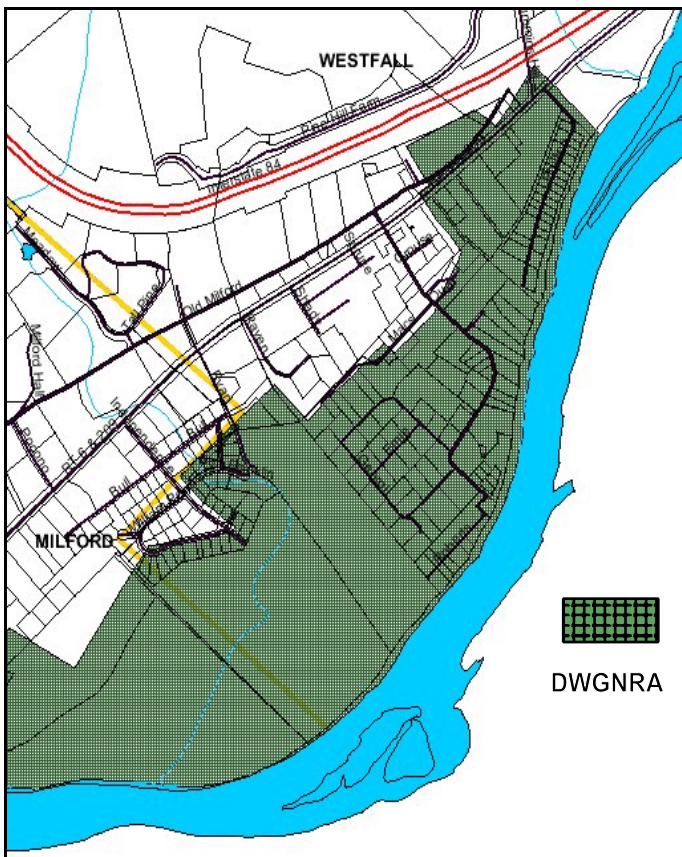
Delaware Water Gap National Recreation Area

Unlike the Upper Delaware, the Delaware Water Gap National Recreation Area is comprised of land owned, or which will eventually be owned, by the National Park Service. The northern boundary of the Recreation Area extends into the southern section of Westfall Township. Including almost 69,000 acres and 40 miles of the Delaware River, the Delaware Water Gap National Recreation Area is the largest natural area in the entire National Park System between Virginia and Maine and one of the largest protected natural areas in the metropolitan corridor extending from Washington, D.C., to Boston, Massachusetts. According to the NPS, there are some 5 million recreation visits to the Recreation Area each year.

Similar to the Upper Delaware, the Delaware Water Gap National Recreation Area has been a significant factor in the growth and development of Pike County. While development of the federal land has been precluded, it has generated much tourism and added to the open space character of the area.

Matamoras and the NPS

Matamoras Borough lies between the Upper Delaware and the Delaware Water Gap National Recreation Area. Zoning in the Borough is not subject to the Upper Delaware *Land and Water Use Guidelines* nor any possibility of land acquisition as part of the Delaware Water Gap National Recreation Area. Nevertheless, the Borough, along with Westfall Township,



Delaware Water Gap National Recreation Area
(Source: Pike County GIS.)

experiences not only some of the tourism trade associated with the national designations, but the increased traffic as well.

Dark Skies

The International Dark-Sky Association (IDA, Inc.) notes: *Today, people who live in or near cities have lost much of their view of the universe. This view is often substantially diminished even for people who live in smaller towns and rural areas. The spectacular view of the sky that our ancestors had on clear dark nights no longer exists. The great increase in the number of people living in urban areas has resulted in a rapid increase in urban sky glow due to outdoor lighting, brightening the heavens to such an extent that the only view most people have of the Milky Way or most stars is when they are well away from cities. This excess light in the sky has an adverse impact on the environment and seriously threatens to remove forever one of humanity's natural wonders - our view of the universe.*



Artist's rendering of city glow effect and a dark sky site. (IDA, Inc.).



This sky glow that adversely affects the environment and compromises astronomical research is called light pollution, for it is wasted light that does nothing to increase nighttime safety, utility, or security. Such wasted light only serves to produce glare, clutter, light trespass and light pollution and wastes energy, money, and natural resources in the process.

Here are some solutions that minimize light pollution without compromising in any way nighttime safety, security, or utility:

- 1. Use night lighting only when necessary. Turn off lights when they are not needed. Timers can be very effective. Use the correct amount of light for the need, more is not better.*
- 2. Direct the light downward, where it is needed. The use and effective placement of well designed fixtures will achieve excellent lighting control. When possible, retrofit or replace all existing fixtures of poor quality. In all cases, the goal is to use fixtures that control the light well, minimizing glare, light trespass, light pollution, and energy usage.*
- 3. Use low pressure sodium (LIPS) light sources whenever possible. This is the best possible light source to minimize adverse effects on astronomical activities. LIPS lamps are also the most energy-efficient light sources that exist. Areas where LIPS is especially good include street lighting, parking lot lighting, security lighting, and any application where color rendering is not critical.*
- 4. Avoid development near existing observatories, and apply rigid controls on outdoor lighting when development is unavoidable. Such controls do not compromise safety, security, or utility. Outdoor lighting ordinances and codes have been enacted by many communities to enforce quality and effective nighttime lighting.¹³*

¹³International Dark Sky Association, Inc., *Information Sheet #1*.

**Zoning Standards
for Lighting and Glare**

The Borough and Township zoning ordinances include standards to control lighting and glare associated with nonresidential development. The standards are basic and may not afford as much protection for neighboring properties and dark-sky preservation as more updated standards.

The Borough and Township will:

- Review and update the lighting and glare standards in the zoning ordinance based on current practices to minimize light pollution.
- Consider applying the standards to all types of residential and nonresidential development.
- Consider standards in a nuisance ordinance that can be applied to existing lighting and glare problems.

HOUSING PLAN

INTRODUCTION

The Housing Plan examines the characteristics of the Matamoras-Westfall Planning Area's existing housing stock and provides strategies to address future housing issues. It is intended to meet the housing needs of current residents and to accommodate anticipated growth. In addition, the Housing Plan seeks to ensure that the Borough and Township provide for housing of various types and in various arrangements.

Families and individuals of all income levels reside in the Matamoras - Westfall Planning Area and need continued access to decent and affordable housing with proper community facilities. The special needs of young families looking for their first home and senior citizens on fixed incomes must be addressed. Similar to commercial development, the Borough and Township can employ cooperative zoning to direct housing types and densities to the most appropriate locations in the Planning Area.

The Pennsylvania Municipalities Planning Code requires 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.

Zoning must provide for housing of various dwelling types encompassing all basic forms of housing, including single-family and two-family dwellings, and a reasonable range of multifamily dwellings in various arrangements, mobile homes and mobile home parks.

HOUSING GOAL AND OBJECTIVES

Housing Goal: Provide for secure and sound housing in a variety of types and densities.

Objectives:

Current Residents

Meet the housing needs of current Planning Area residents.

- Sound Housing - Encourage preservation of presently sound housing.
- Rehabilitation - Promote rehabilitation of houses in decline.
- Housing Programs - Encourage participation in all county, state and federal housing rehabilitation and assistance programs to ensure residents receive full benefit from such programs.

Housing Growth

Accommodate anticipated housing growth in appropriate locations, at appropriate densities, and with suitable amenities.

- Location - Coordinate the location of new housing with pending road improvements
- Density - Provide for varying densities suited to the Planning Area's character and landscape and infrastructure.

- Townhouses - Allow townhouses in conservation design in all zoning districts at the same density as single-family dwellings.
- Amenities - Provide for recreation and open space amenities within residential developments
- Senior Housing - Encourage the development of nursing homes, adult care centers, assisted living facilities and other housing types which provide amenities that are attractive to retirees.
- Commercial District Dwellings - Where adequate off-street parking and sewage disposal are available, encourage the use of second and third floor spaces in the Borough Commercial District for dwellings.

Types and Affordability Provide a diversity of housing types and affordability levels.

- Type and Density - Allow residential development of various types in suitable areas at a density sufficiently high to moderate the land cost of the increasing cost of housing, while requiring adequate off street parking, water supply and sewage disposal.
- Fair Share - Ensure that the Planning Area provides its required *fair share* of housing of all types at various densities.
- Gated Alternatives - Promote alternatives to private, gated communities.
- Innovative Design - Advocate conservation design, village style or traditional neighborhood development.
- Incentives - Consider density and design incentives to encourage the development of age-restricted and affordable housing

HOUSING CONSIDERATIONS

Municipalities Planning Code Requirements

The Pennsylvania Municipalities Planning Code (MPC) addresses housing from the perspective of ensuring affordable housing for families of all income levels. In terms of planning, MPC §301 requires comprehensive plans to include an element *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.*

In terms of land use management as effected by zoning, MPC §604 requires zoning ordinances to *provide for the use of land within the municipality for residential housing of various dwelling types encompassing all basic forms of housing, including single-family and two-family dwellings, and a reasonable range of multifamily dwellings in various arrangements, mobile homes and*

mobile home parks, provided, however, that no zoning ordinance shall be deemed invalid for the failure to provide for any other specific dwelling type.

Court decisions have upheld this zoning provision of the MPC establishing a *fair share* rule which considers the percentages of land available for a given type of housing, current population growth and pressures within the municipality and surrounding region, and the amount of undeveloped land in a community. The Pennsylvania Department of Economic Development publication titled, *Reducing Land Use Barriers to Affordable Housing, Fourth Edition, August 2001*, lists a number of barriers to affordable housing associated with land use regulations, including among others:

- insufficient amount of land zoned for medium and high density residential development
- excessive lot frontage and setback requirements which dictate greater lot sizes
- excessive street widths and construction standards unrelated to expected traffic volumes
- lack of provisions for cluster design and planned residential development
- limitations on the use of mobile homes and manufactured homes
- plan review and administrative delays

Housing Affordability

Municipalities throughout the country have been addressing housing issues for many years. *Pennsylvania Housing*, a 1988 study conducted by the Pennsylvania Housing Financing Agency, defined *affordable* as requiring less than thirty percent of gross monthly income for rent or less than twenty-eight percent for a mortgage and other related housing costs. U.S. Department of Housing and Urban Development (HUD) guidelines continue to define *affordable housing* as costing no more than thirty percent of a household's gross monthly income. (See also the *Affordable Housing Study Sidebar* on the following page.)

Affordability in a Growing Community

Real estate values in Matamoras Borough and Westfall Township, and all of Pike County, have increased rapidly given the appeal of the quality lifestyle so close to metropolitan areas. The Borough's small town character and the Township's natural setting are key factors. As the housing market recovers and the longer term demand for land and housing continues, the cost of real estate will obviously also continue to increase. Balancing this demand driven housing cost increase with the need for affordable housing is difficult, particularly when coupled with the problem of providing adequate sewage disposal and water supply for higher density housing.

Affordable Housing Study

The Summer 2000 *Affordable Housing Study* for Jacksonville, Florida provides a good description of how affordable housing is assessed. *The American Dream* has long been associated with the possibility of owning one's home. National housing-market surveys report that the home ownership rate reached a peak in the late 1990s—almost sixty-seven percent in 1999—due mainly to a robust economy with record levels of low unemployment and low interest rates. However, while this unprecedented economic expansion enabled many Americans to purchase their own homes, it has pushed housing prices and rental rates higher, preventing many other households, with insufficient incomes, from either becoming homeowners or finding affordable, safe, and decent rental housing. Housing affordability is a relative concept—both rich and poor can experience difficulty in affording housing, depending on how much they spend toward housing costs. Housing in one community with a relatively high median income can be quite expensive but affordable compared to housing in another community with a relatively low median income.

Federal governmental guidelines, primarily those established by the U.S. Department of Housing and Urban Development (HUD), define affordable housing as costing no more than thirty percent of a household's gross monthly income—referred to here as the 30 percent rule. The income counted is derived from all wages earned by people fifteen and older in the household. For homeowners, affordability is generally defined as owning a house with a value equal to slightly more than twice the household's annual income. The homeowner costs counted typically include a mortgage payment (principal, interest, taxes, and insurance) and utilities. For renters, the costs usually include contract rent and utilities. The 30 percent rule leaves seventy percent for food, clothing, health care, child care, transportation to work, and other basic expenses. Because of increasing housing costs, many lower income Americans are forced to make tradeoffs and go without necessities. Tenants experiencing unexpected emergencies typically fall behind in their rent and face eviction. If not assisted, they may become homeless.

EXISTING HOUSING CONDITIONS

Overview

Unlike most of the other municipalities in Pike County, Matamoras Borough and Westfall Township evolved more as full-time communities than as vacation communities. Recent population increases in Pike County are largely a result of conversion of second homes to permanent residences, while Matamoras and Westfall have historically experienced much less seasonal home development and conversions.

Housing Trends

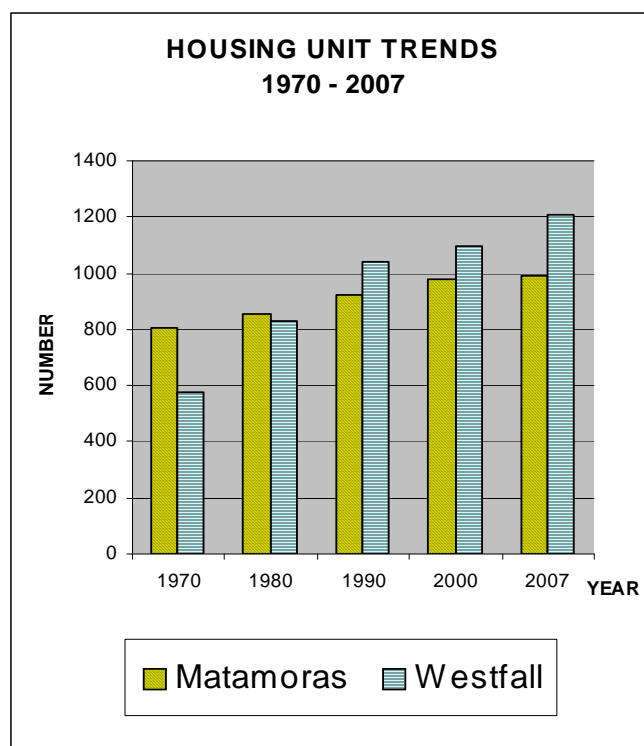
The *Housing Units Table* shows the changes in the number of housing units throughout Pike County between 1970 and 2000 and the *Dwelling Unit Permits Table* shows the number of permits issued for new dwellings in the Borough and Township through 2007. Key considerations and changes in the Planning Area include:

- Matamoras has limited potential for increased numbers of dwelling units given few vacant lots and little vacant land, while Westfall Township, with hundreds of acres of open land, holds great potential.
- The number of housing units in the Borough has increased at about the same rate since 1970.
- In the Township, the greatest increase in number of housing units occurred between 1970 and 1980.
- In Matamoras Borough, housing units in 2007 are estimated at 1,020, based on the 44 building permits issued since 2000. The increase is on par with the increases since 1970.

HOUSING UNITS U.S. CENSUS										
	1970 Total Units	# 70-80	% 70-80	1980 Total Units	# 80-90	% 80-90	1990 Total Units	# 90-00	% 90-00	2000 Total Units
Blooming Grove	391	1,646	421.0%	2,037	1,067	52.4%	3,104	169	5.4%	3,273
Delaware	1,167	1,123	96.2%	2,290	705	30.8%	2,995	458	15.3%	3,453
Dingman	676	711	105.2%	1,387	2,794	201.4%	4,181	1,508	36.1%	5,689
Greene	1,251	313	25.0%	1,564	999	63.9%	2,563	217	8.5%	2,780
Lackawaxen	944	582	61.7%	1,526	1,722	112.8%	3,248	502	15.5%	3,750
Lehman	443	1,103	249.0%	1,546	2,429	157.1%	3,975	680	17.1%	4,655
Matamoras	807	48	5.9%	855	66	7.7%	921	56	6.1%	977
Milford Boro	507	14	2.8%	521	43	8.3%	564	(4)	-0.7%	560
Milford Twp	205	165	80.5%	370	193	52.2%	563	31	5.5%	594
Palmyra	1,859	1,287	69.2%	3,146	765	24.3%	3,911	(73)	-1.9%	3,838
Porter	636	212	33.3%	848	24	2.8%	872	54	6.2%	926
Shohola	627	240	38.3%	867	2,049	236.3%	2,916	173	5.9%	3,089
Westfall	576	257	44.6%	833	206	24.7%	1,039	58	5.6%	1,097
Pike County	10,139	7,588	74.8%	17,727	13,125	74.0%	30,852	3,829	12.4%	34,681
PA (1,000's)	3,925	671	17.1%	4,596	342	7.4%	4,938	312	6.3%	5,250

DWELLING UNIT PERMITS PIKE CO. BOARD OF ASSESSMENT*			
Year	Matamoras	Westfall	Pike Co.
2000	1	8	481
2001	4	11	504
2002	4	14	735
2003	6	14	907
2004	5	14	1,121
2005	7	17	1,037
2006	12	25	1,004
2007	5	11	6,751
total	44	114	12,540

* Source: 21st Century Appraisals



Source: 1970 - 2000 - U.S. Census; 2007 - estimate

- Based on the 114 permits issued, the number of housing units in Westfall Township in 2007 is estimated at 1,155, with the anticipated 10-year increase well below prior decades.
- The pace of population growth has exceeded the growth of new housing units. This is likely due to the conversion of seasonal units to permanent housing and larger household sizes as more families move into the Planning Area. From 1990 to 2000, the number of seasonal homes in the Township dropped from 144 to 87.
- By comparison, Dingman, Lehman, Lackawaxen and Delaware Townships have experienced the greatest increases in housing unit numbers over the past 15 years, due in large part to in-fill in existing large subdivisions.
- In terms of both rate of increase and absolute numbers, Dingman Township has shown the greatest growth since 1980, increasing from 1,387 units to 5,689 units, this increase having been likely stimulated by the availability of residential communities such as Sunrise Lake, Conashaugh Lakes, and Gold Key Lake, and Dingman's rural atmosphere and affordable housing costs (*Dingman Township Comprehensive Plan - 1997 Planning Survey, Shepstone Management Company*).

Age of Housing

The data in the *Rate of Housing Development Table* provides a good measure of the age and potential condition of housing in the Planning Area.

- The housing units in the Borough are considerably older than in the Township, which would be expected given the early development pattern of the Planning Area.

RATE OF HOUSING DEVELOPMENT U.S. CENSUS						
	Matamoras		Westfall		Pike County	
# Units 2000	977		1,097		34,681	
# Units 1990	921		1,039		30,852	
# Units 1980	855		833		17,727	
# Units 1970	807		576		10,139	
YEAR STRUCTURE BUILT						
	#	%	#	%	#	%
1999-3/2000	3	0.3%	20	1.8%	656	1.9%
1990-1998	85	8.7%	122	11.1%	7,968	23.0%
1980-1989	72	7.4%	263	24.0%	9,618	27.7%
1970-1979	79	8.1%	232	21.1%	7,341	21.2%
1960-1969	86	8.8%	105	9.6%	3,454	10.0%
1940-1959	224	22.9%	173	15.8%	2,997	8.6%
1939 or earlier	428	43.8%	183	16.7%	2,647	7.6%

- Most of the homes in Matamoras and many in Westfall were constructed prior to 1970, the approximate date when state on-site sewage regulations were instituted. This is important in terms of the age of on-lot disposal systems, compliance with DEP standards, and effect on water quality.
- The age of the housing stock does not appear to be a factor in housing condition and dilapidated housing in the Planning Area is not an issue.

Housing Demand

The demand for housing in the Borough and Township, and all of Pike County, will certainly continue at a high level at least for the near term, and most likely for the long term. Although Matamoras has relatively little land available for additional development, ample undeveloped land is available in the Township. The Planning Area will certainly feel the result of new development in terms of increased community activity and associated traffic, and demand for retail and service establishments. Owing largely to the 9/11 terrorist attack and increased urbanite desire for a better quality of life, real estate values in the County have been reported by area real estate brokers to have increased some 25% since 2000. This increase, without a compensating increase in locally rooted incomes, will only exacerbate the housing affordability issue.

Home Ownership

The *Home Ownership Table*, shows the 1990 and 2000 Census home ownership rates for Matamoras, Westfall, Pike County and the Commonwealth.

HOME OWNERSHIP U.S. CENSUS				
Occupied Units (does not include second homes)	Matamoras	Westfall	Pike County	PA
Home Ownership Rate (Owner-Occupied), 1990	76.2%	80.2%	83.3%	70.6%
Home Ownership Rate (Owner-Occupied), 2000	70.1%	80.5%	84.8%	71.3%
Renters (Renter-Occupied Units), 1990	23.8%	19.8%	16.7%	29.4%
Renters (Renter-Occupied Units), 2000	29.9%	19.5%	15.2%	28.7%

- Home ownership rates in Westfall Township were higher than the Commonwealth, but lower than the County.
- In Matamoras Borough, the proportion of homeowners was on par with the State, but less than Westfall Township and the County. The data for the Borough and the Commonwealth is consistent with the higher proportion of multi-family dwellings.
- There was an insignificant change in home ownership in the Township between 1990 and 2000, with the County and Commonwealth also showing little change.
- Home ownership rates declined somewhat in the Borough between 1990 and 2000.

OWNER OCCUPIED HOUSING VALUE U.S. CENSUS 2000							
	Matamoras		Westfall		Pike County		PA
	#	%	#	%	#	%	%
total	597	100.0%	569	100.0%	13,091	100.0	100.0%
less than \$50,000	13	2.2%	2	0.4%	232	1.8%	15.1%
\$50,000 to \$99,999	257	43.0%	133	23.4%	4,414	33.7%	37.4%
\$100,000 to \$149,999	283	47.4%	249	43.8%	4,812	36.8%	24.3%
\$150,000 to \$199,999	33	5.5%	114	20.0%	2,133	16.3%	11.9%
\$200,000 to \$299,999	8	1.3%	52	9.1%	1,157	8.8%	7.4%
\$300,000 to \$499,999	0	0.0%	13	2.3%	278	2.1%	2.9%
\$500,000 to \$999,999	0	0.0%	6	1.1%	51	0.4%	0.8%
\$1,000,000 or more	3	0.5%	0	0.0%	14	0.1%	0.2%
median value	\$104,800	--	\$129,300	--	\$118,300	--	\$97,000

MEDIAN HOUSING VALUE U.S. CENSUS	
2000 Value	
Blooming Grove Township	\$137,300
Delaware Township	\$97,000
Dingman Township	\$133,500
Greene Township	\$106,500
Lackawaxen Township	\$108,300
Lehman Township	\$105,100
Matamoras Borough	\$104,800
Milford Borough	\$156,400
Milford Township	\$166,300
Palmyra Township	\$125,700
Porter Township	\$130,600
Shohola Township	\$117,700
Westfall Township	\$129,300
Pike County	\$118,300
Pennsylvania	\$97,000

Housing Value

Housing values compared to household income provide a measure of housing affordability. While high values are positive in terms of housing condition and real estate tax revenue, it may indicate the need to evaluate the affordability of housing for younger couples and older residents. (See the *Median Housing Value Table* and the *Owner Occupied Housing Table*.)

- The Township has a higher proportion of homes of greater value than the Borough, and this is reflected in the median value data. Nevertheless, home values vary widely with the highest proportion of homes in the \$100,000 - \$149,000 range.
- Median value of owner-occupied homes in Matamoras, at \$104,800, was at the lower end of the values in Pike County, but higher than the Commonwealth as a whole. This is probably a reflection of the age of housing with smaller lots, fewer high value vacation homes, and more families working in the local economy instead of commuting to metropolitan areas.
- Westfall Township's median housing value was about in the middle of County values, but substantially higher than the State's. Generally newer housing on larger lots most likely accounting for the value being higher than the Borough's.

HOUSING VALUES U.S. CENSUS				
Housing Data	Matamoras	Westfall	Pike Co.	PA
Median Value Owner-Occupied, 2000	\$104,800	\$129,300	\$118,300	\$97,000
Median Value Owner-Occupied, 1990	\$105,300	\$127,600	\$117,700	\$69,700
Median Value Owner-Occupied, 1990, inflation adjusted to 2000	\$138,785	\$168,177	\$155,129	\$91,865
% Change 1990 - 2000 inflation adjusted	-24.5%	-23.1%	-23.7%	5.6%

- Equally important is the change in median value between 1990 and 2000 which provides a measure of demand for housing compared to the regional market.
- After adjustment for inflation, which between 1990 and 2000 was a factor of 1.318, median housing value in the Borough, Township and County actually decreased significantly in the ten years between the Census counts.
- This suggests that the housing values are not keeping pace with the cost of living, or that more recent housing construction has been of more modest values.
- The data is perplexing when considered in terms of the value of real estate in Pike County and the recent dramatic increases in real estate values since 2000.

Housing Structural and Vacancy Characteristics The *Housing Structural and Vacancy Characteristics Table* provides data for the Year 2000 on the types of housing units in the Planning Area and the occupancy of the units.

- The Planning Areas's housing stock is dominated by single-family detached dwellings.
- Multi-family housing units account for almost 22% of the total housing stock in the Borough, but less than 5% in the Township.

HOUSING STRUCTURAL AND VACANCY CHARACTERISTICS U. S. CENSUS								
	Matamoras		Westfall		Pike County		PA (1,000's)	
1990 total housing units	921		1,039		30,852		4,938	
1990 occupied housing units	768		784		10,536		4,496	
2000 total housing units	977		1,097		34,681		5,250	
2000 occupied housing units	925		951		17,433		4,777	
2000 Housing units in structure	#	%	#	%	#	%	#	%
1 unit detached	740	75.7%	794	72.3%	27,986	80.7%	2,935	55.9%
1 unit attached	25	2.6%	74	6.7%	697	2.0%	940	17.9%
multi-family	212	21.7%	47	4.3%	872	2.5%	1,111	21.2%
mobile homes, trailer, other	0	0.0%	183	16.7%	5,126	14.8%	263	5.0%
Average household size (persons)								
1990	2.52		2.54		2.62		2.57	
2000	2.50		2.49		2.63		2.48	
2000 occupied housing units	#	%	#	%	#	%	#	%
total occupied units	925	100.0%	951	100.0%	17,433	100.0%	4,777	100.0%
owner occupied units	648	70.1%	766	84.8%	14,775	84.8%	3,406	71.3%
renter occupied units	277	29.9%	185	15.2%	2,658	15.2%	1,371	28.7%
2000 vacant housing units	#	%	#	%	#	%	#	%
total vacant units	52	5.3%	146	13.3%	17,248	49.7%	473	9.0%
seasonal/recreation use	6	0.6%	87	7.9%	15,350	44.2%	148	2.8%
other vacant units	46	4.7%	59	5.3%	1,898	5.5%	325	7.8%
Homeowner vacancy rate								
1990	3.1%		3.1%		4.9%		1.5%	
2000	2.6%		2.7%		3.6%		1.6%	
Renter vacancy rate								
1990	15.3%		5.5%		10.1%		7.2%	
2000	4.8%		6.6%		5.7%		7.2%	

- The proportion of multi-family dwellings in the Borough was on par with the Commonwealth, while Westfall's is significantly lower. Multi-family dwellings often provide a more affordable type of housing.
- Additionally, 183, or almost 17%, mobile homes (often more affordable), trailers or other dwelling types were reported in the Township, compared to none in the Borough, about 15% in the County and 5% in the State.
- Occupied housing units in the Borough totaled 977 with 648 (70%) owner occupied and 277 (30%) renter occupied.
- In the Township, 766 (85%) of the 951 total units were owner occupied and 185 (15%) were renter occupied.
- In 2000, the homeowner vacancy rate, which is the proportion of owner-occupied units vacant and for sale, was 2.6% in the Borough and 2.7% in the Township. A vacancy rate of less than 6% is considered low.
- The number of dwellings for season or recreation use in the Planning Area is very low when compared to Pike County as a whole, and the number of such homes declined between 1990 and 2000 in all municipalities in the County except Dingman Township.

SECOND HOMES U.S. CENSUS				
Municipality	Second Homes			
	1990	2000	2000 % of Total Units	% change ('90 - '00)
Blooming Grove Twp.	2,227	1,677	51.2%	-25%
Delaware Township	1,698	993	28.8%	-42%
Dingman Township	2,368	2,435	42.8%	3%
Greene Township	1,368	1,349	48.5%	-1%
Lackawaxen Township	1,986	1,862	49.7%	-6%
Lehman Township	2,647	1,762	37.9%	-33%
Matamoras Borough	14	6	0.6%	-57%
Milford Borough	21	18	3.2%	-14%
Milford Township	79	41	6.9%	-48%
Palmyra Township	2,841	2,337	60.9%	-18%
Porter Township	796	724	78.3%	-9%
Shohola Township	2,180	2,054	66.5%	-6%
Westfall Township	144	87	7.9%	-40%
Pike County	18,351	15,350	44.2%	-16%
PA (1,000's)	144,700	148,443	2.8%	3%

Housing Affordability in the Planning Area

Housing affordability is a complex issue typically related to the unique mix of housing types, real estate demand, housing values, and household incomes in the community. In the Planning Area and Pike County, the number of residents commuting to work in nearby metropolitan areas also adds to the housing affordability mix. These commuters, who have often recently moved to the County, are employed in more lucrative jobs than residents who are employed locally. This higher income, coupled with the high value of homes sold in the metropolitan area, add to the cost of real estate in Pike County. These *equity exiles* can afford to pay more for housing and the demand they drive increases housing values beyond the level of affordability for many Township residents relying on the local job market. The *Bergen County Comparison Figure* puts the local versus metropolitan differences into perspective.

HOUSING MARKET CONTRAST	Bergen County	Pike County
Median Household Income	\$65,241	\$44,608
Median Home Value	\$250,000	\$118,000
Median Property Taxes / % of Income	\$5,499 8%	\$1,915 4%

Bergen County Comparison (Year 2000)

The *Housing Affordability Data Table* also includes 2000 Census information to provide an indication of the affordability of housing in the Planning Area.

- In both the Borough and Township a significant proportion of home owning households and renting households had Year 2000 housing costs which exceed the *thirty percent rule* for household income and housing expense indicating an affordability problem in the Planning Area.
- The very high proportion for renting household in the Borough with rent exceeding 30% of income, almost 50%, is of particular concern.
- It is also important to remember that the data does not account for the dramatic increases in real estate values since 2000 which likely have added to the affordability problem.
- In addition, the recent enactment of the State Uniform Construction Code has, while aimed at ensuring the safety and durability of construction, added to the overall cost of home construction.

HOUSING AFFORDABILITY DATA U. S. CENSUS 2000									
	% Single-family	% Duplex	% Mobile Homes RV's	% Multi-family	Median Housing Value	Median Gross Rent	Median Hsehold Income	% Owner Hseholds home exp >30% of Income	% Hseholds with rent >30% of Income
Matamoras	75.7%	2.6%	0.0%	21.7%	\$104,800	\$663	\$37,361	25.1%	47.6%
Westfall	72.3%	6.7%	16.7%	4.3%	\$129,300	\$675	\$42,472	26.8%	33.7%
Pike Co	80.7%	2.0%	14.8%	3.5%	\$118,300	\$701	\$44,608	29.2%	39.6%
PA	55.9%	17.9%	5.0%	21.1%	\$97,000	\$531	\$40,106	22.8%	35.5%

PLANNING IMPLICATIONS

Regional Issue

The type and price of housing available in any municipality is largely market driven and beyond a municipality's direct control. Local municipalities must recognize that housing needs cannot be addressed entirely at the local level. In fact, with the exception of ensuring that land use and building regulations are reasonable in terms of affecting costs, small municipalities can do little to manage housing affordability which is so dependent on regional economic real estate market factors. In addition, municipalities can take steps to encourage innovative forms of housing that meet the community's needs and satisfy the market. Age restricted housing is a good example.

Housing Stock

The housing stock in the Planning Area appears to be healthy in terms of condition and overall mix of housing types. However, home ownership in the Borough decreased between 1990 and 2000 and the homeowner vacancy rate decreased somewhat in the Borough and Township. This may suggest ownership may be more difficult where few homes are available for purchase and at higher prices. The percentage of cost burdened homeowners and renters is high, increasing the chance for instability.

Housing Programs

The Borough and Township must look to the Wayne County Housing Authority and their contacts with private affordable housing organizations to meet the specific housing needs of lower income residents. Housing Authority assistance is necessary to ensure resident access to publically funded housing development, rent assistance and housing rehabilitation programs. Pike County currently contracts with the Wayne County Housing Authority for federal housing services. The Pike County Comprehensive Plan suggests that the County *determine whether a separate Pike County housing agency, such as a Housing Authority or Community Housing Development Organization, should be created to identify housing needs and issues, identify and/or institute programs to meet the housing needs of Pike County residents, and facilitate resident use of those programs.*

FUTURE PLANNING POLICIES

Overview

Future planning and policy recommendations pertaining to housing are intended to ensure that the Borough and Township accommodate projected housing unit growth, provide for a diverse and affordable mix of housing types, and maintain a sound housing stock.

Policies

Policies:

- Promote mixed-use development that would accommodate various dwelling types in proximity to commercial and civic services.
- Provide for a variety of housing types, including single-family attached and multi-family dwellings, in order to accommodate individuals and families of various income levels.
- Review land use controls in terms of standards not directly linked to public health and safety which increase housing costs.

- Provide for age-restricted housing in proximity to services to accommodate seniors.
- Consider a market study to determine the need for affordable owner and rental units and propose required actions.
- Investigate ways to bring relief to cost burdened households (owner and renters).
- Permit a mix of lot sizes within residential developments to encourage diversity of housing structures and styles.
- Encourage rehabilitation of substandard housing.
- Cooperate with area municipalities and the County to plan for housing needs regionally and as housing needs are identified consider the development of joint housing plans with neighboring municipalities.

IMPLEMENTATION STRATEGIES

Overview

Implementation of the housing plan proposes actions aimed at supporting existing residents, accommodating future housing needs, and providing a variety of housing types and affordability levels. Housing goals can be accomplished through the following initiatives:

Zoning Ordinance

Zoning Ordinance amendments intended to implement the policies and recommendations:

- Promote the use of conservation design, traditional neighborhood, and planned residential development, and development incentives such as density bonuses as a means of providing more affordable housing.
- Consider providing some incentives (density or design) for developers who provide age restricted and/or affordable housing.
- Allow multi-family housing where compatible with surrounding land uses, with access to transportation corridors, and in keeping with the logical extension of utilities and public services.
- Consider the use of cooperative zoning to provide higher density housing in areas with adequate infrastructure.
- Consider the use of transferrable development rights to enable the shift of density from more remote parcels to zoning districts allowing higher residential density.

SALDO

Subdivision and Land Development Ordinance amendments intended to implement the policies and recommendations:

- Create design standards that promote attractive, interconnected communities with pedestrian access and appropriate landscaping.

Additional Measures

Additional measures intended to implement the policies and recommendations are as follows:

- Support the housing recommendations of the Wayne County Housing Authority (which currently serves Pike County) relative to subsidized housing programs for low and moderate income families and ensure area residents receive fair consideration for available programs.
- Encourage Pike County to assess the need and benefit of a County authority or agency (as opposed to contracting with the Wayne County Housing Authority) to address housing needs.
- Conduct an in depth housing study to address issues related to affordability and the supply of various types of housing.

COMMUNITY FACILITIES, SERVICES AND UTILITIES PLAN

INTRODUCTION

Overview

Community facilities and services are those facilities and services that are provided by local, county and state government, and by quasi-public institutions such as volunteer fire departments, hospitals and libraries. They are most often considered in terms of government or institutional response to meet the needs and demands of the community's residents.

Community facilities and services can serve as a tool, or as an unexpected trigger, to guide or stimulate community growth and development. Provision of a public water supply or sewage disposal system can be used to remedy an existing problem or foster business development, but unexpected (and perhaps undesired) development can result. The construction or improvement of highways, often to solve traffic congestion, can have similar effect resulting in even more traffic and a change in community character.

Local Providers

This section of the *Comprehensive Plan* focuses on those facilities and services provided by the two municipalities, the County, and quasi-public institutions, such as fire and ambulance companies serving the area. It addresses existing issues related to these services and seeks to coordinate the provision of community facilities, services and utilities with the development pattern advocated by the Future Land Use Plan.

Cooperation

This *Comprehensive Plan* also supports inter-municipal cooperation for the provisions of community facilities, services and utilities. In recent years, more and more municipalities in the Commonwealth have begun working together on a number of issues and programs. The provision of community facilities and services offers myriad opportunities for continued cooperation. Cooperation can result in efficiency of program operation and service delivery, and economies of scale in purchasing of supplies and materials. A council of governments (COG) is the most common type of local municipal organization in the Commonwealth and can, by formal municipal agreement, be used to provide virtually any service or facility normally provided by an individual municipality. Examples of COGs in the region are the Pike County COG, the Lackawanna County COG and the Susquehanna COG. The Lackawanna County COG has been effective in terms of realizing savings on purchases of materials such as road salt. The Susquehanna County COG, with some fourteen member municipalities, administers the sewage enforcement program and the statewide building code for member municipalities. Local officials should fully explore and take advantage of any opportunities to improve facilities and services offered by intermunicipal cooperation via Matamoras and Westfall collaboration, the Pike County Council of Governments and the Pennsylvania *Piggyback* (purchasing) Program.

COMMUNITY FACILITIES, SERVICES AND UTILITIES GOAL AND OBJECTIVES

Community Facilities, Services and Utilities Goal: Ensure that community facilities and services are provided to meet the needs of the Matamoras - Westfall Planning Area.

Residents rely on community and public facilities and services to meet their transportation, educational, water supply, sewage disposal, police protection, emergency response, recreation and other daily living need. Municipalities do not, and cannot, provide all the facilities and services demanded by residents, many such services being provided by other levels of government or volunteer organizations. Nevertheless, without diligent and ongoing attention to the operation and maintenance of existing facilities and services, and planning for new facilities and services, a municipality can fall short in adequately serving its residents.

Community facilities and utilities should be considered resources with limited capacities that are to be provided in appropriate places to support and implement a multi-municipal comprehensive plan. The location of certain key facilities, including water, sewer, schools, and roads, are often essential to providing the necessary services to accommodate more intensive residential and nonresidential development. Conversely, these services will facilitate unintended development in areas, such as important farming areas or areas with limiting natural resources, where growth may not be appropriate. The location of other services, facilities, and utilities should be considered in relation to their ability to support or conflict with the land use planning for the multi-municipal area. The land use planning should facilitate the efficient and economic provision of public, quasi-public, and privately provided community services wherever possible.

Source: *Planning Beyond Boundaries*, p. 3-18.

OBJECTIVES:

Public Facilities and Services

Maintain existing public facilities and services and plan carefully for new public facilities and services.

- Maintenance - Provide necessary maintenance of existing municipal buildings, equipment and other community facilities to extend the useful life and forestall unnecessary capital expenditures.
- Efficiency - Manage all municipal facilities and services efficiently and effectively.
- Capital Improvements Program - Systematically identify the need for local municipal community facilities and services, including useful life replacement of existing facilities, and develop a capital budget to meet the needs.
- Water and Sewer Extensions - Evaluate the extension of any central water supply or central sewage disposal service in terms of stimulating unwanted development.
- Infrastructure Needs - Encourage the County to take the lead with area municipalities to coordinate planning for the infrastructure needs of Eastern Pike County.
- Cooperation - Encourage and participate in any area intergovernmental cooperation efforts for community facilities planning and economies of scale for joint purchasing, recreation and other facilities and services.

- Sidewalks - Recognize the importance of sidewalks to the quality of life in the Borough and develop a sidewalk inventory, improvement, construction, and maintenance program to ensure long term viability of sidewalks.

Emergency Services**Protect the Planning Area with effective emergency services.**

- Expanded Service - Identify isolated and under served areas and assess the need for expanded or additional fire and ambulance stations.
- Volunteer Organizations - Acknowledging the critical importance of such groups to the community, encourage and continue to support volunteer fire, ambulance and other public service organizations.
- Police Protection - Maintain existing levels of police protection and consider cooperation as demand for service increases.

Water Supply and Sewage Disposal**Ensure adequate water supplies and sewage disposal facilities.**

- Source Water - Identify important groundwater supply areas and actively protect the sources.
- Borough Water Authority - Monitor the need to extend the Borough water system to serve new customers as demand dictates and the supply permits.
- Well Ordinance - Apply well construction standards with a well ordinance in areas not served by community water supply.
- Community Water Supplies - Apply well head protection standards to maintain good drinking water quality.
- Township Sewer Authority - Monitor the need to extend the sewer system to serve new customers as demand dictates and the treatment capacity permits.
- Sewage Disposal - Monitor the effectiveness of on-lot sewage disposal systems and evaluate central sewage disposal as a means of correcting any widespread problems.
- On-Site Sewage Systems - Ensure that on-site sewage systems are maintained, and that failing systems are repaired and new systems are installed in accord with DEP standards.

Storm Water**Improve stormwater management.**

- Planning - Evaluate storm water management facilities and participate in the Pike County storm water planning project to address existing problem and minimize future problems
- Improvements - Include require stormwater management improvements in the capital improvements program.
- Innovate Controls - Incorporate innovative stormwater management

techniques into new development.

- Education - Address existing problems with stormwater runoff through outreach and education of landowners.

New Development

Ensure that an adequate and safe water supply system, a proper sewage disposal system, well designed and constructed roads, stormwater management and other facilities are provided by developers as part of any residential development.

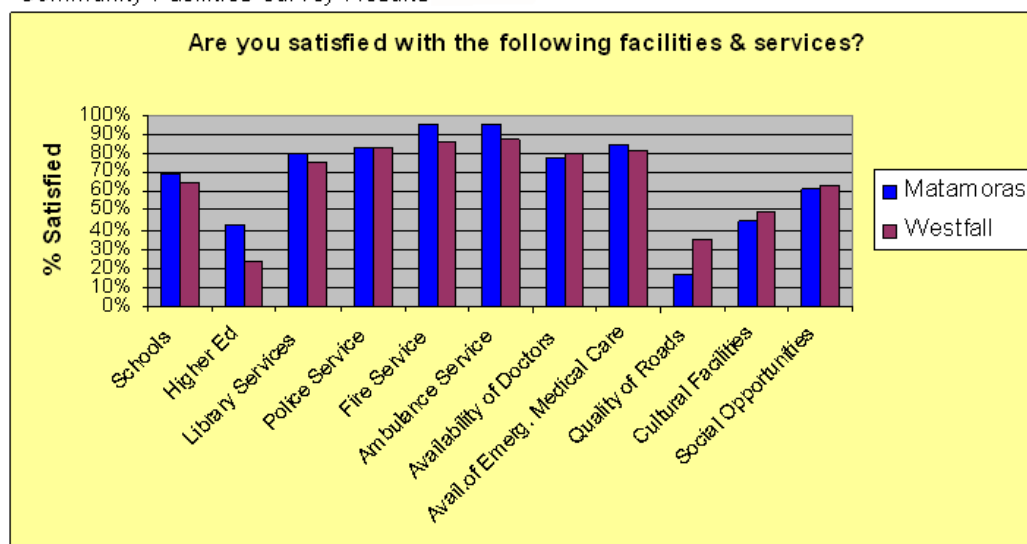
EXISTING CONDITIONS

Overview

Public community facilities and services in the Planning Area are provided on several levels, and the provision of these facilities and services is dependent on tax dollars, whether in the form of federal and state aid, county supported programs, or locally funded facilities and services. Both public and private funds support institutional facilities and services. Certainly, the facilities and services provided by the Commonwealth of Pennsylvania and Pike County are vital to Borough and Township residents, but are somewhat beyond the scope of this *Plan*. Nevertheless, County-owned and operated facilities in the Planning Area are discussed in terms of the effect on the community. Should community residents find that state or county facilities or services are inadequate, local municipal officials can serve as a conduit for communication with responsible state and county officials to effect facility and service improvements.

The discussion of existing community facilities and utilities focuses on municipal facilities, schools, emergency services, water supply, wastewater disposal, stormwater management, and energy supply.

Community Facilities Survey Results



Source: Pike County Comprehensive Plan, Township Specific Survey Results, July 2005

Survey Results

As part of its *Comprehensive Plan*, Pike County conducted a survey of the population within each municipality. One of the questions pertaining to community facilities asked residents to indicate their level of satisfaction with

various aspects of Pike County. Excerpts of the survey results for Matamoras Borough and Westfall Township are shown in the *Community Facilities Survey Results Figure*. The survey reveals that respondents in the Planning Area are generally satisfied with the various community facilities and services, with the exception of *Higher Education, Quality of Roads, and Cultural Facilities*, where fewer than 50% of residents are satisfied. *Schools and Social Opportunities* show room for improvement with less than 70% satisfied.

Municipal Facilities

The Matamoras Borough Municipal Building located on First Street, houses the offices of the Borough Secretary, Zoning Officer, and Sewage Enforcement Officer. A meeting room used for borough business and by seniors and civic groups is housed in the attached annex building. The Eastern Pike Regional Police Department and Emergency Operations Center are also located in the Borough Building.



Matamoras Borough Municipal Building

The Borough employs a full-time secretary, a part-time Zoning Officer, and a part-time Sewage Enforcement Officer. The Building Inspector is subcontracted through a private company.

The Borough's Street Department and Recreation Department equipment is stored in the Borough Barn located on Avenue Q adjacent to Airport Park.

The Borough's equipment includes the following:

- 2007 Stirling Garbage Truck
- 2007 Stirling Dump Truck
- 1989 International Dump Truck
- 1996 Ford Mason Dump Truck
- Backhoe
- Leaf Vacuum

Both the Borough building and barn are in need of upgrades. The most immediate concerns are the lack of an adequate back-up power supply and a lack of local communication systems, including emergency and radio communications. In addition, the Borough has no daily newspaper and no Pennsylvania television stations, which severely limits the local government's ability to communicate with its residents and contributes to a lack of participation in local affairs.



Westfall Township Municipal Building

The Westfall Township Municipal Building is located at La Barr Lane, just off of Delaware Drive. It contains a meeting room and the offices of the Township Secretary, Zoning Officer, Building Officer, and Sewage Enforcement Officer. The meeting room is used for Township business.

The Township Secretary is a full-time employee, the zoning, building and sewage enforcement officers are part-time. The Township also employs a full-time Roadmaster. The governing body consists of five Supervisors. Planning Commission membership was recently increased to five.

The Township maintenance building is located adjacent to the Municipal Building and is used for storage of the following equipment:



Westfall Township Maintenance Building

- 2 Trailers
- 1 Farm Tractor
- 1 Boat Trailer
- 1 Ford F550 Truck
- 1 Ford F350 Truck
- 1 Yamaha Four-Wheel Vehicle
- 1 John Deere Backhoe
- 1 Freight Line Truck (recently purchased)
- 1 Chevy Pick-up Truck (recently purchased)

In terms of future needs, Westfall Township is also lacking a local news outlet, making communications with residents extremely difficult. The Township also experiences frequent power outages and has no back-up power system. Only minor maintenance issues exist in reference to the Township Building.

Schools

As previously noted, just under 70% of survey respondents are satisfied with the state of the schools in the planning area. Although local municipalities have no direct control over school district facilities and activities, the Pennsylvania Municipalities Planning Code (MPC) recognizes the importance of school buildings and land to the community. Public schools account for the largest expenditure of local tax dollars. The public school system not only provides education for a community's children, but also provides adult and community education, library facilities, cultural and social activities, and recreational and sport facilities for the surrounding communities. The MPC requires school districts to submit certain proposed actions related to land and buildings to the municipality for review if a comprehensive plan has been adopted. (See following sidebar.) Most school districts are not aware of this provision and local municipalities must monitor school district activities and notify school administrators about the requirement.

The Matamoras-Westfall Planning Area, along with Milford Borough, Milford Township, Delaware Township, Dingman Township, and Shohola Township, is served by the Delaware Valley School District. The District maintains seven school buildings including the elementary, middle and high school along Route



Delaware Valley Middle and High Schools



School Districts and the Municipalities Planning Code

Section 305. The Legal Status of Comprehensive Plans Within School Districts. Following the adoption of a comprehensive plan . . . , any proposed action of the governing body of any public school district located within the municipality or county relating to the location, demolition, removal, sale or lease of any school district structure or land shall be submitted to the municipal and county planning agencies for their recommendations at least 45 days prior to the execution of such proposed action by the governing body of the school district.

6/209 in Westfall Township, the primary, elementary, and middle school along Route 739 in Delaware Township, and the elementary school along Twin Lakes Road in Shohola Township.

In 2009, the Delaware Valley School District enrolled some 5,800 students and the Pennsylvania Department of Education projected the enrollment to increase to almost 6,100 by 2010 and to 6,700 by 2014. However, recent enrollment rates have been stable with a slight decline at the elementary school level. The District is not longer experiencing 10% to 12% annual growth rates, most likely due to the current economic climate.

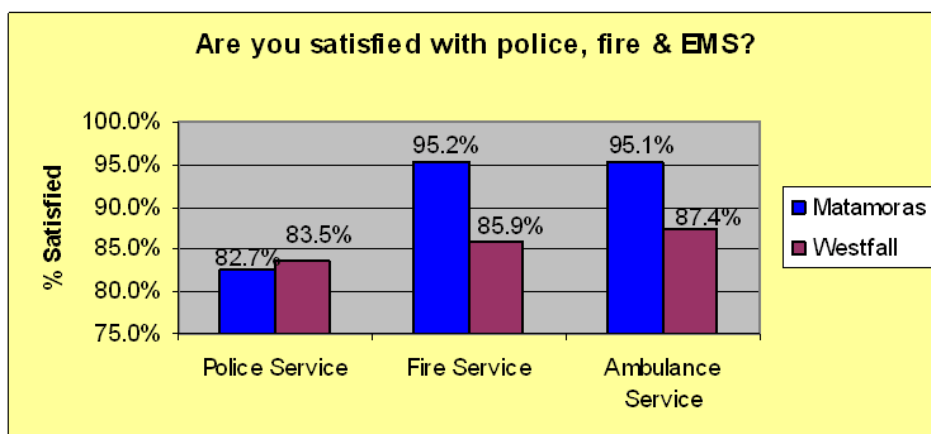
In terms of current issues it faces, the District reports that the region's mobile population (families moving into and out of the District) results in changing students and needs to which the District must respond. Electricity surges and brownouts have been a real and increasing problem due to aging infrastructure. The District also cites the lack of local Pennsylvania television stations and cable networks. Traffic in the vicinity of the high school is no longer a concern as improvements to Route 6/209 have alleviated problems, and there is no immediate need for additional improvements given the stable enrollment rate.

The District shares a good working relationship with Westfall Township and the Regional Police. It wishes to work with Westfall and Matamoras to bring about needed upgrades to the power service, to reinstate past efforts to gain access to Pennsylvania television stations, and to address common issues.

Police, Fire and EMS

Police services are provided by the Eastern Pike Regional Police Department, whose jurisdiction includes Matamoras Borough and Westfall Township. The Eastern Pike Regional Police Department was formed on January 7, 2008 when the Matamoras and Westfall Police Departments merged. It is headquartered in the Matamoras Borough Municipal Building. The Police Department has a full-time staff of eight, including a Chief, Assistant Chief, two Sergeants, and four Patrolmen, and a part-time staff of four patrolmen. Ten patrol cars are in service. The department responded to 197 calls in December

2008. Because incidents tend to increase in the month of December, this number may be atypical and the monthly average may be lower. The majority of incidents involve retail theft associated with the commercial development along Route 6/209 in Westfall Township, and drugs. Traffic incidents are also very common. The Police Department's annual budget is funded by the Borough and the Township with





Eastern Pike Regional Police Dept.

each municipality's share apportioned according to population, mileage, and call ratio. The Department is also paid by the National Park Service to patrol parts of its corridor, as well as by PennDOT, to administer DUI and seatbelt checks. Grants are another source of funding typically used to cover the costs of training and equipment. Maintaining a steady and sufficient funding stream is an on-going struggle. Lack of manpower has also been an issue; however, the Department expects to hire one full-time and two part-time patrolmen in 2009.



Matamoras Fire Department

The Matamoras Borough Fire Department located on Avenue Q adjacent to Airport Park is an all volunteer department providing fire and water rescue services. The fire department building also serves as a Red Cross evacuation staging center. The Department provides first response; primary ambulance service is provided by the Port Jervis Fire Department. The Matamoras Fire Department has 50 active members, although only five to ten members are typically available to respond to any given call. The Department responded to 255 calls (fire and EMS) in 2008. Apparatus includes a rescue truck, one engine, one ladder truck, a military tanker, and a pick-up truck. The Department is funded by the Borough, the Commonwealth of Pennsylvania, and through fund raising efforts. The Department receives 3 mills of

Borough tax, equivalent to \$58,000 per year, plus the Foreign Fire Insurance payment received from the Commonwealth. The remainder of the Department's revenue is raised through private donations. The tax revenue is sufficient to cover expenses associated with the building, but does not cover the cost of equipment. The annual payment on the ladder truck, for example, is \$62,000 per year. Acquiring funding, along with recruiting volunteers are the Department's two biggest, on-going challenges.



Westfall Fire Department

Fire and EMS services in Westfall Township are provided by the Westfall Fire Department and the Mill Rift Fire Department. The Lumberland Fire Department from Sullivan County New York also provides service to the Pond Eddy area of the Township. The Westfall Fire Department is an all volunteer department with approximately 50 active members. Fire apparatus includes two engines, a tanker, a brush fire pumper, a rescue boat, a command vehicle, and two ambulances (Basic Life Support). In 2008, the Department responded to 205 fire calls and 750 EMS calls. Approximately 25% of the Department's budget is funded by Westfall Township and the Foreign Fire Insurance payment received from the Commonwealth; the remainder is obtained through fund raising and private donations. Funding is the Department's biggest challenge, followed by dwindling volunteerism.



Mill Rift Fire Department

The Mill Rift Fire Department is an all volunteer department with approximately 25 members serving the rural interior of Westfall Township. It has two stations: a main station located in Mill Rift at the intersection of Delaware Drive and Cummins Hill Road, and a substation further south on Delaware Drive next to the



Mill Rift Fire Department Substation

Westfall Township municipal building. The Mill Rift Fire Department provides fire response and emergency medical technicians. The Department receives approximately 50 calls per year. Ninety percent of its funding comes from the Township and approximately 10% comes from occasional state grants. The Department's fund raising capabilities are limited by its geographical location. Fire apparatus include a Pumper/Engine with 1,000 gallons of water (at the main station), a tanker truck with 2,500 gallons of water (at the substation), and two brush trucks – one is a pumper, the other a 1,200 gallon tanker (at the main station). The Department is in need of a newer, more reliable piece of apparatus that will require less maintenance than the current equipment. The main station is also in need of modernization: two of the three bays are standard garage doors, which are not large enough for modern apparatus.

Although flooding can block access to the two stations, the Department is able to move the apparatus to positions above the flood stage and carry out response operations. The main station serves as an emergency shelter during such events.

Advanced Life Support (ALS) is provided by the Regional Emergency Medical assistance system. ALS goes beyond Basic Life Support (BLS) in that paramedics can start intravenous solutions (IV) and administer drugs. Pike County ALS recently relocated from the Dingman Township Volunteer Fire Department firehouse on Log Tavern Road to the Milford Professional Park on Buist Road in Dingman Township. ALS is looking for a permanent central location in the County due to the importance of distance to and from hospitals.

The Pike County 911 Center dispatches calls for the Regional Police and all fire departments in Matamoras and Westfall, in addition to receiving the 911 calls for the geographic areas served by the Pennsylvania State Police. The Center is located in the Pike County Administration Building in Milford. Under a mutual aid program for fire companies, available fire fighters, EMS technicians, and equipment are coordinated from all fire companies.

Lack of manpower has been an ongoing concern of the emergency service providers. The shortage of patrolmen in the police department should be remedied in 2009 with three new hires; however, fire and EMS companies throughout the County have experienced difficulties recruiting and retaining new volunteers. Other problems include raising sufficient funds to purchase and maintain adequate and updated equipment. Local emergency communication systems are also lacking; there is a need for local emergency radio communications. Finally, as the number of residents and commercial establishments increase, police, fire, and EMS services currently stretched to their limits, will be further stressed to provide adequate emergency protection for the Planning Area.

Hospitals

Hospitals serving the Planning Area are located in Port Jervis, NY; East Stroudsburg, PA; Honesdale, PA; Newton, NJ; and Scranton, PA.

Emergency Management

Emergency management planning at the local level is coordinated by the Pike County Emergency Management Agency (EMA). County emergency management agencies throughout the Commonwealth receive direction from the Pennsylvania Emergency Management Agency and the Federal Emergency Management Agency. The Borough and the Township work with the County EMA, and have appointed Emergency Management Coordinators. They share use of the Emergency Operations Center located in Matamoras.

Projects currently in progress by the Matamoras Borough EOC include the following:

- Four more solar powered alarm systems for various locations around town - to enhance the present alarm system.
- AM Emergency Radio Station.
- Backup generator for Police Station, EMA office, EOC, and Boro Annex.
- Obtain approval for the Hope Church and St. Joseph's Church as Red Cross Evacuation Shelters.
- Raise river banks from interstate 84 along airport park towards the Matamoras / Port Jervis Bridge and install flood control gates on culvert ditch near rte 84 and install flood control gates on the road to the Bennykill.
- Storm water drainage system down 10th street from Avenue L to the Delaware River.
- Storm water drainage system on Avenue K from Tenth Street to Third Street.

The installation of a dike to prevent flooding at airport park between Avenue R and the Skating Rink by 10th Street has been halted.

Road Maintenance

Matamoras Borough and Westfall Township each employ road crews who provide all normal winter and summer maintenance. The Borough maintains 13.1 miles of roadway and the Township maintains 21.2 miles. Each municipality contracts for larger scale road maintenance and improvement projects such as paving and shoulder reconstruction. This approach has served well and in terms of cost efficiency is the most prudent given the expense of owning and maintaining road construction equipment. Each municipality has relatively new road maintenance vehicles and equipment.

Only 17% of survey respondents from the Borough and 35% from the Township indicated satisfaction with the quality of roads. Approximately 98% in both municipalities agreed that road improvements are an important planning issue. The Borough/Township cooperation on planning provides an opportunity for more coordination of road maintenance efforts, and such efforts should also be coordinated with other nearby municipalities via the Pike County Council of Governments (COG). Taken as a whole, the individual

participants in the COG employ a considerable labor force, and own and maintain a variety of vehicles and equipment. As a means of using local municipal funds and resources most efficiently, the COG could:

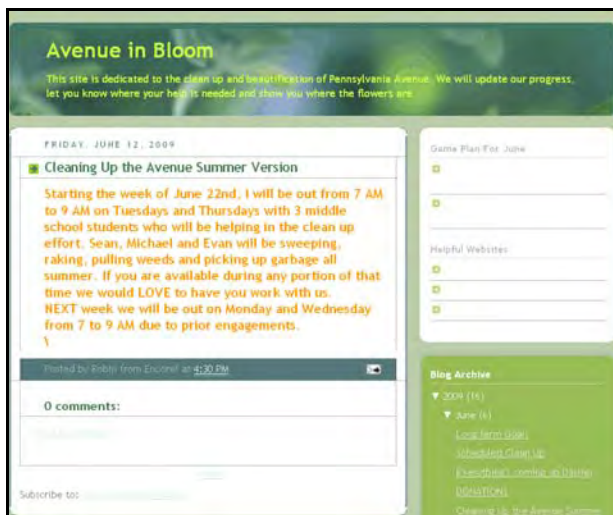
- Update and keep current the list of vehicles and equipment owned by all COG municipalities.
- Serve as a clearinghouse and notify all COG participants when a municipality is selling or purchasing equipment which may meet the needs of another municipality.
- Investigate the possibilities for increased sharing labor and equipment.
- Investigate the possibilities for increased contracting with or swapping with adjoining municipalities for winter road maintenance where travel savings may be realized.
- Coordinate joint purchasing of supplies and materials whenever possible to reduce unit costs. Other vehicle and equipment actions:
- Maintain an accurate inventory of all vehicles and equipment.
- Liquidate obsolete vehicles and equipment.
- Include planned purchases of vehicles and equipment on a capital budget to plan for large expenditures.

Sidewalks Streetscapes, and *Avenue in Bloom*

In a small community such as Matamoras Borough, and in new residential developments with smaller lots, walking is an important and valued means of transportation for many residents. Walking can also increase quality of life and contribute to downtown economic revitalization.

In 2005, the Borough was awarded a \$175,000 grant from PennDOT's Hometown Streets program for the installation of sidewalks, curbs, lighting, and street trees along Pennsylvania Avenue from Tenth Street to the bridge. Due to financial and regulatory complications, the Borough is currently unable to complete the project. To date, sidewalks and curbs have been installed along the east side of Pennsylvania Avenue up to First Street, one block short of the bridge. Additional funds are needed to complete the sidewalks and curbing and install lights and street trees.

In addition a group of local volunteer residents have initiated *Avenue in Bloom*. The volunteers regularly remove litter from Pennsylvania Avenue, plant flowers and maintain landscaping to improve the appearance of the Borough's main street. *Avenue in Bloom* sponsors related clean-up and other programs and maintains a web site to inform residents. This grass-roots effort could serve as the foundation of a local organization critical for the long-term success of an organized revitalization effort requiring active business community participation.



The Borough has clearly made significant sidewalk improvements along Pennsylvania Avenue, but much remains to be accomplished on side streets. In most areas sidewalks are missing altogether and residents, including children must walk on the street.

There are several key steps to determining the sidewalk improvements needed in the Borough. To begin, community leaders need to identify and prioritize specific problems and areas of needed improvement. One method for identifying and prioritizing the various tasks is to complete a walking audit or *walkability checklist*, a concept developed by a partnership of the U.S. Department of Transportation, the Pedestrian and Bicycle Information Center, and the Partnership for a Walkable America. A *walkability checklist* is a subjective method to help communities identify problems and deterrents to safe walking in their communities.

Shade Trees



Shade trees along streets in residential neighborhoods are an important part of any community, enhancing its character and the welfare of its residents. Shade trees are needed along Pennsylvania Avenue to enhance the appearance of the commercial corridor and to screen the unattractive overhead utilities. To accomplish this, the Borough must pursue funding to complete the improvements along Pennsylvania Avenue. In 1977 the Borough created a 3-member Shade Tree Commission by ordinance to address issues including tree maintenance, removal and planting within the street right-of-way, and subsequently participated in *Tree City USA* a program which provides direction, assistance, attention, and national recognition for urban and community forestry programs. The Borough no longer participates in *Tree City USA* and the Shade Tree Commission is not active. Rejuvenating the Commission and considering renewed participation in *Tree City USA* would support revitalization efforts.

Circumstances in Westfall Township are somewhat different given that most residential subdivisions have been developed on forested parcels. Nevertheless, the preservation of trees and vegetation and the planting of shade trees in new subdivisions where necessary, and in commercial areas, is also important in terms of maintaining the quality of life in the Planning Area. The Borough and Township should include such standards in the zoning ordinance and subdivision and land development ordinance.

See the Pennsylvania Avenue Revitalization Plan for more discussion on sidewalks, streetscapes and shade trees.

Parking

Approximately 97% of survey respondents from the Borough and 95% from the Township identified parking in Matamoras as a serious issue. There are not enough parking lots for the businesses along Pennsylvania Avenue. Because most buildings have minimal setbacks from the street line, parking must be accommodated behind and/or on the side of buildings. Parking is permitted along Pennsylvania Avenue; however, according to the *Congested Corridor Study*, PennDOT proposes to prohibit parking along Pennsylvania Avenue. Such a move would push parking onto the surrounding residential streets and increase the need to install parking lots.

Cultural Institutions

There are no cultural institutions in the Planning Area and levels of satisfaction, as indicated by the County survey, are relatively low at 44% for the Borough and 50% for the Township. The three museums in the County are the Zane Grey Museum (National Park Service), Grey Towers (U.S. Forest Service), and Pike County Historical Society. Environmental Education Centers include the Pocono Environmental Education Center and Wallenpaupack Environmental Education Center.

Library



Pike County Public Library

Libraries play an important role in the community by making information available to all residents. Libraries supplement school libraries for students, provide life-long learning opportunities for adults, and offer special services such as interlibrary loan, books by mail and children's reading programs. Libraries also provide computer and internet access to residents who do not own a computer, which can aid in job searches, and professional development. Residents of the Matamoras-Westfall Planning Area utilize the Pike County Public Library System and the Port Jervis Free Library. The Pike County Public Library operates from three branches – Dingman, Lackawaxen and Milford – with its administrative offices in the Milford Branch.

The County survey reports an 80% rate of satisfaction in Matamoras Borough and a 75% rate of satisfaction in Westfall Township with library services. This *Comprehensive Plan* recognizes the importance of the Library to the quality of life in the Township and Borough and the entire County, and supports the construction of the new Milford Branch and administrative office on Harford Street in the Milford Borough as essential to continue providing quality library services to the community.

Solid Waste Disposal

Planning for solid waste disposal is a county responsibility as mandated by state statute, and local municipalities are authorized to regulate solid waste disposal by ordinance. In Westfall Township, homeowners and business owners contract with private haulers for the collection and disposal of solid waste. The Township does not operate a curbside recycling program (per Act 101, only municipalities exceeding a population of 5,000 must operate a curbside recycling program). Residents may drop-off recyclables at the County's recycling facility located at the Milford Township Building.

Matamoras Borough provides garbage collection for its residents twice weekly. Curbside recycling pick-up has been halted; however, residents may drop-off recyclables at the Borough's recycling center located behind the Borough barn.

Water Supply

The Matamoras Municipal Authority supplies water to all of the Borough of Matamoras and an adjacent portion of Westfall Township. It serves a population of approximately 2,900 via 1,089 service connections with an average demand of 270,000 gallons per day and maximum demand of 810,000 gallons per day. The Municipal Authority recently completed an upgrade to about 80% of the lines in the service area.

The Matamoras Municipal Authority has four wells (listed in the table below), and two storage reservoirs that are 300,000 gallons and 750,000 gallons. All

Well #	Depth (feet)	Pump Capacity (gpm)	Year Drilled
3	255	52	1954
5	530	90	1962
7	84	42	1977
8	86	208	1981

wells and water service connections are metered. All water is chlorinated prior to entering the distribution system. All four wells are located above the 100-year flood elevation.

The remaining portion of Westfall Township is served by on-lot, private wells and community water supply systems drawing from groundwater sources. Community systems include the Hickory Grove Trailer Park, Milford Senior Care and Rehabilitation Center, Milford Landing, and the Green Acres Trailer Park.

Approximately 99% percent of County survey respondents from both the Borough and the Township believe that water quality protection and drinking water supply are important issues facing the County, and 87% believe that there should be more inter-municipal cooperation for public water service. To date there have been no reports of problems involving insufficient water supply in the Planning Area.

Wastewater Treatment

The Planning Area municipalities are located along a stretch of the Delaware River that is classified by the Delaware River Basin Commission (DRBC) as Special Protection Waters (SPW). This designation presents significant environmental planning challenges for this growing area, including issues related to wastewater treatment and disposal. The regulations discourage direct discharges of wastewater to the designated waterways, stipulating that no new or expanded wastewater discharges shall be permitted in waters classified as SPW until all non-discharge/load reduction alternatives have been fully evaluated and rejected because of technical and/or financial infeasibility. Non-discharge alternatives include land applications, such as spray irrigation, where treated wastewater is applied to the ground where soils are suitable.

The SPW regulations also require that the minimal level of wastewater treatment for all new and expanding wastewater treatment projects discharging directly to Special Protection Waters will be *Best Demonstrable Technology*, including ultraviolet light disinfection or an equivalent disinfection process that results in no harm to aquatic life, does not produce toxic chemical residuals, and results in effective bacterial and viral destruction.

Matamoras Wastewater

Ninety-seven percent of survey respondents from Matamoras Borough agree that sewage disposal is an important planning issue. Wastewater treatment in the Borough is entirely accomplished through private, on-lot septic systems. With 5,000 square foot lot sizes, replacement on-lot sewage disposal systems are often not feasible. Furthermore, if residences in the Borough are converted from single-family to multi-family dwellings, these systems become even less effective since they were not designed to handle the excess sewage generated by the converted homes. The lack of a central sewer system also inhibits commercial growth and economic development in the Borough by limiting the types and sizes of businesses that can operate. Central sewer provided by the Municipal Authority of the Township of Westfall may become a viable alternative if any widespread malfunctions develop and subject to resident affordability and the Borough's ability to finance such a project.

Westfall Wastewater One-hundred percent of survey respondents from Westfall Township agree that sewage disposal is an important planning issue. Wastewater treatment in the Township is accomplished by either on-lot systems, by municipal treatment for properties within the service area of the Municipal Authority of the Township of Westfall Municipal Authority, or by private treatment facilities.

Private Wastewater Facilities Private wastewater treatment facilities in Westfall Township include the following:

Delaware Valley School District

The Delaware Valley Joint School Authority owns and operates the wastewater treatment plant that serves the school complex located on Route 6/209. The facility is permitted under the NPDES for 18,000 gallons per day (gpd) and discharges into the Delaware River.

Milford Senior Care and Rehabilitation Center

This wastewater treatment plant is owned and operated by North American Medical Centers, Inc. It is permitted under the NPDES for 15,000 gpd and discharges into the Delaware River.

M&S Sanitary Sewage Disposal, Inc.

This facility is owned and operated by Pike County Environmental, Inc. It accepts septage generated by on-lot septic systems and sludge generated by wastewater treatment plants. The septage and sludge is transported to the facility by individual haulers for treatment and ultimate disposal at the Grand Central Landfill. Wastewater is not conveyed to the facility for treatment. The plant discharges treated effluent from the septage/sludge process to the Delaware River. It is permitted under the NPDES for 100,000 gpd.

The Municipal Authority of the Township of Westfall The existing Township Authority collection system is a force main system; no gravity collection is used. The system consists of a 6-inch diameter pipe located along Route 209 south of the wastewater treatment plant (WWTP) and an 8-inch diameter pipe located along Route 209 north of the WWTP. A force main extension along Mountain Avenue in Westfall Township was constructed in 2007. There are currently three pump stations owned and operated by the Authority. One pump station is located along Mountain Avenue, the other two pump stations are located along Route 209. Conveyance capacity of the system is augmented by numerous privately owned pump stations that pump into the Authority's force mains.

The existing wastewater treatment plant is owned and operated by the Authority and operates under NPDES Permit No. PA0061611 renewed on November 7, 2008 and Water Quality Management Permit Nos. 5287402-T1, 5292404-T1, 5291402-T1 and 5295402-T1 all issued on May 28, 2002. The Authority expanded the treatment facility to a 300,000 gpd facility and the facility went on-line in October of 2005. The plant discharges into the Delaware River via the outfall structure. The outfall structure is comprised of twin 12-inch pipes that convey the effluent flow into the midstream of the river. The outfall structure is constructed and permitted for an average daily flow of 820,000 gpd to the Delaware River.

Westfall's Wastewater Treatment Plant is currently the only central wastewater

treatment system in the region. It primarily services the commercial properties located within the State Route 209/6 corridor in Westfall Township. The Township has also been ordered by Federal District Court to plan for the sewage needs of the area known as the Katz properties. In addition, The Borough of Matamoras, Borough of Milford and Milford Township have each expressed interest in acquiring an allocation of the WWTP's capacity. Given these demands, along with anticipated growth within Westfall Township itself, the Township is currently updating its Act 537 Plan. The Regional 537 Plan update would expand the service area to include a Regional Growth Boundary within Westfall Township and look at alternatives for treatment within this expanded service area. One of the alternatives being considered is the acquisition and upgrade of the M&S septage treatment facility to treat a portion of the region's wastewater. The regional 537 Plan update will include a comprehensive evaluation of the region's wastewater treatment needs by incorporating the results of the "regional" municipalities' 537 planning efforts and include multiple combinations of treatment alternatives.

**Westfall On-Lot
Sewage Disposal**

For the evaluation of on-lot sewage disposal system areas located outside of the Regional Growth Boundary and Sewer Service Area, the Regional Act 537 Plan Update will assess forecasted growth areas and recommend sewage treatment and disposal approaches to address the future needs of these areas.

Westfall Township has relatively few problems with on-lot septic systems and no reported groundwater contamination. However, two areas that warrant attention are The River Drive Estates neighborhood, which has small lots, poor soils with a high water table, and pre-regulation septic systems; and the Bell Manor neighborhood adjacent to the Borough, with small lots, pre-regulation systems, and little room for replacement systems.

**Stormwater
Management**

Stormwater runoff is the rainwater that moves over the ground in a watershed during and immediately following a rain event. In a watershed that is developed or is undergoing land development, the amount of stormwater can increase dramatically due to the reduction of natural areas and increase of impervious cover. This increased volume and rate of stormwater runoff results in altered drainage patterns, more frequent and destructive localized flooding, greater stream channel erosion, greater siltation and sedimentation, and a reduction in groundwater recharge.

**PA Stormwater
Management Act**

The Pennsylvania Stormwater Management Act of 1978, Act 167, was enacted to address the growing negative impacts of stormwater runoff. The Act requires the Pennsylvania DEP to designate watersheds and establish guidelines for the preparation of stormwater management plans for these watersheds. Counties are responsible for preparing the plans and developing ordinance language that municipalities must adopt.

**Pike County
Stormwater Plan**

The Pike County Conservation District is currently in the process of preparing a county- wide stormwater management plan. Municipalities play a very important role in Act 167 stormwater management planning, since the preparation and adoption of a stormwater management plan by the County may require changes to local land use regulations. Act 167 specifies: *within six months following adoption and approval of the watershed storm water plan,*

each municipality shall adopt or amend, and shall implement such ordinances and regulations... as are necessary to regulate development within the municipality in a manner consistent with the applicable watershed storm water plan and the provisions of this act.

Designated watersheds within the Planning Area that are subject to the County stormwater management plan are the Bushkill Creek watershed and Delaware River (land areas draining directly to the Delaware River). Matamoras Borough lies entirely within the Delaware River drainage area. Portions of Westfall Township lie within both watersheds.

Local Stormwater Problems

Stormwater runoff problems are identified throughout the Planning Area. This is due in large part to residential and commercial developments lacking stormwater management systems, roads without adequate stormwater conveyance and infiltration systems, and the general topography of the area. Inadequate stormwater management facilities cause runoff to flow across or accumulate on roadways and properties causing flooding and damage and posing safety hazards. In addition, runoff that flows across the land carries contaminants that adversely impact water quality. These problems are exacerbated by increased amounts of impervious cover in the Planning Area. Matamoras Borough has specifically identified a need to upgrade its storm drains and install pumps to enable proper drainage. Other specific issues and problem areas have been identified and are cited in the Pike County Act 167 Study.

Electricity Service

Electricity service is provided by Pike County Light & Power Company. Problems persist as power outages are frequent in the Planning Area.

Telecommunications

Telephone service is provided by Verizon. Both the Borough and Township cite communications as a concern due to the lack of a local television and radio system. According to the Pike County Comprehensive Plan: *Telecommunications infrastructure within the County needs improvement in order to better serve County residents and support business development. A "Pocono Telecommunications Task Force" previously met and established a goal to increase and accelerate the rollout of technology infrastructure in the Pocono Region with a focus on improving technology for public safety infrastructure, providing excellent cellular service to Monroe and Pike Counties, assisting technology expansion and development, and cable, wireless, radio and broadband initiatives. These telecommunication infrastructure needs should be continually assessed and addressed to provide seamless service to County residents and visitors.*

PLANNING IMPLICATIONS

Summary

As the Planning Area's population continues to change the demand for facilities and services will also change. Because of a currently stable school enrollment rate, there is no immediate call for additional classroom space and associated needs. However, projected increases in the population over the long-term will likely require increased police protection and emergency services, and expanded community services. It will place more demands on roads, water supply, wastewater, and stormwater facilities. Costs to provide

these services will also increase, but a coordinated development plan that includes contemporary land use practices can help to promote efficient provision of services and balance costs and revenues.

Growth Areas

To this end, the planning and provision of community facilities, services and utilities is undertaken in the overall context of the *Comprehensive Plan* and the Planning Area's long term growth and development goals. Community facilities, services and utilities must be coordinated with the future higher density growth areas of Matamoras Borough and Bell Manor, and the moderate density growth areas of the immediately surrounding areas of Westfall Township. These areas are intended to absorb the majority of the projected growth, becoming the Planning Area's population center. Community facilities are to be concentrated in this area making them accessible to the bulk of the population. This also enables more efficient delivery of municipal and emergency services that have better access to the population center rather than having to serve a population dispersed throughout the Planning Area.

Water and Sewer

Utilities are planned to correspond to the future growth areas. That is, where a higher intensity of uses is proposed, as in the high and moderate density residential areas, public and community water supply and wastewater treatment systems are most appropriate. In low-density residential areas, on-lot systems may be more appropriate. The aim is to achieve more efficient allocation of services and reduce the widespread, adverse environmental impacts that often arise from un-managed growth and inadequate water and sewerage facilities.

Sewage Planning

Planning for wastewater treatment must be coordinated with the Regional Act 537 Plan, currently in progress. That plan will advocate expansion of the Westfall Township WWTP service area. Westfall Township and Matamoras Borough must be aware of the development impacts that can result from an expanded central sewer system. The large scale commercial development along Route 6/209 was enabled by the existence of the Westfall Township WWTP. With this in mind, the municipalities must ensure that any future expansion to the sewer system is closely coordinated with the Future Land Use Plan advocated by this Comprehensive Plan.

Cooperation

Finally, the Borough and Township should not act individually when considering facilities, services, and utilities, but should cooperate with each other and other municipalities, the School District, and the County to provide and improve facilities and services which are best provided regionally.

FUTURE PLANNING POLICIES AND ACTIONS**Overview**

The following future planning policies and recommendations are measures intended to address issues related to community facilities and utilities. These policy recommendations will guide future decisions and actions related to the provision of such services.

Emergency Services

- Pursue upgrades to municipal buildings and equipment, such as power

generators, as necessary.

- Continue financial support of the Eastern Pike Regional Police and local fire departments.
- Consider consolidation / regionalization of fire departments.
- Assist fire department with promoting volunteerism.
- Provide support to the Emergency Management Coordinators to implement planned projects.

Communications and Utilities

- Pursue the establishment of a local communications system via, television, radio, and news print.
- Continue the lines of communication with the Delaware Valley School District to exchange information on planning related matters.
- Partner with Pike County and the State to bring and maintain state of the art telecommunications to the Planning Area.
- Partner with Pike County and the State to negotiate necessary upgrades with the electric company.

Circulation

- Explore cost effectiveness of sharing road maintenance duties or partnering with roads departments in the Pike County COG.
- Pursue funding to complete the sidewalk and streetscape project in the Borough (Pennsylvania Avenue Revitalization)
- Prioritize side streets in the Borough for sidewalk and streetscape enhancements.
- Investigate the feasibility of installing parking lots behind and/or to the side of the businesses on Pennsylvania Avenue. These can be shared parking lots. Any parking lots should be landscaped and should be screened from adjacent residential lots.
- Include provisions in the SALDO for sidewalks and shade trees in any new high to moderate density subdivisions and land developments as appropriate.

Groundwater

To protect the Planning Area's surface and groundwater supply:

- Protect the Planning Area's Exceptional Value and High Quality watersheds by prohibiting development of environmentally constrained land, such as wetlands, stream banks, very steep slopes, and hydric and high water table soils.
- Protect forest and vegetative cover, especially in headwater drainage areas.
- Identify community source water areas and provide wellhead protection

buffer zones surrounding community drinking water wells. Land use within designated zones is regulated in an effort to reduce potential infiltration of surface pollution into groundwater.

- Pursue funding through the State to upgrade stormwater management and wastewater disposal facilities.

Stormwater

To manage stormwater runoff:

- Pursue funding through the State to upgrade stormwater management facilities.
- Participate fully in the County stormwater management planning process.
- When completed, use the County model stormwater management ordinance to develop standards to meet local needs while maintaining consistency with the County stormwater management plan.
- Require stormwater management systems that employ Best Management Practices, such as vegetated swales, wetlands, and ponds, in all new residential subdivisions and land developments.
- Limit the use of impervious cover and promote the use of pervious surfaces that allow infiltration of stormwater.
- Encourage the use of conservation design development to reduce the volume and rate of stormwater runoff.
- Require removal of pollutants from stormwater runoff prior to release in order to protect water quality.
- Minimize runoff from developed sites onto adjacent lands.
- Require regular maintenance of stormwater management facilities.

Wastewater

To manage wastewater treatment and disposal:

- If any widespread on-site sewage system malfunctions are documented and if financially feasible and affordable for residents, pursue opportunities to bring central sewer to Matamoras Borough through the Municipal Authority of the Township of Westfall.
- Consider a management plan for on-lot septic systems that would require routine maintenance of such systems.
- Future sewage facilities planning must comply with DEP's *Water Quality Antidegradation Guidance*, which requires that land-based sewage disposal alternatives should be examined first for new sewage disposal concepts.
- Utilize alternative systems to the extent possible, such as on-lot and community sand mounds, and spray and drip irrigation.

**Other Facilities
and Services**

- Ensure that residential lot sizes will provide sufficient isolation distance for on-lot systems and replacement areas.
- Limit development of lots with unsuitable soils and steep slopes that are not appropriate for individual septic systems.
- Fully explore and take advantage of any opportunities to improve facilities and services offered by inter-municipal cooperation, Matamoras and Westfall, the Pike County Council of Governments and the Pennsylvania *Piggyback* (purchasing) Program.
- Re-institute curbside recycling pick-up in the Borough when financially feasible.
- Rejuvenate the Borough Shade Tree Commission and consider renewed participation in *Tree City USA* to support Pennsylvania Avenue revitalization efforts as well as other efforts in the Borough and Township.

TRANSPORTATION PLAN

INTRODUCTION

Transportation System

A sound transportation system includes adequate and well maintained roads, available public transportation, safe and convenient pedestrian access, and bicycle routes. However, few communities are able to achieve this ideal level of service. This is particularly true in small, less populated communities with limited budgets. In other words, local municipalities must evaluate transportation needs, set priorities, and garner all available resources to make improvements.

Land Use and Transportation

The high rate of growth in Pike County in recent years translates into more vehicles and more time spent on the region's roads. This places demands on the roads, including those in the Matamoras/Westfall Planning Area, most of which were not designed for such a high level of use. As a result, maintenance costs rise and residents' quality of life diminishes.

It is also important to remember that there is a direct correlation between land use and transportation needs. As residential and commercial land is developed, more and more people use the roads, and the roads become congested for longer periods of time. This is particularly true for rush hours. In response, roads are improved to address the traffic congestion, the adjoining land becomes easier and more lucrative to develop, and more traffic is generated. A balance must be reached to allow for the safe flow of traffic and to plan for appropriate improvements in conjunction with future development goals. It is the intent of this plan to emphasize needed circulation system improvements that will enhance the safety and efficiency of the Planning Area's road network while avoiding increased capacity and accessibility to lands intended for conservation. This approach is consistent with the goal of preserving the Planning Area's rural character and sensitive natural features while accommodating future growth.

CIRCULATION SYSTEM GOAL AND OBJECTIVES

Circulation System Goal: Establish and maintain an adequate circulation system to safely and efficiently move people and goods.

Safe and well maintained roads are vital to all communities, serving not only as the means of travel within the community, but also as the direct link to the region and beyond. The interstate and state routes provide easy access to and from the area, and will certainly foster continued development. Local officials must plan carefully to ensure adequate funding for the

Circulation - Planners typically talk about "circulation" rather than transportation because circulation (getting around) is the goal of the citizens they serve, whereas transportation is just a method of achieving that goal. A good circulation plan includes more than streets and roads – it includes means of pedestrian and bicycle circulation and, in many communities, some form of mass transportation.

Although good circulation plans involve more than roads, the starting point for an existing conditions analysis of circulation is a map of streets and highways in the community.

Source: *Community Planning, an Introduction to the Comprehensive Plan*, p. 80.

- i improvement and maintenance of locally-owned roads. Land use management tools must consider the capacity of roads, directing commercial and higher density development to areas served by roads capable of carrying increased traffic and the trucks necessary to serve commercial establishments. Providing safe pedestrian circulation in the Borough and Bell Manor can reduce the amount of car trips for goods and services.

OBJECTIVES:

Classification **Inventory and classify according to function all public roads and bridges, and assess maintenance and safety concerns and the improvements needed.**

- Road Task Force - Participate in the Pike County Road Task Force to address regional traffic impacts and highway improvement needs.
- Planning - Actively participate in all County and PennDOT highway planning programs.
- Improvements Program - Develop a local road and intersection maintenance and capital improvements program.
- Pennsylvania Avenue - Specifically address the traffic on Pennsylvania Avenue and its effect on pedestrian circulation.

Local Actions **Develop a coordinated Borough - Township program to maintain an adequate capacity of the road network.**

- Development Location - Limit higher density and higher traffic impact development to areas with adequate highway capacity.
- Parking and Access - Require adequate off-street parking and loading, limit curb cuts, and require well designed access points.
- New Development - Maintain up-to-date standards for construction of new subdivision roads.
- Road Linkages - Include the consideration of through road connections as part of the development review process.
- Road Dedication - Evaluate the acceptance of public dedication of development roads in terms of public benefit versus long term costs and apply road design standards for the dedication of roads .
- Official Map - Using an official map, establish and reserve public street alignments and adequate rights-of-way for planned street improvements.
- Emergency Access - Coordinate emergency access and communication with the National Park Service

**Pedestrians
and Bicyclists**

Consider the needs of pedestrians and bicyclists in all transportation planning.

EXISTING CONDITIONS

Overview

With the exception of I-84, the Planning Area's road network is entirely comprised of two-lane rural roads. Despite the rural designation, as a primary access point to New York and New Jersey, the Planning Area's main routes carry heavy volumes of traffic. Much of this traffic originates from interstate highways outside of the Planning Area, namely I-84, which runs East-West from I-380, near Scranton, to New York. Traffic volumes also increase substantially in the summer when seasonal residents and vacationers travel to the region.

Planning Issues

Issues of concern related to circulation have been identified as follows:

- Given its adjacency to New York State and I-84, the Matamoras - Westfall Planning Area suffers much of the traffic entering and leaving Pike County.
- The Planning Area also provides significant retail and service needs to residents of the region, especially along the Route 6 corridor.
- Many of the Planning Area streets are substandard relative to design and functionality.
- The Borough streets are narrow and little curbing to control traffic and drainage.
- There is limited access from the north portion of the Planning Area to the southern portion.
- Heavy traffic in the Borough makes pedestrian circulation difficult and detracts from small town character.
- Parking in the Borough is extremely limited.
- Increased residential development is placing more demand for the maintenance and improvement of Township roads.

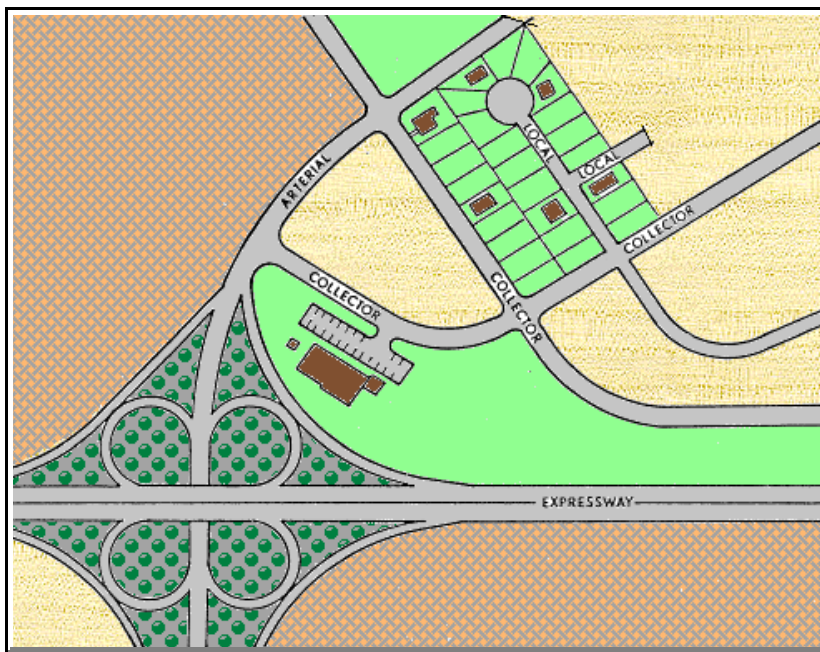
Access - Mobility

Each highway, road or street in a community plays a specific role for the movement of traffic and it is useful for planning purposes to classify roads according to the particular function each serves. In general terms, the functional classification of a road is based largely on two factors -- access and mobility -- and typically, as access declines mobility increases. For example, Interstate Route 84 clearly serves a different function than does a street in the Borough of a residential subdivision. Although the I-84 and local street example compares streets at the opposite ends of the road classification hierarchy, it clearly depicts the relationship between access and mobility. Traffic on Interstate 84, a limited access highway, travels over long distances at high rates of speed. On the other hand, traffic using a residential street with

unlimited access from individual properties moves at minimum speeds to reach roads that connect the residential community with other areas in both municipalities and the region at large.

Highway Classification Factors

As previously noted, access, how traffic enters the traffic stream and mobility, the physical capability of the road to carry traffic, are the key determinants of a road's functional classification. However, several other road and network characteristics also affect the functional classification of a road. Traffic volume in relationship to the physical design of the road, including lane and shoulder width, right-of-way alignment and surface treatment, is important to its classification. Generally, as a community develops, roads are improved to meet the increased traffic demands, with specific routes moving higher in the functional classification as they are improved.



Highway Functional Classification

However, in areas of rapid growth and associated traffic increases, the amount of traffic carried by specific roads may increase to the point of exceeding the road's capacity. The road, in terms of traffic, may be serving as an arterial route, but may not have been physically upgraded from a minor collector or local road. In urban areas, mass transit and non-capital approaches such as ride sharing and staggered work hours are promoted as a means of reducing traffic congestion as an alternative to upgrading roads. In a community such as the Matamoras-Westfall Planning Area, where much of the traffic is not related to travel to work, such solutions are likely impractical. A road's location and relationship to other roads in the intra- community and inter-regional highway network may also help define the road's classification.

Those roads which provide direct and convenient connection to arterial routes and expressways typically develop into roads which carry increasing amounts of traffic. Conversely, interchanges for expressways are normally located to provide connection with those roads in a community which historically have developed into arterials and collectors. Traffic flow problems and declines in level-of-service on routes connecting areas of the municipalities and routes providing access to the region are directly related to the capacity of collector and arterial roads. As traffic increases on the collectors and arterials, where access to abutting properties has historically not been limited to any significant degree, increasing traffic congestion can be expected. Also resulting from such access by adjoining residential and commercial properties and intersecting streets are the safety problems associated with increased congestion.

Functional Classification

The nomenclature used for a Highway Functional Classification also differs from jurisdiction to jurisdiction throughout the Commonwealth and the United States. Road classification in metropolitan and suburban areas is often very complex, with the various categories of roads being divided into subcategories based on land use type served and the designation of specific traffic volumes.

The nomenclature for classification being used for the Matamoras - Westfall Planning Area is based on the type and density of the land uses served by the road and the volume of traffic on the road. Not to ignore the impact of the Route 6 commercial corridor on the Planning Area's traffic issues, but the relatively small-scale commercial development interwoven with the residential development pattern within the small town setting warrants a more simplified highway classification system for the two-municipality area. While simplified, this classification will meet the needs for identification of problem areas and needed improvements, and for long-range planning. The designation of the Highway Functional Classification for roads serving the Planning Area includes expressway, arterial highway, collector road and local road. A description of each classification follows and the Highway Functional Classification and Annual Average Daily Traffic Figure provides an illustration and overview of the road system in the two municipalities.

Expressway



I-84

- Provides interregional and interstate connections
- Designed for unrestricted, high speed (55+ mph) mobility of traffic
- Limited access only - no direct access from private property
- Provides highest level of mobility
- Intersects selected arterial or collector routes with interchanges
- Carries highest volumes of automobile and truck traffic with longer trip lengths



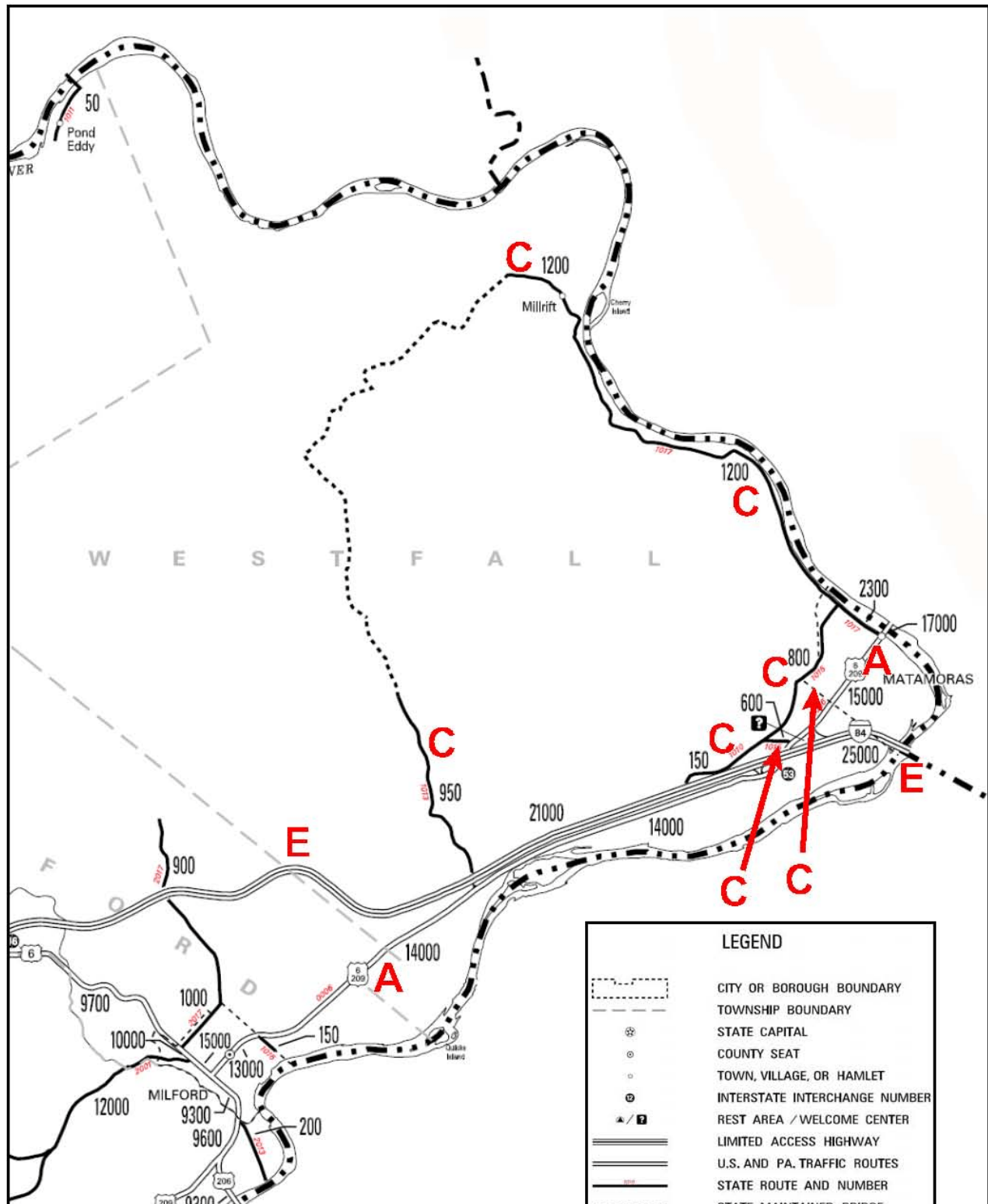
I-84

Interstate 84, running east and west through Westfall Township and Pike County, is the only expressway in Pike County. Planning Area access is at the Matamoras - Westfall Interchange. Since its completion in the late 1970's, I-84 has played a central role in shaping the growth

and development of all of Pike County. The ease of access provided for visitors and new residents has certainly contributed to the level of residential development and will continue to facilitate travel to nearby urban centers.

Arterial Highway

- Provides connection between commercial and population centers in the region
- Provides connection between the municipalities and adjoining communities, counties and states
- Carries larger volumes of traffic at relatively high speeds (45-55 mph)
- Serves a mix of local and through traffic
- Carries low volumes of through truck traffic
- Provides moderate to high levels of mobility
- Access limited only by PennDOT highway occupancy permits and local zoning and subdivision ordinances



Highway Classification and Average Annual Daily Traffic
E=Expressway, A=Arterial, C=Collector

VOLUMES SHOWN ARE 2006 ANNUAL AVERAGE DAILY TRAFFIC BASED ON THE MOST CURRENT COUNT INFORMATION AVAILABLE.

Arterial highways in the Planning Area include the following state highways:



I - 84 / Route 6/209

Route 6 - a major east/west corridor in the Commonwealth continuing from New York State through the Borough (Pennsylvania Avenue) and Township (Milford Road) westward through Pennsylvania to the border with Ohio.

Route 209 - a north/south route carrying traffic from the Milford/Montague Toll Bridge through the Delaware Water Gap National Recreation Area and Milford Borough to the south of the Planning Area. The Route is combined with Route 6 at Hartford and Broad Streets in Milford Borough and extends through the Township and Borough into New York.

Collector Road



Delaware Drive

- Collects traffic from local streets for connection of residential areas to commercial and activity centers and arterials
- Serves moderate levels of traffic at reduced speeds (35-45 mph)
- Serves more locally oriented traffic and few through trips
- Carries primarily only "local delivery" truck traffic
- Access from smaller and more numerous properties
- Access limited only by local municipal and PennDOT highway occupancy permits and local zoning and subdivision ordinances
- Provides reduced levels of mobility

Collector roads in the Planning Area include:

Delaware Drive (SR 1017): carries residential traffic from Matamoras Borough through Westfall Township along the Delaware River toward the Village of Mill Rift.

Mountain Avenue (SR1010) and Avenue C: provides a connection for traffic from residential development to the northwest of the Borough to Route 6/209 via Avenue C to Delaware Drive.

Mountain Avenue (SR1015): connects Mountain Avenue to Route 6/209.

Cummins Hill Road/Bluestone Boulevard (SR1013): carries Route 6/209 over the ridge to Mill Rift, all within Westfall Township.

Tenth Street (north of Pennsylvania Avenue): connects Avenue C to Pennsylvania Avenue.



Cummings Hill Road

Local Road

- Provides connection of residential properties and communities and less populated areas to collectors
- Serves lowest levels of traffic at slowest speeds (less than 35 mph)
- Provides high level of access from smaller residential parcels or areas with little development
- Carries local trips only with no through trips
- Carries minimal truck traffic for local deliveries

All other public roads in the two municipalities not classified as expressways, arterials or collectors are considered local roads.

Roads in the Planning Area

The total length of public roads in the Township and Borough is 53.60 miles, with 34.31 miles of municipal roads and 19.29 miles of state-owned routes. Local municipal road mileage in Pike County ranges from a low of six miles in Porter Township to a high of forty-three miles in Lackawaxen Township. All roads owned by the municipalities are part of the State Liquid Fuels Programs which provides state payments to the municipalities for road maintenance and reconstruction based on population and miles of roads meeting PennDOT specifications. However, the Liquid Fuels Funds comprise only a small part of the Township and Borough road maintenance budgets and do not nearly cover the cost of long term maintenance and replacement.

PUBLIC ROAD MILEAGE MATAMORAS/ WESTFALL PLANNING AREA			
	Township	Borough	Total
	Miles	Miles	Miles
Local	21.20	13.11	34.31
State	16.82	2.47	19.29
Total	38.02	15.58	53.60

Traffic Volume

It is obvious that traffic on the roads in the Borough and the Township have been increasing significantly in association with the rapid development in the area. In fact, traffic congestion in the Township and Borough on Route 6 and Route 209 has reached the point of disrupting the character of the community and quality of life. Recent updates to the curbs and sidewalks in the Borough have helped to improve the look of the roadway.

Annual average daily traffic (AADT) volumes provide an overview of the traffic flow in the Township and Borough for planning purposes. PennDOT conducts traffic counts on state roads, and the counts do provide an means of assessing the overall traffic conditions. Traffic counts for 2006 for all state roads in the municipalities, reported as annual average daily traffic (AADT), are shown on the *Highway Classification and Annual Average Daily Traffic Figure*.

As would be expected, other than I-84, Route 6/209 through the commercial corridor in Westfall Township carries the greatest volume of traffic through the Planning Area. Traffic counts from the 2004 PennDOT Route 6/209 Congested Corridor Improvement Program study reported a ten day average of 18,845 vehicles in the Westfall commercial corridor in August 2004. This is not inconsistent with the AADT of 14,000 vehicles reported by PennDOT in 2006.

AADT in the Borough in 2006 was 15,000 vehicles on Pennsylvania Avenue and 17,000 on the Delaware River Bridge. An important point to remember is that AADT does not reflect daily and seasonal traffic volumes which can far exceed AADT. The proportionate increase in daily and seasonal counts can be significant, exacerbating congestion far beyond what is found on the average day.

Level-of-Service

The traffic carrying capacity of a community's road network, and the intersections associated with the network, to handle the existing and future traffic volumes generated by development is the key element for providing safe and efficient traffic flow. Those land uses which generate larger volumes of traffic should logically be located in the areas of a community served by roads with greater carrying capacity. For example, commercial establishments generate more traffic than a single family residence and should be located on routes which have sufficient capacity to serve the use. The capacity of a highway or road typically decreases as the service area of the route declines.

For example, the capacity of I-84 is obviously significantly greater than any arterial highway, which has a greater capacity than collector roads, with the lowest capacity associated with local roads.

Local roads, because of the limited service and low traffic volumes, are not considered in terms of capacity. The quality of traffic service is discussed in terms of level-of-service (LOS). There are six levels of service ranging from LOS A through LOS F, with LOS A representing free flowing traffic and LOS F representing a total breakdown in the traffic flow or *bumper to bumper* traffic.

Congested Corridor Improvement Program

In December 2004 PennDOT issued the *Congested Corridor Improvement Program Report* for the U.S. 6 / U.S. 209 corridor in Pike County. (See the following *Congested Corridor Improvement Program Sidebar*) The study included the following intersections in the Planning Area: Constitution Avenue (SR 0006) & Wal-Mart Driveway; Constitution Avenue (SR 0006) & Westfall Town Center Driveway; Constitution Avenue (SR 0006) & Reuben Bell Road / Interstate 84 Eastbound Ramps Pennsylvania Avenue (SR 0006) & Mountain Avenue (SR 1015); and Pennsylvania Avenue (SR 0006) & Stella Street (T-442) / Interstate 84 Westbound Ramps. All intersections were found to be operating at acceptable levels of service even during peak hours. However, the Report goes on to note that level of service will decline significantly over ten years if no improvements are made to the corridor.

The Report summarizes the conditions leading to the traffic congestion as follows:

The US 6 / US 209 corridor was nominated for the CCIP due to traffic congestion resulting from overwhelming population and retail growth over the last 20 years. Weekend travel is particularly bad, causing residents to schedule simple travel and chore trips around peak congestion times. In addition to heavy congestion, safety has been cited as a serious issue along the corridor. The corridor study limits are a heavily traveled link connecting the Borough of Milford and the Borough of Matamoras in Pike County.

The following adverse conditions were noted through the project meetings, data collection procedures, and traffic analyses:

Population Growth - Over the past 20 years, Pike County's population has increased 153%, qualifying it as the fastest growing county in the Commonwealth. The population is expected to increase another 94% by 2020, leading to further residential growth. With the population growth, the corridor continues to experience increasing traffic volumes from residential and related commercial development.

Development Pressure - Future residential and commercial development is anticipated for the Lake Wallenpaupack area in Pike and Wayne Counties, which will result in increased traffic volumes along this corridor. In addition to the development in Pennsylvania, the neighboring Counties of Orange and Sullivan in New York, and Sussex in New Jersey are some of the fastest growing Counties in their states, further straining the roadway networks. At this time, several large retailers are looking to develop along this corridor due to the proximity of the County's only Department of Environmental Protection

CONGESTED CORRIDOR IMPROVEMENT PROGRAM - US 6/US 209 CORRIDOR IN PIKE COUNTY

The Pennsylvania Department of Transportation (PENNDOT) initiated the Congested Corridor Improvement Program (CCIP) in 2001 to identify several congested corridors in the Commonwealth and, in conjunction with its partners, define and implement the needed improvements. The goal of the CCIP is a 20 percent reduction in peak hour travel time or system delay on the improved transportation corridor. A Standard Study Methodology (SSM) was developed as part of the CCIP to provide a uniform approach to identify improvements and assess their effectiveness in accordance with the goals of the program. The SSM identifies the steps involved in an engineering study of improvement alternatives, and focuses on the use of simulation models as analysis tools to evaluate operational impacts of improvement alternatives. Since its initiation in 2001, there have been 25 corridors studied and planned for improvement as part of CCIP.

The US 6 / US 209 corridor in Pike County was selected for the CCIP, along with seven other corridors in the Commonwealth of Pennsylvania for 2004, based on nominations by the local planning organizations. The Northeastern Pennsylvania Alliance (NEPA) Rural Planning Organization nominated the US 6 / US 209 corridor in Pike County, which is located in PENNDOT Engineering District 4-0. The US 6 / US 209 corridor is located in Milford Borough, Milford Township, Westfall Township, and Matamoras Borough in Pike County. The corridor study limits extend 6.79 miles from Harford Street in Milford Borough to the New York State line in Matamoras Borough. The corridor limits include six (6) signalized intersections as follows

- Broad Street (S.R. 0006) & Harford Street (S.R. 0006 / S.R. 0209);
- Constitution Avenue (S.R. 0006) & Wal-Mart Driveway;
- Constitution Avenue (S.R. 0006) & Westfall Town Center Driveway;
- Constitution Avenue (S.R. 0006) & Reuben Bell Road / Interstate 84 Eastbound Ramps
- Pennsylvania Avenue (S.R. 0006) & Mountain Avenue (S.R. 1015); and
- Pennsylvania Avenue (S.R. 0006) & Stella Street (T-442) / Interstate 84 Westbound Ramps

(DEP) designated sewage disposal facility, the move of businesses from Port Jervis, NY, and the expansion and upgrade of the Port Jervis, NY rail line to New York City.

Recreational Traffic - Nearby major recreational facilities and tourist destinations include Lake Wallenpaupack and direct access to the Delaware Water Gap National Recreational Area. This corridor also serves as the main arterial connecting the Boroughs of Milford and Matamoras.

Safety - High crash rates have been reported throughout the corridor. Of particular concern are the pedestrian crashes along Broad Street within Milford Borough. However, these pedestrian safety concerns are addressed by the planned Milford Borough Streetscaping project.

Constitution Avenue & Reuben Bell Road/ I-84 Eb from the I-84 off ramp is of particular concern at the intersection. Heavy delays for these /eft turns result in intersection operation of LOS E during the PM and Saturday peak periods. Also, a merge point occurs where the corridor changes from two lanes to one lane just east of the Pennsylvania Avenue & Stella Street / I-84 WB Ramps intersection. This merge, particularly under the future conditions, results in heavy queuing on the corridor west of the bottleneck point.

Insufficient Storage Length - Throughout the corridor, several turning bays have insufficient storage lengths, thus preventing turning vehicles from entering the turning bays either because of long queues in the turning bays or long through queues blocking the entrance into the turning bays. The following intersections were identified with insufficient storage lengths:

- Broad Street & Harford Street
- Constitution Avenue & Reuben Bell Road / I-84
- Eastbound Ramps
- Pennsylvania Avenue & Mountain Avenue
- Pennsylvania Avenue & Stella Street / I-84
- Westbound Ramps

Queuing In Matamoras Borough - Residential and emergency vehicles both experience difficulty exiting the minor streets onto Pennsylvania Avenue within Matamoras Borough due to heavy traffic on the mainline. Additionally, because Pennsylvania Avenue is a two-lane roadway with no /left turn lanes, queues and delays can develop as a result of left turning vehicles. These queues and delays further inhibit the progression of emergency vehicles throughout the Borough.

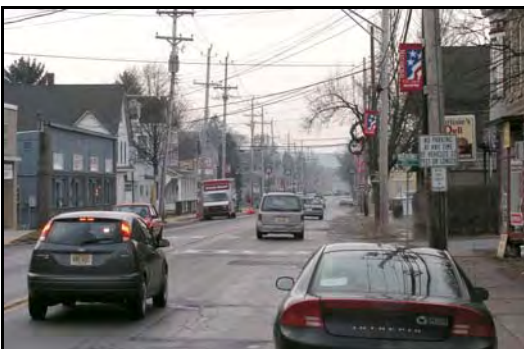
Ramps Intersection - The intersection at Reuben Bell Road and the eastbound I-84 ramps experiences congestion and delays, sometimes impeding the response time of local emergency services. The eastbound left turning movement entering the I-84 on-ramp from Constitution Avenue is of particular concern at the intersection. Heavy delays for these left turns result in a queuing over capacity and overall intersection performance of LOS E during the Saturday peak hour.

Pennsylvania Avenue & Stella Street / I-84 Wb Ramps Intersection - The intersection at Stella Street and the westbound I-84 ramps experiences congestion and delays, sometimes impeding the response time of local emergency services. The northbound left turning movement entering Pennsylvania Avenue westbound.

Other Problem Areas

Other road segments and intersections in the Planning Area are equally affected by increased traffic:

- Entering Route 6/Route 209 from businesses and side roads in Matamoras Borough and Westfall Township is becoming progressively more difficult.



Pennsylvania Avenue / First Street



Pennsylvania Avenue / Tenth Street

PLANNING IMPLICATIONS**Need for Regional Transportation Planning**

Situated along the I-84 entrance to Pennsylvania from New York/New Jersey, and the US 6/209 entrance from New York, the Matamoras-Westfall Planning Area is significantly impacted by the tremendous population growth that occurred over the past two decades, and the ongoing tourism promotion of the Upper Delaware River. The resulting transportation impacts demand attention through traffic planning, one of the most critical issues facing the entire region.

Current municipal ordinances contain provisions for the construction and dedication of roads, and for parking and loading. However, these regulations are only applicable to roads under municipal jurisdiction. Neither the Borough nor the Township have the authority to initiate action on roads owned by community associations or under state jurisdiction. Instead, they must lobby PennDOT and the community associations for improvements to these roads.

Given that traffic is an issue that transcends municipal boundaries and effects all the municipalities surrounding the Planning Area, the County Planning Office should take the lead role in coordinating and promoting the idea of regional traffic planning. This should include the affected municipalities (in Pennsylvania and New Jersey), the County Planning Commission, the Pike County Road Task Force, PennDOT, NJ DOT and the Joint Toll Bridge Commission. This will require a long term commitment of significant staff time and effort. However, without such commitment the problem will simply intensify with no real plan or solution. The County recently completed its comprehensive plan and the County lead in traffic planning for the Matamoras - Westfall Planning Area and Milford Borough - Milford Township Planning Area is a logical next step in the process.

Municipal Roads

Township and Borough roads are generally in good condition, with the primary concerns being routine maintenance and drainage improvements. The Borough Council and Township Board of Supervisors will focus on the maintenance and improvement of existing local municipal roads, and monitor the need and ability to correct specific drainage problems and width and alignment problems which would require reconstruction as traffic volumes dictate and available funds allow.

Specific problems in the Borough include:

- drainage on Avenue G, Avenue H, and Avenue K
- paving on Avenue N, Second Street, and the downtown portion of Seventh Street

Specific problems in Westfall Township include the need to maintain the Cummins Hill Road / Bluestone Boulevard loop for emergency services, particularly during times of flooding.

In terms of new road construction, the municipalities are not likely to undertake any new road construction. Roads serving new residential developments will be constructed by developers in accord with the applicable county or municipal

standards. These roads can be accepted for public dedication by the municipality, and provided such roads meet PennDOT standards, the municipality's State Liquid Fuels Fund allocation would increase. However, the long term cost of the maintenance of public roads falls far short of the funds received from the Commonwealth for liquid fuel funds. Local officials must carefully weigh the long term maintenance costs against the local tax revenues generated by development and increased state funding before accepting private roads for dedication. The annual payment from the state is based on the municipal population and the amount of road miles maintained.

State Roads

The condition of the state roads in the Planning Area is also generally good, with continued maintenance and a few dangerous intersections the primary concerns. The state roads in the Planning Area also include segments with sharp curves and steep grades. Given the modest traffic volumes on state roads other than Route 6/209 and limited funding available, the upgrading of these roads by the state is obviously not a priority and is unlikely to occur in the near term. Although the municipalities have no direct control over state roads (the roads that carry the most traffic at higher speeds and present the most critical safety concerns) this Plan identifies a number of concerns which must be monitored:

- Correction of dangerous intersections
- Increasing volumes of traffic
- Horizontal and vertical alignment
- Speed limit enforcement
- Adequate maintenance
- Improved signs for hazards and traffic control
- Improvement of Route 6 and Cummins Hill Road intersection

Should the condition of these routes deteriorate due to lack of maintenance, or if PennDOT does not make improvements in anticipation of traffic volume increases over the long term, the capacity and level-of service could degenerate. The municipalities should work with PennDOT and the Pike County Planning Commission to identify the most critical state route improvement needs in the municipalities and work to have the improvements programmed by PennDOT on their Twelve-Year Transportation Program (TYP).

Bridges

Neither municipality owns bridges in the Planning Area, which is fortunate in terms of finances given the expense of bridge maintenance and replacement. All bridges in the Planning Area are the responsibility of Pike County or PennDOT.

Subdivision Roads

New road construction in the Planning Area is associated with residential development. The subdivision and land development ordinance sets standards for road layout, design, and construction. Roads may be owned and maintained by private communities, or if a road is constructed to the required standards of the road dedication ordinance it may be accepted by the municipality for general public use. Dedicated roads are then added to Pennsylvania Liquid Fuels Program reimbursement list and are owned and maintained by the municipality.

Bicycle Routes

Bicycle PA is the name for a network of cross-state bicycle routes that guide the bicycle tourist across the Commonwealth. The routes generally use existing highways that have been identified as desirable roads for bicycling. In some cases, the route uses improved rail trails to bypass difficult sections. *Bicycle PA Route Y1* runs along the Route 6/Route 209 corridor and any transportation planning should consider the establishment of additional bicycle routes in the Planning Area.



Airports, Railroads, and Public Transportation

Given the regional nature of airport and railroad development and support, this Comprehensive Plan calls for no specific action to be taken by the Borough or Township with regard to air and rail service. Direct local municipal provision of public transportation is not feasible and no action is anticipated other than participation in regional transportation planning efforts. Area residents rely on regional airports in Pennsylvania, New York and New Jersey for major commercial carrier service. Railroad freight service is available in nearby Port Jervis, New York as is passenger service to New York City used by many Pike County residents. The Shortline Bus Company provides limited service in Pike County.

Public transportation in rural communities is generally limited by low population density, the cost of providing the service, and uncertainty of public acceptance and use. In short, the cost is too high in relation to the potential revenue from the users of the system, and without public subsidy, it is simply not feasible. In addition, even in areas where the public subsidy has been provided, use of public transport is low given long trips and limited schedules, and the historic reliance on automobiles in rural areas.

PLANNING POLICIES AND ACTIONS

Overview

Future planning and policy recommendations are intended to address the problems cited in the chapter and achieve the goals set forth by Matamoras Borough and Westfall Township.

Local Roads

- Continue regular maintenance of local municipal roads.
- Improve drainage problems of local roads.
- Maintain an up-to-date inventory of road maintenance equipment as a means of planning for replacement and inclusion the capital improvements program.
- Work with the Eastern Pike Regional Police Department to enforce speed limits.
- Complete and update annually a detailed Township/Borough road inventory and evaluation to identify needs and develop an improvements schedule within normal budgetary process, and to identify potential capital projects.

- Develop a Transportation Capital Improvement Program in Matamoras Borough and Westfall Township to plan and budget for improvements.
- Partner with community associations to address road maintenance issues (outreach to community associations could perhaps be undertaken by a Planning Area Transportation Task Force).

Local Ordinances

- Maintain an up-to-date road ordinance and SALDO setting standards for construction of roads and establishing procedures for dedication to the public.
- Carefully weigh the costs and benefits of accepting private roads for dedication.
- Review road construction standards to ensure adequacy for public safety and eliminate excessive requirements to minimize the consumption of resources for construction and long term maintenance.
- Maintain an up-to-date road occupancy ordinance setting standards for driveway access to Borough and Township roads and for stormwater and utility improvements within the road right-of-way.
- Review and update zoning standards for parking and loading areas to ensure safe and adequate parking facilities.
- Include context sensitive design standards in the road construction regulations.
- Amend the SALDOs to provide rights-of-way for emergency access and road connections through dedication of land and easements.
- Amend SALDOs and zoning ordinances to require a Traffic Impact Study for higher intensity developments.
- Consider the adoption of an Act 209 Traffic Impact Fee Ordinance, which allows municipalities to assess developers for a portion of the transportation capital improvements costs necessitated by, and attributed to their development.

Official Map

- Consider an Official Map to identify and reserve land needed for road improvements and connections.

Congested Corridor

- Pursue road improvements and intersection improvements identified in the Congested Corridor Improvement Program through PennDOT.
- Implement mid-day coordinated signal timings on all five traffic signals in Westfall Township.
- Make major improvements to the Constitution Avenue and Reuben Bell Road / I-84 Eastbound Ramps Intersection.
- Make minor improvements to the Pennsylvania Avenue and Mountain

Avenue Intersection.

- Make major improvements to the Pennsylvania Avenue and Stella Street / I-84 Westbound Ramps Intersection.
- Develop and adopt an Access Management Plan throughout the Borough of Matamoras to limit curb cuts, require shared driveways and parking, provide service roads, and accommodate pedestrians and public transit.
- Establish site design guidelines to minimize development impacts on the corridor.
- Install two Dynamic Message Signs in Westfall Township to display the I-84 traffic conditions in realtime.
- Work with PennDOT to improve intersections with insufficient storage lengths.
- Address stacking and delays on Pennsylvania Avenue due to left turns by eliminating curb cuts and limiting left turn opportunities.
- Work with PennDOT to place priority road and intersection improvements on the Twelve-Year Transportation Program.

State Roads

- Participate in the PennDOT Customer Advisory Board to communicate concerns to PennDOT.
- Continue to work with the Pike County Road Task Force and PennDOT officials to discuss highway improvement needs and prioritize and promote specific improvement projects.
- Work with local legislators, the County and PennDOT to schedule studies to identify improvements to correct identified road and intersection deficiencies

Bicycle Routes

- Consider the establishment of a bicycle lane on Route 6/209 to accommodate Bicycle PA Route Y1.
- Consider opportunities to establish additional bicycle routes in the Planning Area.

Public Transportation

- Encourage the establishment of a ride-share (car pool) system. A ride-share program could be coordinated by a Planning Area Transportation Task Force or ride-share participant volunteers. Information regarding the program could be posted on local websites.
- Recognize the potential future need for public transportation and plan accordingly (e.g., locate residential development along main roads where transit stops are most likely to be located).

HISTORIC PRESERVATION PLAN

INTRODUCTION

The aim of historic resource protection is to retain the identity of a community or region as reflected in its natural and built environment. It ensures that the community's heritage and unique character are preserved to be appreciated by future generations. Historic resources provide a sense of place that fosters a connection to the community and a sense of pride among its residents. The resources also provide an awareness of the community's roots and traditions and are a valuable educational tool. With increasing development pressure many historic structures and sites are sacrificed or altered, or the surrounding area is developed, to the point that historic value is lost.

Pennsylvania has more than 100,000 historic resources identified by the National Register of Historic Places. Thousands more could be identified across the state, in cities, towns and villages, and rural areas. This rich heritage is under threat from abandonment and demolition of decaying urban building stock, destruction of rural landscapes and prime farmland for housing and business, and highway construction to accommodate the tidal wave of trucking and passenger traffic. As with our natural resources, we must strengthen our values and develop strategies to maintain our historic resources. Historic resources are worth saving. Without these resources, communities would lose their integrity, identity, and their attractiveness to newcomers. The goal is to strike a balance between development and saving what's important to the community's past. Source: *Better Models for Development in Pennsylvania*, p. 83.

HISTORIC PRESERVATION GOAL AND OBJECTIVES

Historic Preservation Goal:

Protect historic sites and structures as an important part of the character of the Borough and Township.

A number of historic landscapes, sites and structures are found in the Matamoras - Westfall Planning Area, ranging from traces of the Lenni Lenape Native Americans and early settlers, to more recent residences and outbuildings, to schools and churches. Buildings were erected as part of a growing community, and although many of the early structures are now gone, the many which remain add tremendously to the character of the community. In addition to buildings, stone walls and fences are significant historic features throughout the Township. Originally an integral part of early agricultural practices, stone walls and fences are now being incorporated into home design and as the prime feature in landscaping. The preservation of historic buildings and other features, and encouraging new development to be consistent with the existing historic character are critical to the future of the Planning Area.

What are Historic Landscapes?

Historic landscapes are places that, through their physical characteristics and features, reflect the interaction of human beings with the environment. They may be associated with a historically significant activity, event or person, or otherwise manifest the values or traditions of a culture. Sometimes called cultural landscapes or heritage landscapes, historic landscapes often incorporate both natural resources, such as vegetation, bodies of water and topographical characteristics, and human-made features, such as buildings, monuments and path systems. Ranging in size from a small plot to thousands of acres, historic landscapes may be the setting for an important building or might be significant in their own right.

Source: *Pike County Open Space, Greenways and Recreation Plan*, p. 218, and Doherty, Joanna. (2005) *Terra Firma: Putting Historic Landscape Preservation on Solid Ground*, Boston, Massachusetts Department of Conservation and Recreation, p 3.

Objectives:

Identify and Evaluate	<p>Develop an inventory of historic resources and evaluate the resources for register status.</p> <ul style="list-style-type: none"> • Historic Register - Based on the historic resources inventory, create a local historic register and consider nomination of qualifying structures and places to the National Register of Historic Places.
Adaptive Reuse	<p>Encourage the adaptive reuse of historic resources.</p> <ul style="list-style-type: none"> • <u>Adaptive Use</u> - Allow the adaptive use of large older homes to enable owners to adequately maintain the structures.
Design Guidelines	Develop guidelines for residential and commercial development to encourage historically sensitive design.
Education	Educate property owners on the significance and value of historic resources, and of the opportunities for their preservation.
Funding	Identify funding sources for historic preservation.

EXISTING HISTORIC RESOURCES

Early Development	<p>The Upper Delaware River Valley, including Matamoras Borough and Westfall Township, contains evidence of a rich and unique past. Archaeological investigations in the area, motivated by the proposed construction of the Tocks Island Dam, uncovered artifacts supporting human occupation of the valley as early as 12,000 years ago. These are some of the earliest inhabitants of the North American continent. Native American inhabitants subsisted in the valley until circa 1758 when European-American settlers forced the last of the Minisink Indians to leave. Post-European settlement of the area, beginning in the early 18th Century, centered around agriculture and later progressed to recreation and tourism.</p>
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MATAMORAS BOROUGH

Incorporated as a borough on January 18, 1905, was originally part of Westfall Township. Named during the Mexican War after the American Army captured the Mexican town of Matamoras. That town had originally been named for Rev. Mariano Matamoras, a hero of the Mexican Revolution.

WESTFALL TOWNSHIP

Created January 31, 1839, from Milford Township. Simon Westfall (or Westfael) first settled there before 1743. His son Simon built the stone house in Matamoras. Two descendants, Cornelius and Jacob served as Justices of the Peace.

(Source: www.pikepa.org.)

Since the middle of the nineteenth century, Pike, a sparsely populated rural county has been a summer home and vacation spot to literally millions of people-people who have become part of a proudly told history. That history - the Pike County Story - can be viewed in microcosm in the story of Westfall and Matamoras. It is the story of Indians and settlers. It is the story of the Delaware River, the Erie Railroad, and the D & H Canal. It is the story of lumbering, rafting, quarrying, and farming. Roads were constructed; towns were formed; schools were built; and men marched off to half a dozen wars. And the visitors came - vacationers, sportsmen, and retired persons from the metropolitan areas - finding a quiet haven of peace in those mountains along the Upper Delaware.

The Delaware River and the beautiful Pike County land, which over 200 years ago attracted settlers from as far away as England, France, Germany, and Spain, continues to attract tens of thousands of visitors each year. And across the River from the old railroad port - Port Jervis - the Westfall-Matamoras area continues to be the gateway.¹

Historic Resources

The many historic resources in Matamoras Borough and Westfall Township are key components of the small town character of the community and the rural-recreation landscape. The history and historic resources of the Planning Area have been well documented by local historians and the Pike County Historical Society, each maintaining an extensive list and description of buildings, structures and sites which comprise the historic fabric of the Borough and Township. The preservation of these resources in this time of growth and development is one of the basic tenets of this *Comprehensive Plan*. Significant historic resources in the Planning Area identified by the County are detailed in the *Selected Matamoras/Westfall Historic Resources Table*.

Pike County Historic Resources Study

This Study, completed in 1997 by Pike County and Cultural Heritage Research Services, Inc., details the many historic resources in Pike County including Matamoras and Westfall. The Study reports:

Eligible for National Register Listing

- Simon Westfael House
- Matamoras Elementary school (razed)
- Charles S. Peirce House
- Conrail #2 Bridge

Potentially Eligible for National Register Listing

- 16 buildings in Matamoras
- an historic farm complex in Westfall

Not Eligible for National Register Listing

- Matamoras Historic District
- Mill Rift Historic District

National Register

The National Register of Historic Places was established by the National Historic Preservation Act of 1966, and in Pennsylvania the program is administered by the Pennsylvania Historical & Museum Commission (PHMC) Bureau for Historic Preservation. According to the Pennsylvania Historical and Museum Commission, Mill Rift Town Hall is the only building in the Township listed on the National Register of Historic Places. The Nearpass House was listed but was razed in 2008. None in the Borough are listed.

Register Eligibility

Several properties in the Planning Area are considered eligible: the Simon Westfael House (Fort Matamoras) in Matamoras and the Conrail No. 2 Bridge and the Charles S. Peirce House (*Arisbe*) in Westfall Township. In order to be eligible for the National Register, a resource must meet one of four criteria:

- the resource made a significant contribution to the broad patterns of our history;
- the resource is associated with the lives of persons significant in our past;
- the resource has distinctive characteristics of a building type, period, or method of construction, that represent the work of a master, possess high



Mill Rift Town Hall

Listed on the National Register of Historic Places

¹Westfall Township, *Gateway to the West*, Henn, William F., 1978, Introduction by George J. Fluhr, Pike County Historian.

artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and,

- the resource has yielded, or may be likely to yield, information important in prehistory or history.

A resource that meets any one of the four eligibility criteria is given a Determination of Eligibility (DOE) by the Bureau for Historic Preservation. That resource, however, might never obtain a listing on the National Register.

The PHMC's Bureau for Historic Preservation provides services to assist in the National Register process, including technical assistance to preparers of National Register nominations, guidance on conducting architectural and historic surveys, evaluation of National Register eligibility, and nomination of properties to the National Register of Historic Places. The State Historic Preservation Board reviews all nominations. If approved, the nomination is then sent to the National Park Service, which either approves or denies the nomination. If approved, it is entered into the National Register of Historic Places.

Many of the older homes and buildings and historic sites in the Borough and Township, along with the landscape itself, add to the historic fabric. Some of these buildings and structures may also be eligible for listing on the National Register. However, the application process is very detailed and the criteria are quite rigorous with the need to document national historic significance, not simply local significance. Even if a building or site is included as eligible, sufficient documentation must be submitted to gain the full listing on the National Register.

National Register of Historic Places

The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior. The Pennsylvania Historical and Museum Commission manages the National Register of Historic Places for Pennsylvania. National Register properties are distinguished by having been documented and evaluated according to uniform standards. These criteria recognize the accomplishments of all peoples who have contributed to the history and heritage of the United States and are designed to help state and local governments, federal agencies, and others identify significant historic and archeological properties worthy of preservation and of consideration in planning and development decisions.

Listing in the National Register, however, does not interfere with a private property owner's right to alter, manage or dispose of property. It often changes the way communities perceive their historic resources and gives credibility to efforts to preserve these resources as irreplaceable parts of the community. Listed historic districts enable municipalities to control the exterior appearance of structures.

Listing in the National Register contributes to preserving historic properties in a number of ways:

- Recognition that a property is of significance to the nation, the state, or the community.
- Consideration in the planning for federal or federally assisted projects.
- Eligibility for federal tax benefits for income producing properties.
- Qualification for federal assistance for historic preservation, when funds are available.



Charles S. Peirce House - Arisbe (National Park Service)

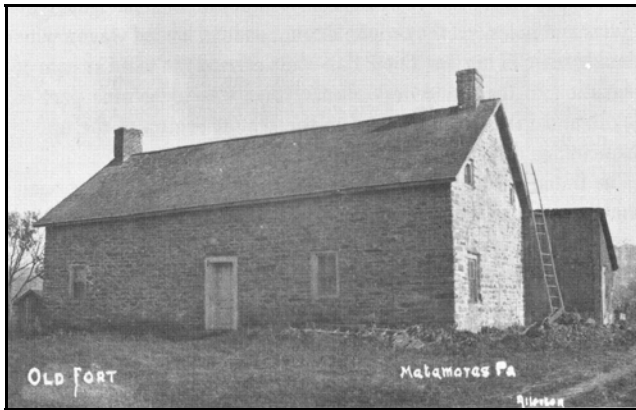


Rosetown Houses



SELECTED MATAMORAS / WESTFALL TOWNSHIP HISTORIC RESOURCES (Source: Pike County Comprehensive Plan and Pike County Historic resources Study)	
Westfall Township	
Mill Rift Hall	On the National Register of Historic Sites for the Event and the Social History. Period of significance is from 1900-1924, 1925-1949.
Mill Rift Cemetery	The cemetery was built in 1888.
Mill Rift Schoolhouse	This schoolhouse was originally built and used as a school in the 1860's. It has since been renovated and is now used as a residence. It is located west of Cemetery Road on the west side of Bluestone Blvd.
<i>Arisbe</i> , The Charles Peirce Home	Father of "Pragmatism" and recognized throughout the world as America's foremost mathematician and philosopher. In 1887, Peirce and his wife, Juliette, bought the John B. Quick home. They added a third story and named it "Arisbe", a classical name from Homer's Iliad. His philosophical treatises and articles from which evolved the Science of Pragmatism, which was used by Einstein in the development of his Theory of Relativity. On the National Register of Historic Sites, the Peirce Society and National Park Service have plans to turn it into a national cultural center.
Quicktown One-Room Schoolhouse	Probably built by John T. Quick, was located on the Old Milford Road and was used until 1920. The school board sold the property and the building moved across Route 6-209 and is now used as a residence.
Cook Residence	Originally the Solomon Middlaugh homestead, also built in the early 1800's located on Bluestone Boulevard.

SELECTED MATAMORAS / WESTFALL TOWNSHIP HISTORIC RESOURCES (Source: Pike County Comprehensive Plan and Pike County Historic resources Study)	
Matamoras Borough	
Methodist Church	Built in 1891 and is located on the corner of 3rd St. and Ave. H.
Matamoras Airport	This is one of the Borough's proudest civic achievements. After the crash of a small private plane in the 1920's, local firemen joined together in developing a municipal airport with the hope of preventing future accidents. Work on the field began 1929 and by 1938, with federal funds, the Borough Airport contained two paved and lighted runways, each over a quarter mile long.
9th St. and Avenue P cemetery	Long neglected and overgrown, this cemetery marks the burial place of some of the earliest inhabitants of the area.
Forth Barrett Bridge	Erected in 1939 this bridge, actually the sixth constructed from Matamoras, is the fourth at this location. Earlier Barrett Bridges were constructed in 1872, 1876, and 1904.
The Schroeder Buildings "Jay's Handy Corner" "Mayor's Corner"	Along PA Ave., this is an unaltered example of a turn-of-the-century, small town storefront. Constructed in 1912 and operated as a grocery store and from 1912 to 1921, also operated as the Matamoras Borough Post Office at the store.
Borough Hall	Completed in 1916, it has served since that time as the office and meeting place of the Borough Council and, in 1980, was a focal point for celebration of the Borough's Diamond Jubilee.
Marford Silk Mill	First incorporated in 1920, the business founded by Martin and Sanford, and later purchased by Welch, provided Matamoras with a thriving industry for more than forty years.
Matamoras' first grade school	Built in 1879 at the corner of Ave. G and Third St.
Avenue C	The old Loder Street is still one of the most historic districts in the Borough. Several of the buildings "on the street where the railroad ran" date from the nineteenth century. Among them are the Blackman House (once a hotel), the Mance Store, and the Arrowhead Salon.
Old Stone House / Simon Westfael House (Fort Matamoras)	Located on 1st and Ave. P., this house was present when the ferries first crossed the Delaware from New York and settlement of northeastern PA had just begun. Built from native stone by Simeon Westfall in ca. 1745, the building has been known as "Fort Westfall", "Fort Matamoras", and "The Wehinger Stone House". The stone house represents the earliest settlement period in Pike County and is an example of a Dutch Colonial type known as the Ulster stone house. Its location is heralded by a PA Historical and Museum Commission marker.
PA Historical and Museum Commission Marker	In 1865 the world heavyweight bare knuckles boxing championship between James Dunn and William Davis occurred. Dunn was declared world champion and today the location of this contest is commemorated by this marker at the corner of 10th Street and the Old Milford/Matamoras Rd.



(Westfall Township, Gateway to the West, W. F. Henn.)



(Westfall Township, Gateway to the West, W. F. Henn.)



Locally Significant

The limited number of designated or eligible structures in the Planning Area does not mean that it does not have a rich history. Historic resources of local significance are those that have not been nominated for the National Register, but are still meaningful and important to the community's heritage. While many of these sites are known informally, a local register would be an important first step in securing the resources for the future.

PLANNING IMPLICATIONS

PA Historic District Act The Pennsylvania the Historic District Act *authorizes counties, cities, boroughs, incorporated towns and townships to create historic districts within their boundaries providing for the appointment of Boards of Historical Architectural Review; empowering governing bodies to protect the distinctive historical character of these districts and to regulate the erection, reconstruction, alteration, restoration, demolition or razing of buildings within the historic districts.* Under the Act municipalities have the authority to enact local historic regulations within historic districts listed on the National Register. Restrictions may range from the use of historic resources to their aesthetics. Applications pertaining to historic resources are reviewed by the Historical Architectural Review Board, which then makes a recommendation to the governing body.

Historic Districts in the Planning Area

There are currently no historic districts in the Planning Area and the 1997 *Pike County Historic Resources Study* concluded:

- *Matamoras was determined not eligible for listing as a historic district in the National Register of Historic Places.*²
- *The Village of Mill Rift Historic District was determined not eligible for listing as a historic district in the National Register of Historic Places.*³

PA Planning Code

The Pennsylvania Municipalities Planning Code enables municipalities to plan for and act to preserve and protect historic resources. *Preservation or protection, when used in connection with . . . historic resources, shall include means to conserve and safeguard these resources from wasteful or destructive use.* The MPC also states *where zoning districts are created, all provisions shall be uniform for each class of uses or structures, within each*

district, except that additional classifications may be made within any district for places having unique historical, architectural or patriotic interest or value. Although not having the force of provisions under the Historic District Act of regulating with specific design standards, a municipally organized historic review commission could act in a support capacity by conducting research, providing data on historic resources and making recommendations for historically sensitive development. The zoning ordinance could formalize the review process for locally significant structures and include incentives such as increased lot coverage or reduced building setbacks to support such sensitive development. The Borough and Township currently have no zoning provisions for historic resource protection under the MPC; therefore, historic resources are left virtually unprotected.

Benefits of Historic Preservation

Since the 1970s, mounting evidence has shown that historic preservation can be a powerful community and economic development strategy. Evidence includes statistics compiled from annual surveys conducted by the National Trust for Historic Preservation and statewide Main Street programs, state-level tourism and economic impact studies, and studies that have analyzed the impact of specific actions such as historic designation, tax credits, and revolving loan funds. Among the findings:

- *Creation of local historic districts stabilizes, and often increases residential and commercial property values.*
- *Increases in property values in historic districts are typically greater than increases in the community at large.*
- *Historic building rehabilitation, which is more labor intensive and requires greater specialization and higher skill levels, creates more jobs and results in more local business than does new construction.*
- *Heritage tourism provides substantial economic benefits. Tourists drawn by a community's (or region's) historic character typically stay longer and spend more during their visit than other tourists.*
- *Historic rehabilitation encourages additional neighborhood investment and produces a high return for municipal dollars spent.*
- *Use of a city or town's existing, historic building stock can support growth management policies by increasing the supply of centrally located housing.*

Source: Planning Commissioners Journal, No. 52, Fall 2003, p. 4.

FUTURE PLANNING POLICIES

Overview

Future planning policies are measures intended to achieve the Planning Area's historic resource protection goals by guiding future decisions and actions related to historic resource protection.

Policies

The history of the Upper Delaware River Valley and the Matamoras - Westfall Planning Area is extremely important, providing evidence of early human settlement and marking a significant social

²*Pike County Historic Resources Study*, Pike County Community Planning and Human Development Office, Cultural Heritage Research Services, Inc., 1997, p. 86.

³*Ibid.*, p. 102.

and cultural transformation of the 19th and early 20th centuries. The following policies are intended to preserve and promote this important and unique past which can also serve as an invaluable asset for the local tourism economy:

- Continue the identification of historic sites (nationally and locally significant) and pursue National Register listing.
- Promote public education to raise awareness of the Borough's and Township's history and historic resources.
- Promote preservation of historic buildings and structures during the land development process.
- Preserve historic buildings by incorporation in commercial areas as commercial uses.
- Preserve historic sites by promotion as recreational or tourist destinations.
- Pursue technical assistance and funding for historic resource identification and preservation.

IMPLEMENTATION STRATEGIES

Overview

Implementation strategies are the specific means by which the Borough and Township can execute the future planning policies. The strategies take the form of regulatory provisions included in the zoning, subdivision and land development ordinance, and other ordinances, as well as non-regulatory initiatives. The following implementation strategies are organized according to zoning ordinance amendments, subdivision and land development ordinance amendments, and additional measures.

Historical Society

Encourage and support community efforts to create a Local Historical Society to promote the benefits of historic preservation and document and preserve local history and historical artifacts. The Mill Rift Civic association and its collection of photographs and artifacts in the Mill Rift Towns Hall could provide the foundation for the effort.

Once created, work with the Society to:

- Conduct a public outreach program, perhaps through a newsletter or web site, to provide educational materials on the Planning Area's history and historic resources.
- Develop a local historic register program aimed at identifying properties eligible for state and national recognition, and encourage and support efforts to list and preserve such properties on the National Register.
- Seek technical assistance from historic preservation organizations, such as the PHMC and Preservation Pennsylvania for inventorying and documenting resources and nominating resources for the National Register.

Historic Preservation Planning

A well-conceived preservation planning process serves to:

- *Establish a basis of public policy about historic resources;*
- *Educate and inform residents and others about their community's heritage and its value;*
- *Identify opportunities for economic growth based on the community's historic and architectural character.*
- *Ensure consistency among various local government policies that affect the community's historic resources;*
- *Lay the groundwork for adopting a local historic preservation ordinance or strengthening an existing one;*
- *Eliminate uncertainty or confusion about the purpose, meaning, and content of a community's preservation ordinance;*
- *Inform existing and potential property owners, investors, and developers about what historic resources the community wants to protect as it grows;*
- *Create an agenda for future preservation activities; and*
- *Facilitate compliance with federal and state historic preservation and environmental quality laws.*

Preservation plans serve several purposes:

- *educating elected and appointed officials, municipal staff, property owners, investors, and others about the status of historic resources within the community and the economic benefits of preservation;*
- *formally documenting existing conditions, issues, opportunities, and challenges;*
- *providing information on tax and other incentives for preservation;*
- *offering discussion and analysis regarding preservation of historic resources, and establishing a roadmap for future efforts;*
- *setting out the roles and responsibilities of the public, private, and nonprofit sectors with regard to the preservation of historic resources.*

Source: Planning Commissioners Journal, No. 52, Fall 2003, p. 6.

- Seek funding from organizations such as the National Park Service, National Trust for Historic Preservation, PHMC, and DCNR, and from programs such as the Federal Rehabilitation Tax Credit Program.
- Create a system for efficient storage, mapping, and retrieval of historic resource data (for example, Geographic Information Systems) and maintain a historic resources database.

Site and Sign Design Guidelines

Prepare and adopt design guidelines for residential, commercial, industrial, and institutional development to encourage the most efficient use of land and development consistent with community character. As part of a continuing commitment to the historic character of a community some municipalities and historical societies provide site and sign design guidelines to encourage commercial establishments and signs to be consistent with the community's heritage. The guidelines would not be mandatory absent a historic district listed on the National Register. The standards used in the Milford Historic District could serve as an example. Such a community based effort would be invaluable to preserving the overall character of the Planning Area, and would be particularly effective in support of any Borough revitalization program for Pennsylvania Avenue.

Pennsylvania Avenue Revitalization

Incorporate the preservation of locally significant historic structures into the Borough revitalization program for Pennsylvania Avenue.

Ordinances

Ordinance provisions intended to implement the planning policies and recommendations pertaining to historic resource protection are as follows:

- Adopt a historic resource protection ordinance to:
 - Require demolition review.
 - Prohibit demolition by neglect.
 - Include provisions for use and adaptive re-use of historic resources.
 - Provide incentives for rehabilitation of historic resources
- Allow home occupations in all zoning districts as a means of encouraging productive use of historic structures which tend to be larger and more difficult to maintain.
- Incorporate the preservation of historic resources in conservation design for residential and commercial development.

NPS Certified Program

Consider participation in the Certified Local Government Historic Preservation Program of the National Park Service and the Pennsylvania Bureau of Historic Preservation.

CERTIFIED LOCAL GOVERNMENT HISTORIC PRESERVATION PROGRAM

The Certified Local Government Program is a preservation partnership between local, state and national governments focused on promoting historic preservation at the grass roots level. The program is jointly administered by the National Park Service (NPS) and the State Historic Preservation Offices (SHPOs) in each state, with each local community working through a certification process to become recognized as a Certified Local Government (CLG). CLGs then become an active partner in the Federal Historic Preservation Program and the opportunities it provides.

Why become a CLG? The key reason is the access certification provides to the expert technical advice of the State Offices as well as the NPS. Partnerships with the National Alliance of Preservation Commissions, Preserve America, the National Trust for Historic Preservation, and the National Main Street Center are also networks that CLGs have an opportunity to tap into. Of course, access to Federal funding is another benefit, making certified communities able to access the portion of Federal funds set aside by each SHPO for just CLGs annually. Being a CLG also shows your community's commitment to keeping what is significant from the past for future generations. As a certified town, city, or county seeking other opportunities, it becomes easy to demonstrate a readiness to take on a preservation project and be successful.

What is a CLG required to do?

A community must show both the state and NPS that they are committed to historic preservation. They can do this by addressing the following minimum goals.

- * Establish a Preservation Commission*
- * Establish an ordinance*
- * Maintain an active survey of local historic resources*
- * Participate in the National Register process*

(Source: www.nps.gov/history/hps/clg/)

DEMOGRAPHIC PROFILE

INTRODUCTION

The demographic composition of a community's population is affected by the geographic, physical and economic character of the community. At the same time, the demographic composition is largely responsible for the manner in which a community develops and grows (or declines) in terms of demand for community facilities and services to meet the specific needs of the changing population, thereby altering the very character of the community. By gaining an understanding of the demographic character of a community and forecasting how the population is likely to change, both in number and composition, local officials can assess the need for additional or different types of public and private facilities and services required to meet the demands of the changing population.

Given their location in northeastern Pennsylvania, the communities of Pike County are especially prone to demographic changes resulting from the migration of residents from the metropolitan areas of Pennsylvania, New York, and New Jersey seeking the rural lifestyle and scenic beauty of the Pocono region. Traditionally a vacation destination, Pike County has seen a growing number of families and individuals take up permanent residency in its townships and boroughs, transforming them into bedroom communities. As the data in the following pages demonstrate, the Matamoras-Westfall Planning Area is among the communities affected by these regional influences.

TABLE 1 - HISTORICAL POPULATION AND GROWTH										
Municipality	1950	1960	1970	1980	%70-80	1990	%80-90	2000	%90-00	%50-00
Blooming Grv	358	424	548	1,176	114.6%	2,022	71.9%	3,621	79.1%	911%
Delaware	511	549	671	1,492	122.4%	3,527	136.4%	6,319	79.2%	1137%
Dingman	361	382	518	1,855	258.1%	4,591	147.5%	8,788	91.4%	2334%
Greene	829	793	1,028	1,462	42.2%	2,097	43.4%	3,149	50.2%	280%
Lackawaxen	1,072	1,068	1,363	2,111	54.9%	2,832	34.2%	4,154	46.7%	288%
Lehman	459	318	624	1,448	132.1%	3,055	111.0%	7,515	146.0%	1537%
Matamoras	1,761	2,087	2,244	2,111	-5.9%	1,934	-8.4%	2,312	19.5%	31%
Milford Boro	1,111	1,198	1,190	1,143	-3.9%	1,064	-6.9%	1,104	3.8%	-1%
Milford Twp	233	386	418	663	58.6%	1,013	52.8%	1,292	27.5%	455%
Palmyra	582	651	1,204	1,722	43.0%	1,976	14.8%	3,145	59.2%	440%
Porter	94	51	88	277	214.8%	163	-41.2%	385	136.2%	310%
Shohola	455	413	574	986	71.8%	1,586	60.9%	2,088	31.7%	359%
Westfall	599	838	1,348	1,825	35.4%	2,106	15.4%	2,430	15.4%	306%
Pike County	8,425	9,158	11,818	18,271	54.6%	27,966	53.1%	46,302	65.6%	450%
PA (1,000's)	10,498	11,319	11,794	11,864	0.6%	11,882	0.1%	12,281	3.4%	17%

Source: US Census Bureau

POPULATION

Population Trends

The analysis of population begins with an examination of historical population growth from 1950 to 2000, followed by current year estimates. Age and migration data provide an understanding of who, in terms of age and origin, accounts for the recent population shifts.

Table 1 - Historical Population Growth Table provides U.S. census data from 1950 to 2000 for Matamoras Borough and Westfall Township, Pike County and its municipalities, and the Commonwealth.

Figure 1 - Matamoras Borough & Westfall Township Population 1950-2008 presents a graphic representation of the study area's population growth. According to the Census data, Pike County has experienced a tremendous amount of growth in comparison to Pennsylvania since 1970. The bulk of that growth has occurred in Delaware, Dingman, and Lehman Townships, where populations have doubled nearly every decade since 1970. The remaining townships have also grown steadily, but at more modest rates, with Westfall Township plateauing at 15.4% in the last two decades. After a period of slight decline in the 1970s and 1980s, the two boroughs (Matamoras and Milford) have seen a return to growth, although modest due to the lack of available land for new development. Milford experienced a slight 3.8% growth rate in the 1990s, while Matamoras' population increased by 19.5%. The rise and fall of Matamoras' population is illustrated in *Figure 1*.

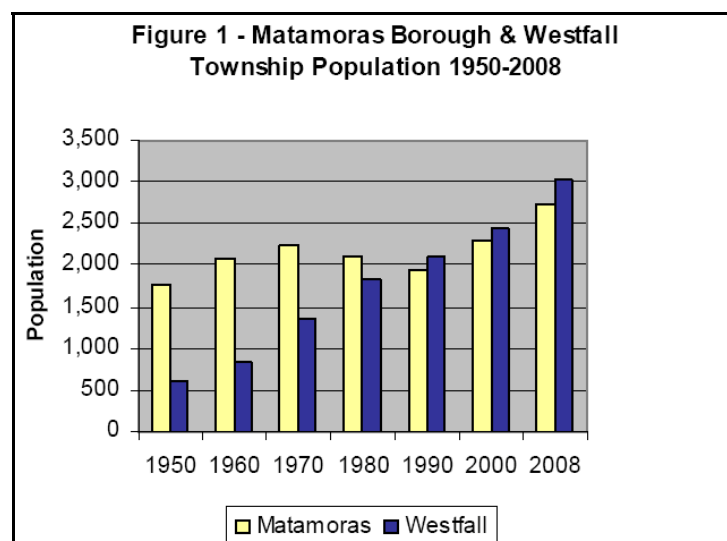


Table 2 –Population Estimates and Percent of County provides estimated population figures through July 1, 2008. These estimates are derived by the Pike County Office of Community Planning and are based on the average percentage population increase between 2000 and 2006. All Pike County municipalities are estimated to have grown significantly over the last eight years; however, most townships grew at approximately half the rate seen in the previous decade (Table 1). Westfall Township is estimated to have grown at a slightly faster pace than in the previous decade (15.4% from 1990 to 2000 compared to 24.7% from 2000 to 2008), while Matamoras Borough has been relatively steady at 19.5% from 1990 to 2000 and 18.3% from 2000 to 2008.

TABLE 2 - POPULATION ESTIMATES and PERCENT OF COUNTY										
Municipality					2000-2008		% of County			
	1970	1990	2000	2008	#	%	1970	1990	2000	2008
Blooming Grove	548	2,022	3,621	4,844	1,223	33.8%	4.6%	7.2%	7.8%	7.7%
Delaware	671	3,527	6,319	8,998	2,679	42.4%	5.7%	12.6%	13.6%	14.4%
Dingman	518	4,591	8,788	12,813	4,025	45.8%	4.4%	16.4%	19.0%	20.5%
Greene	1,028	2,097	3,149	3,857	708	22.5%	8.7%	7.5%	6.8%	6.2%
Lackawaxen	1,363	2,832	4,154	5,704	1,550	37.3%	11.5%	10.1%	9.0%	9.1%
Lehman	624	3,055	7,515	10,875	3,360	44.7%	5.3%	10.9%	16.2%	17.4%
Matamoras	2,244	1,934	2,312	2,736	424	18.3%	19.0%	6.9%	5.0%	4.4%
Milford Boro	1,190	1,064	1,104	1,263	159	14.4%	10.1%	3.8%	2.4%	2.0%
Milford Twp	418	1,013	1,292	1,790	498	38.5%	3.5%	3.6%	2.8%	2.9%
Palmyra	1,204	1,976	3,145	3,916	771	24.5%	10.2%	7.1%	6.8%	6.3%
Porter	88	163	385	471	86	22.3%	0.7%	0.6%	0.8%	0.8%
Shohola	574	1,586	2,088	2,553	465	22.3%	4.9%	5.7%	4.5%	4.1%
Westfall	1,348	2,106	2,430	3,030	600	24.7%	11.4%	7.5%	5.2%	4.8%
Pike County	11,818	27,966	46,302	62,624	16,322	35.3%	100.0%	100.0%	100.0%	100.0%

Source: Pike County Office of Community Planning

Population by percent of county reveals that between 1970 and 2008 the geographic distribution of population has shifted from Matamoras Borough, Milford Borough, and Westfall Township to Dingman, Delaware, and Lehman Townships, all three with large residential developments and direct access to New Jersey and New York (Table 2). In 2008, Matamoras Borough, Westfall Township and their neighboring municipalities make-up only a small portion of the County's total population.

TABLE 3 – MUNICIPAL IMMIGRATION				
	Matamoras Borough		Westfall Township	
	#	%	#	%
persons 5 years +	2,187	100.0%	2,297	100.0%
Residence in 1995				
lived in same house	1,449	66.3%	1,523	66.3%
lived in different house in US	735	33.6%	749	32.6%
same county	438	20.0%	283	12.3%
different county in PA	13	0.6%	43	1.9%
different state	284	13.0%	423	18.4%
out of U.S.	3	0.1%	25	1.1%

Source: US Census Bureau, 2000

Municipal Immigration

An examination of municipal immigration provides insight into the origin of recent increases in population in Matamoras Borough and Westfall Township by identifying the residency of individuals in 1995. According to *Table 3- Municipal Immigration* approximately one-third of the population of both the Borough and the Township emigrated from areas outside the Planning Area. Of these individuals, the vast majority came from within Pike County and from other states, most likely New York and New Jersey. Most (20%) immigration to Matamoras originated from other Pike County municipalities; however, most

immigration to Westfall Township originated from other states, again most likely New York and New Jersey (18.4%). These findings indicate that recent population growth is due largely to in-migration and that the two communities are attracting new residents from outside areas who presumably want to be in close proximity to New York and New Jersey.

TABLE 4 - AGE COHORTS

Matamoras Borough			
Age	1990	2000	% change
< 18	445	605	36.0%
18-64	1097	1264	15.2%
65+	392	443	13.0%
Westfall Township			
Age	1990	2000	% change
< 18	491	579	17.9%
18-64	1211	1379	13.9%
65+	404	472	16.8%

Source: US Census Bureau

Age Cohorts

Table 4- Age Cohorts shows population growth across all age cohorts with the most dramatic increase occurring in Matamoras Borough where the school-aged population (under 18 years) increased by 36%. In both municipalities, the number of working age adults and retirees increased significantly. When considered along with *Table 9 –Age Distribution*, it appears that recent population growth is due largely to the immigration of families with school-aged children and retirees.

Seasonal Population

Pike County municipalities see their populations swell during vacation months as seasonal homeowners and renting vacationers take up temporary residence. The results of a survey of second home owners conducted in 1990 as part of the *Pike County Comprehensive Plan* by Community Planning and Management, LLC, found that the average visitation rate to second homes was 3.3 persons. Although the study is somewhat dated, the results can provide a measure of the peak second home population.

TABLE 5 - SEASONAL POPULATION

Municipality	2000 Total Units	% 2nd homes	# 2nd homes	Permanent population	Estimated peak Seasonal population	Estimated peak population. (seasonal+perm)
Blooming Grove Twp.	3,273	51.2%	1,677	3,621	5,031	8,652
Delaware Township	3,453	28.8%	993	6,319	2,979	9,298
Dingman Township	5,689	42.8%	2,435	8,788	7,305	16,093
Greene Township	2,780	48.5%	1,349	3,149	4,047	7,196
Lackawaxen Township	3,750	49.7%	1,862	4,154	5,586	9,740
Lehman Township	4,655	37.9%	1,762	7,515	5,286	12,801
Matamoras Borough	977	0.6%	6	2,312	18	2,330
Milford Borough	560	3.2%	18	1,104	54	1,158
Milford Township	594	6.9%	41	1,292	123	1,415
Palmyra Township	3,838	60.9%	2,337	3,145	7,011	10,156
Porter Township	926	78.3%	724	385	2,172	2,557
Shohola Township	3,089	66.5%	2,054	2,088	6,162	8,250
Westfall Township	1,097	7.9%	87	2,430	261	2,691
Pike County	34,681	44.2%	15,350	46,302	46,050	92,352

Source: US Census Bureau, 2000

Applying a conservative household size of three persons to the number of second homes in the County and its municipalities yields a seasonal population of 46,000 in the County and a total peak population of more than 92,000 in the year 2000 (*Table 5 – Seasonal Population*). Matamoras Borough is estimated to have a seasonal population of 18, bringing its total peak population to 2,330 in the year 2000. Westfall Township is estimated to have a seasonal population of 261, bringing its total peak population to 2691 in the year 2000. The seasonal populations of Matamoras Borough and Westfall Township are much lower than in the other municipalities, but Matamoras and Westfall nonetheless experience the increased traffic that is generated. They also provide much of the retail service for County's seasonal population.

The numbers have certainly changed in the past eight years based on the number of new dwelling units and the mix of seasonal and permanent dwellings. However, the real effect is the increased traffic and demand for facilities and services created by a seasonal population. In addition, as existing second homes are converted to full-time residences, the assessed valuation does not increase as would be the case for new construction, so the demand for facilities and services increases while tax revenues do not.

The Pike County survey of second home owners revealed another interesting trend. At the time of the survey in 1990, more than 70% of the respondents planned on settling permanently in Pike County within 15 years. Those 15 years have now elapsed, and the conversions predicted in 1990 have certainly added to the explosive population growth of the County. Conversions and the construction of new dwellings for full-time residency will continue. The future implications are clear, the County and most municipalities will experience strong population growth along with increased demand for public facilities and services.

Population Growth Northeast Pennsylvania

Table 6 - Recent Population Growth in Northeast Pennsylvania compares the Township to Pike County, surrounding counties and the Commonwealth. The more rural counties increased dramatically in population between 1990 and

TABLE 6 - RECENT POPULATION GROWTH IN NORTHEAST PENNSYLVANIA 2010 PROJECTIONS							
	1980	1990	80-90	2000	90-00	2010	00-10
Matamoras Borough	2,111	1,934	-8.4%	2,312	19.5%	2,853*	23.4%*
Westfall Township	1,825	2,106	15.4%	2,430	15.4%	3,2014*	31.7%*
Carbon Co.	53,285	56,846	6.7%	58,802	3.4%	64,310	9.4%
Lackawanna Co.	227,908	219,039	-3.9%	213,295	-2.6%	211,360	-0.9%
Luzerne Co.	343,079	328,149	-4.4%	319,250	-2.7%	324,520	1.7%
Monroe Co.	69,409	95,709	37.9%	138,687	44.9%	172,170	24.1%
Pike Co.	18,271	27,966	53.1%	46,302	65.6%	69,350*	49.8%*
Wayne Co.	35,237	39,944	13.4%	47,722	19.5%	49,750	4.3%
Northeast PA	696,837	767,653	10.2%	824,058	7.3%	884,180	7.3%
PA (1,000's)	11,865	11,883	0.2%	12,281	3.3%	12,408	1.0%
* Pike County Office of Community Planning projection.							

Source: Pennsylvania State Data Center

2000 and are expected to increase through 2010, with no reason to believe the growth will wane. In fact, Pike, Monroe and Wayne Counties had the highest growth rates in the Commonwealth because of the attraction of the Poconos to nearby metropolitan areas in Pennsylvania, New Jersey and New York. In contrast, the population of the more densely populated counties, Lackawanna and Luzerne, has declined with the same trend expected for Lackawanna County through 2010. By comparison, the Commonwealth as a whole has been increasing slightly in population since 1980, and a one percent increase is expected by 2010. These trends suggest continued population growth for the Northeast Pennsylvania Region as individuals and families leave urbanized areas seeking a rural and small town lifestyle.

Population Projections

Estimating a municipality's future population is a good way to anticipate the changing demand for community facilities and services and to assess the demand for land and the effect on such community characteristics such as open space and housing affordability. In the case of Matamoras Borough and Westfall Township, and all of Pike County, future population growth is more dependent on immigration than the net of births and deaths. The migration from the greater New Jersey and New York metropolitan area which has been so volatile over the past thirty years makes accurate projection difficult. Nevertheless, it appears that population in the Borough and the Township will continue to increase over the next ten years.

Table 7 – Municipal Population Projections reports population projections for the years 2010 and 2020. Projections for 2010 are from *Pike County/Municipal Population Projections – 2010 Estimates* and are based on the average annual growth rate from 2000 to 2006. Projections for 2020 are calculated based on the assumption that the trends seen from 2000 to 2010 will continue.

TABLE 7 - MUNICIPAL POPULATION PROJECTIONS, 2020					
Municipality	2000	2010	% 00-10	2020	%10-20
Blooming Grv	3,621	5,209	43.9%	7,493	43.9%
Delaware	6,319	9,830	55.6%	15,292	55.6%
Dingman	8,788	14,080	60.2%	22,559	60.2%
Greene	3,149	4,057	28.8%	5,227	28.8%
Lackawaxen	4,154	6,175	48.7%	9,179	48.7%
Lehman	7,515	11,928	58.7%	18,932	58.7%
Matamoras	2,312	2,853	23.4%	3,521	23.4%
Milford Boro	1,104	1,306	18.3%	1,545	18.3%
Milford Twp	1,292	1,943	50.4%	2,922	50.4%
Palmyra	3,145	4,137	31.5%	5,442	31.5%
Porter	385	496	28.8%	639	28.8%
Shohola	2,088	2,685	28.6%	3,453	28.6%
Westfall	2,430	3,201	31.7%	4,217	31.7%
Pike County	46,302	67,391	45.5%	98,085	45.5%

Source: Pike County Office of Community Planning; Consultant's Analysis

TABLE 8 - MATAMORAS BOROUGH and WESTFALL TOWNSHIP POPULATION PROJECTIONS, 2020

	Matamoras Borough		
Growth Rate	10%	20%	30%
2020 Population	3,138	3,424	3,709
	Westfall Township		
Growth Rate	20%	30%	40%
2020 Population	3,841	4,161	4,481

Source: Consultant's Analysis

However, as this is rather unlikely to be the case, *Table 8 – Matamoras Borough and Westfall Township Population Projections 2020* provides additional projections for Matamoras Borough and Westfall Township using a range of growth rates (10% below and 10% above the average).

The 2010 projections indicate continued growth throughout the County, with the highest populations and growth rates once again in Delaware, Dingman, and Lehman Townships. However, growth rates in these municipalities

are more moderate than in the recent past. In addition, growth rates throughout the County are more evenly distributed across all municipalities. Matamoras Borough is expected to experience a slight increase in growth (from 19.5% between 1990 and 2000 to 23.4% between 2000 and 2010), while Westfall Township's growth rate will double.

Assuming the same growth rates through 2020, the populations of Matamoras Borough and Westfall Township will reach 3,521 and 4,217, respectively. However, given a range of growth rates, Matamoras' population ranges between 3,100 and 3,700, while Westfall's population ranges from 3,800 to 4,500.

As noted earlier, it is difficult to predict the regional factors that will directly effect population changes in Pike County. However, as population in the Matamoras-Westfall Planning Area continues to increase, the rate of housing construction, infill and redevelopment, and second home conversion will also continue to increase, with more demand for land, facilities, infrastructure and services.

SOCIOECONOMIC CHARACTERISTICS

The examination of socioeconomic characteristics includes population age, income levels, and employment. This provides a description of the composition of the population and an indication of services and facilities required to meet the social and economic needs of the Matamoras-Westfall Planning Area.

Age of Population

The age of a community's population is important in terms of the types of community facilities and services which must be provided. Many of the services which are age dependant are provided by public entities other than the Township. For example, the number of children determines the size and type of educational facilities and services provided by the school district, while an aging population will require more social services from county and state agencies. An aging population might also influence the type of housing in a community, brining about the construction of age-qualified and continuing care retirement communities.

TABLE 9 - YEAR 2000 AGE DISTRIBUTION						
	Matamoras Borough		Westfall Township		%	
Age	#	%	#	%	Pike Co	PA
< 5	122	5.3%	135	5.6%	5.9%	5.9%
5-9	171	7.4%	174	7.2%	7.9%	6.7%
10-14	193	8.3%	163	6.7%	8.6%	7.0%
15-19	175	7.6%	149	6.1%	6.3%	6.9%
20-24	91	3.9%	90	3.7%	3.4%	6.1%
25-34	230	9.9%	220	9.1%	10.0%	12.7%
35-44	373	16.1%	368	15.1%	17.7%	15.9%
45-54	317	13.7%	377	15.5%	14.2%	13.9%
55-59	96	4.2%	146	6.0%	5.8%	5.0%
60-64	101	4.4%	136	5.6%	5.2%	4.2%
65-74	208	9.0%	242	10.0%	9.6%	7.9%
75-84	195	8.4%	145	6.0%	4.4%	5.8%
85+	40	1.7%	85	3.5%	1.2%	1.9%
Total	2,312	100.0%	2,430	100.0%	100.0%	100.0%
18 and Over	1,707	73.8%	1,851	76.2%	73.3%	76.2%
65 and Over	443	19.2%	472	19.4%	15.2%	15.6%
Median age	40.0	--	42.8	--	39.6	38.0

Source: US Census Bureau, 2000

Table 9 – Year 2000 Age Distribution demonstrates that the populations of both Matamoras Borough and Westfall Township were comprised largely of families with school-aged children and retirees (age 65 and over). This is consistent with the County and the Commonwealth; however, the County, Borough, and Township each exhibited slightly higher percentages of retirees than the Commonwealth suggesting that the senior population is more concentrated in this region.

Income

Table 10 – Income Levels reports per capita income, median household income, and income ranges for Matamoras Borough, Westfall Township, Pike County and the Commonwealth. This provides an indication of the economic status of the Matamoras-Westfall Planning Area. The data show that the income levels of Matamoras Borough and Westfall Township were generally consistent with the County and the Commonwealth, with the majority of households in the lower-middle to middle income ranges. Income in Matamoras Borough was slightly lower by comparison. Furthermore, recent trends show that the Borough's income levels have not kept pace with the others over the years. In 1989, the per capita and median household incomes of the Borough were higher than, or generally the same as Westfall, the County and the Commonwealth. Although the Borough's incomes rose between 1989 and 1999, the rate of increase lagged behind Westfall Township, Pike County, and the Commonwealth. By 1999, the Borough's median household income was substantially lower than the others.

Poverty Status

Poverty status is another indicator of a community's economic well-being. According to the Census data shown in *Table 11- Poverty Status*, despite the Borough's lower incomes, the number of persons below poverty level decreased substantially, from 120 persons in 1989 to 91 persons in 1999 – a 24% decrease. The opposite was seen in Westfall Township, where, despite higher incomes, the number of persons below poverty level rose by 12%, from 145 to 162 persons.

TABLE 10 - INCOME LEVELS						
Income	Matamoras Borough		Westfall Township		Pike County	PA
	Income (% increase)		Income (% increase)		Income (% increase)	
Per capita - 1989	\$13,909		\$13,549		\$13,785	\$14,068
Per capita - 1999	\$18,946 (36%)		\$20,866 (54%)		\$20,315 (47%)	\$20,880 (48%)
Median household - 1989	\$28,958		\$30,375		\$30,314	\$29,069
Median household - 1999	\$37,361 (29%)		\$42,472 (40%)		\$44,608 (47%)	\$40,106 (38%)
Households with income of	#	%	#	%	%	%
less than \$10,000	61	6.6%	58	6.11%	5.80%	9.70%
\$10,000 to \$14,999	80	8.6%	78	8.22%	6.40%	7.00%
\$15,000 to \$24,999	161	17.3%	85	8.96%	12.20%	13.80%
\$25,000 to \$34,999	104	11.2%	137	14.44%	12.70%	13.30%
\$35,000 to \$49,999	205	22.0%	180	18.97%	18.80%	16.90%
\$50,000 to \$74,999	187	20.1%	238	25.08%	23.50%	19.50%
\$75,000 to \$99,999	76	8.2%	93	9.80%	11.20%	9.60%
\$100,000 to \$149,000	49	5.3%	61	6.43%	6.60%	6.60%
\$150,000 to \$199,999	0	0.0%	11	1.16%	1.50%	1.80%
\$200,000 or more	8	0.9%	8	0.84%	1.10%	1.90%
# reporting households	931	100.0%	949	100.00%		

Source: US Census Bureau, 2000

TABLE 11 - POVERTY STATUS					
	1989		1999		
	Persons Below		Persons Below		
	Poverty Level		Poverty Level		
	#	%	#	%	
Matamoras Borough	120	6.2%	91	4.0%	
Westfall Township	145	6.9%	162	6.9%	
Pike County	1,964	7.10%	3,178	6.90%	
PA (1,000's)	1,284	11.10%	1,304	11.00%	

Source: US Census Bureau

Employment

Table 12 – Employment by Sector and Job Type provides an indication of the vitality of the local labor force and the most prevalent income generating occupations. The data show that in terms of unemployment rates in the year 2000, the local workforce was quite vibrant. Both Matamoras Borough and Westfall Township had lower unemployment rates than the County and the Commonwealth. Furthermore, the unemployment rate declined in both municipalities between 1989 and 1999, falling in Matamoras Borough from 4.4% in 1989 to 3.3% in 1999, and from 5.0% to 3.6% in Westfall Township.

According to the data on employment by sector, the greatest proportion of employed persons in Matamoras Borough worked in *education, health and social services* (20.1%) and *manufacturing* (19.2%), followed by *retail* (9.8%). *Education, health and social services* (22%) was also the top employment sector in Westfall Township; however, *retail* (18.6%) took the second slot, followed by *manufacturing* (11.6%). These employment patterns are consistent with the County and the Commonwealth where these three sectors represented the largest portion of the employment base.

TABLE 12- EMPLOYMENT BY SECTOR AND JOB TYPE - U.S. CENSUS 2000						
	Matamoras Borough		Westfall Township		Pike Co	PA
population age 16 years +	1,803		1,915		35,354	9,693,040
# employed	989		1,120		19,639	5,653,500
# unemployed	34		42		1,117	339,386
percent of civilian labor force	3.30%		3.6%		5.4%	5.7%
not in labor force	777		747		14,575	3,692,528
SECTOR	#	% of emp.	#	% of emp.	% of emp.	% of emp.
Ag, forestry, mining	3	0.3%	8	0.7%	0.7%	1.3%
Construction	51	5.2%	65	5.8%	8.9%	6.0%
Manufacturing	190	19.2%	130	11.6%	10.0%	16.0%
Wholesale	45	4.6%	18	1.6%	3.2%	3.6%
Retail	97	9.8%	208	18.6%	14.0%	12.1%
Transportation, warehousing, utilities	40	4.0%	70	6.3%	6.5%	5.4%
Information	39	3.9%	42	3.8%	2.9%	2.6%
Finance, insurance, real estate, rental, leasing	82	8.3%	79	7.1%	7.4%	6.6%
Professional, scientific, mngt, admin, waste mngt	34	3.4%	57	5.1%	7.5%	8.5%
Education, health, social services	199	20.1%	246	22.0%	18.2%	21.9%
Arts, entertainment, recreation, accommodation, food	83	8.4%	89	7.9%	10.8%	7.0%
Other services	75	7.6%	51	4.6%	5.0%	4.8%
Public administration	51	5.2%	57	5.1%	4.7%	4.2%
JOB TYPE	#	% of emp.	#	% of emp.	#	% of emp.
Management, professional and related	318	32.2%	336	30.0%	28.6%	32.6%
Service	167	16.9%	159	14.2%	17.6%	14.8%
Sales and office	272	27.5%	316	28.2%	26.6%	27.0%
Farming, fishing, forestry	3	0.3%	3	0.3%	0.4%	0.5%
Construction, extraction, maintenance	87	8.8%	123	11.0%	12.6%	8.9%
Production, transportation, material moving	142	14.4%	183	16.3%	14.3%	16.3%
CLASS OF WORKER	#	% of emp.	#	% of emp.	#	% of emp.
Private wage and salary	784	79.3%	809	72.2%	76.6%	82.4%
Government	129	13.0%	188	16.8%	14.6%	11.3%
Self-employed (not incorporated)	76	7.7%	123	11.0%	8.5%	6.0%
Unpaid family workers	0	0.0%	0	0.0%	0.3%	0.3%

Source: US Census Bureau, 2000

The *job type* and *class of worker* data reveal that the majority of workers were engaged in *management/professional* and *sales and office* jobs, and were *private wage and salary* earners. Again, these patterns are consistent with the County and the Commonwealth. While the proportion of workers in each category have likely changed since 1999, the shifts are not expected to be of significance.

Place of Work

According to the 2000 U.S. Census, 875 individuals in the Matamoras Borough labor force – that is 89% of the labor force - worked outside of the Borough; 107 individuals worked within the Borough. A slightly greater percentage (92%) of Westfall Township workers were employed outside of the Township; 88 individuals worked within the Township. Commuting times also

increased between 1990 and 2000. For workers in Matamoras, commute time increased from an average of approximately 20 minutes to 30 minutes, and for workers in Westfall from 25 minutes to 30 minutes. This is further evidence of the continued transition of these municipalities to bedroom communities, with individuals and families taking up permanent residency in the two communities and commuting to jobs located elsewhere.

Planning Implications

It is clear that Pike County and its local municipalities have experienced an explosion of population growth over the past several decades. This growth is largely attributed to in-migration; that is, individuals and families moving in to the community from outside areas. New homes are being constructed and seasonal homes are being converted to permanent residences. Projections indicate that this trend is expected to continue over the next ten years. While growth in Matamoras Borough is limited by the scarcity of available land, Westfall Township remains a predominantly undeveloped community with the potential for dramatic, long-term population growth.

As population continues to increase, the demand for land, housing, facilities, utilities, and services will subsequently increase. Traffic congestion is also likely to worsen. The increase in the number of families with young children results not only in more demand on the school system, but for such community facilities as parks and recreation areas. All of these factors place a strain on the Matamoras-Westfall Planning Area's financial resources and rural small town character. Preserving forest land and open space and increasing the commercial base can help off-set the costs associated with new residential development and reduce the need for tax increases. Open space lands generate little demand for services and, in comparison to residential land, results in a positive net contribution to tax coffers.

Economic trends suggest that both Matamoras Borough and Westfall Township are economically viable. Unemployment rates have declined in Matamoras Borough and Westfall Township, and the poverty rate has also declined in Matamoras. The vast majority of employment, however, is provided outside of the two communities requiring relatively long commutes. Their function as bedroom communities, however, provides further economic opportunity with an increasing population providing a market for the retail centers along Route 209 and the small businesses in Matamoras Borough.

A coordinated land use pattern that preserves the rural small town character while accommodating projected growth and supporting the local economy is key to the long-term health and well-being of the Matamoras-Westfall Planning Area. Policies and strategies aimed at accomplishing this goal are discussed in the other sections of this Plan.

Demographic Profiles

The following *demographic profiles* are taken from the Year 2000 Census and are intended to provide the full details about the permanent population characteristics of the Borough, Township and Pike County.

Table DP-1. Profile of General Demographic Characteristics: 2000

Geographic area: Matamoras borough, Pennsylvania

[For information on confidentiality protection, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
Total population.....	2,312	100.0	HISPANIC OR LATINO AND RACE		
SEX AND AGE			Total population.....	2,312	100.0
Male.....	1,045	45.2	Hispanic or Latino (of any race).....	74	3.2
Female.....	1,267	54.8	Mexican.....	2	0.1
Under 5 years.....	122	5.3	Puerto Rican.....	48	2.1
5 to 9 years.....	171	7.4	Cuban.....	2	0.1
10 to 14 years.....	193	8.3	Other Hispanic or Latino.....	22	1.0
15 to 19 years.....	175	7.6	Not Hispanic or Latino.....	2,238	96.8
20 to 24 years.....	91	3.9	White alone.....	2,178	94.2
25 to 34 years.....	230	9.9	RELATIONSHIP		
35 to 44 years.....	373	16.1	Total population.....	2,312	100.0
45 to 54 years.....	317	13.7	In households.....	2,311	100.0
55 to 59 years.....	96	4.2	Householder.....	925	40.0
60 to 64 years.....	101	4.4	Spouse.....	484	20.9
65 to 74 years.....	208	9.0	Child.....	718	31.1
75 to 84 years.....	195	8.4	Own child under 18 years.....	559	24.2
85 years and over.....	40	1.7	Other relatives.....	98	4.2
Median age (years).....	40.0	(X)	Under 18 years.....	36	1.6
18 years and over.....	1,707	73.8	Nonrelatives.....	86	3.7
Male.....	754	32.6	Unmarried partner.....	45	1.9
Female.....	953	41.2	In group quarters.....	1	-
21 years and over.....	1,633	70.6	Institutionalized population.....	-	-
62 years and over.....	498	21.5	Noninstitutionalized population.....	1	-
65 years and over.....	443	19.2	HOUSEHOLD BY TYPE		
Male.....	172	7.4	Total households.....	925	100.0
Female.....	271	11.7	Family households (families).....	635	68.6
RACE			With own children under 18 years.....	303	32.8
One race.....	2,288	99.0	Married-couple family.....	484	52.3
White.....	2,232	96.5	With own children under 18 years.....	213	23.0
Black or African American.....	14	0.6	Female householder, no husband present.....	116	12.5
American Indian and Alaska Native.....	8	0.3	With own children under 18 years.....	70	7.6
Asian.....	22	1.0	Nonfamily households.....	290	31.4
Asian Indian.....	10	0.4	Householder living alone.....	249	26.9
Chinese.....	4	0.2	Householder 65 years and over.....	158	17.1
Filipino.....	-	-	Households with individuals under 18 years.....	331	35.8
Japanese.....	1	-	Households with individuals 65 years and over.....	331	35.8
Korean.....	1	-	Average household size.....	2.50	(X)
Vietnamese.....	-	-	Average family size.....	3.05	(X)
Other Asian ¹	6	0.3	HOUSING OCCUPANCY		
Native Hawaiian and Other Pacific Islander.....	-	-	Total housing units.....	977	100.0
Native Hawaiian.....	-	-	Occupied housing units.....	925	94.7
Guamanian or Chamorro.....	-	-	Vacant housing units.....	52	5.3
Samoan.....	-	-	For seasonal, recreational, or		
Other Pacific Islander ²	-	-	occasional use.....	6	0.6
Some other race.....	12	0.5	Homeowner vacancy rate (percent).....	2.6	(X)
Two or more races.....	24	1.0	Rental vacancy rate (percent).....	4.8	(X)
Race alone or in combination with one			HOUSING TENURE		
or more other races: ³			Occupied housing units.....	925	100.0
White.....	2,256	97.6	Owner-occupied housing units.....	648	70.1
Black or African American.....	24	1.0	Renter-occupied housing units.....	277	29.9
American Indian and Alaska Native.....	14	0.6	Average household size of owner-occupied units.....	2.62	(X)
Asian.....	24	1.0	Average household size of renter-occupied units.....	2.22	(X)
Native Hawaiian and Other Pacific Islander.....	-	-			
Some other race.....	18	0.8			

- Represents zero or rounds to zero. (X) Not applicable.

¹ Other Asian alone, or two or more Asian categories.² Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.³ In combination with one or more of the other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.

Source: U.S. Census Bureau, Census 2000.

Table DP-2. Profile of Selected Social Characteristics: 2000

Geographic area: Matamoras borough, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
SCHOOL ENROLLMENT			NATIVITY AND PLACE OF BIRTH		
Population 3 years and over enrolled in school	631	100.0	Total population	2,312	100.0
Nursery school, preschool	57	9.0	Native	2,272	98.3
Kindergarten	30	4.8	Born in United States	2,267	98.1
Elementary school (grades 1-8)	274	43.4	State of residence	537	23.2
High school (grades 9-12)	171	27.1	Different state	1,730	74.8
College or graduate school	99	15.7	Born outside United States	5	0.2
EDUCATIONAL ATTAINMENT			Foreign born	40	1.7
Population 25 years and over	1,587	100.0	Entered 1990 to March 2000	2	0.1
Less than 9th grade	40	2.5	Naturalized citizen	38	1.6
9th to 12th grade, no diploma	200	12.6	Not a citizen	2	0.1
High school graduate (includes equivalency)	686	43.2	REGION OF BIRTH OF FOREIGN BORN		
Some college, no degree	328	20.7	Total (excluding born at sea)	40	100.0
Associate degree	97	6.1	Europe	22	55.0
Bachelor's degree	141	8.9	Asia	5	12.5
Graduate or professional degree	95	6.0	Africa	-	-
Percent high school graduate or higher	84.9	(X)	Oceania	-	-
Percent bachelor's degree or higher	14.9	(X)	Latin America	8	20.0
MARITAL STATUS			Northern America	5	12.5
Population 15 years and over	1,839	100.0	LANGUAGE SPOKEN AT HOME		
Never married	377	20.5	Population 5 years and over	2,187	100.0
Now married, except separated	1,017	55.3	English only	2,102	96.1
Separated	43	2.3	Language other than English	85	3.9
Widowed	206	11.2	Speak English less than "very well"	16	0.7
Female	173	9.4	Spanish	34	1.6
Divorced	196	10.7	Speak English less than "very well"	9	0.4
Female	143	7.8	Other Indo-European languages	51	2.3
GRANDPARENTS AS CAREGIVERS			Speak English less than "very well"	7	0.3
Grandparent living in household with one or more own grandchildren under 18 years	34	100.0	Asian and Pacific Island languages	-	-
Grandparent responsible for grandchildren	5	14.7	Speak English less than "very well"	-	-
VETERAN STATUS			ANCESTRY (single or multiple)		
Civilian population 18 years and over ..	1,719	100.0	Total population	2,312	100.0
Civilian veterans	281	16.3	Total ancestries reported	2,975	128.7
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION			Arab	3	0.1
Population 5 to 20 years	511	100.0	Czech ¹	9	0.4
With a disability	12	2.3	Danish	-	-
Population 21 to 64 years	1,227	100.0	Dutch	130	5.6
With a disability	175	14.3	English	343	14.8
Percent employed	41.1	(X)	French (except Basque) ¹	117	5.1
No disability	1,052	85.7	French Canadian ¹	20	0.9
Percent employed	79.1	(X)	German	570	24.7
Population 65 years and over	446	100.0	Greek	3	0.1
With a disability	205	46.0	Hungarian	61	2.6
RESIDENCE IN 1995			Irish ¹	605	26.2
Population 5 years and over	2,187	100.0	Italian	481	20.8
Same house in 1995	1,449	66.3	Lithuanian	14	0.6
Different house in the U.S. in 1995	735	33.6	Norwegian	50	2.2
Same county	438	20.0	Polish	101	4.4
Different county	297	13.6	Portuguese	-	-
Same state	13	0.6	Russian	43	1.9
Different state	284	13.0	Scotch-Irish	37	1.6
Elsewhere in 1995	3	0.1	Scottish	69	3.0
			Slovak	-	-
			Subsaharan African	-	-
			Swedish	9	0.4
			Swiss	12	0.5
			Ukrainian	14	0.6
			United States or American	100	4.3
			Welsh	20	0.9
			West Indian (excluding Hispanic groups)	6	0.3
			Other ancestries	158	6.8

-Represents zero or rounds to zero. (X) Not applicable.

¹The data represent a combination of two ancestries shown separately in Summary File 3. Czech includes Czechoslovakian. French includes Alsatian. French Canadian includes Acadian/Cajun. Irish includes Celtic.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-3. Profile of Selected Economic Characteristics: 2000

Geographic area: Matamoras borough, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
EMPLOYMENT STATUS			INCOME IN 1999		
Population 16 years and over	1,803	100.0	Households	931	100.0
In labor force	1,026	56.9	Less than \$10,000	61	6.6
Civilian labor force	1,023	56.7	\$10,000 to \$14,999	80	8.6
Employed	989	54.9	\$15,000 to \$24,999	161	17.3
Unemployed	34	1.9	\$25,000 to \$34,999	104	11.2
Percent of civilian labor force	3.3	(X)	\$35,000 to \$49,999	205	22.0
Armed Forces	3	0.2	\$50,000 to \$74,999	187	20.1
Not in labor force	777	43.1	\$75,000 to \$99,999	76	8.2
Females 16 years and over	999	100.0	\$100,000 to \$149,999	49	5.3
In labor force	520	52.1	\$150,000 to \$199,999	-	-
Civilian labor force	517	51.8	\$200,000 or more	8	0.9
Employed	503	50.4	Median household income (dollars)	37,361	(X)
Own children under 6 years	151	100.0	With earnings	647	69.5
All parents in family in labor force	138	91.4	Mean earnings (dollars) ¹	45,250	(X)
COMMUTING TO WORK			With Social Security income	367	39.4
Workers 16 years and over	982	100.0	Mean Social Security income (dollars) ¹	12,548	(X)
Car, truck, or van - - drove alone	815	83.0	With Supplemental Security Income	45	4.8
Car, truck, or van - - carpooled	99	10.1	Mean Supplemental Security Income (dollars) ¹	7,606	(X)
Public transportation (including taxicab)	18	1.8	With public assistance income	-	-
Walked	27	2.7	Mean public assistance income (dollars) ¹	-	(X)
Other means	4	0.4	With retirement income	238	25.6
Worked at home	19	1.9	Mean retirement income (dollars) ¹	24,653	(X)
Mean travel time to work (minutes) ¹	29.2	(X)	Families	661	100.0
Employed civilian population			Less than \$10,000	16	2.4
16 years and over	989	100.0	\$10,000 to \$14,999	18	2.7
OCCUPATION			\$15,000 to \$24,999	98	14.8
Management, professional, and related occupations	318	32.2	\$25,000 to \$34,999	73	11.0
Service occupations	167	16.9	\$35,000 to \$49,999	172	26.0
Sales and office occupations	272	27.5	\$50,000 to \$74,999	168	25.4
Farming, fishing, and forestry occupations	3	0.3	\$75,000 to \$99,999	76	11.5
Construction, extraction, and maintenance occupations	87	8.8	\$100,000 to \$149,999	37	5.6
Production, transportation, and material moving occupations	142	14.4	\$150,000 to \$199,999	-	-
INDUSTRY			\$200,000 or more	3	0.5
Agriculture, forestry, fishing and hunting, and mining	3	0.3	Median family income (dollars)	45,917	(X)
Construction	51	5.2	Per capita income (dollars) ¹	18,946	(X)
Manufacturing	190	19.2	Median earnings (dollars):		
Wholesale trade	45	4.6	Male full-time, year-round workers	32,875	(X)
Retail trade	97	9.8	Female full-time, year-round workers	26,176	(X)
Transportation and warehousing, and utilities	40	4.0			
Information	39	3.9		Number below poverty level	Percent below poverty level
Finance, insurance, real estate, and rental and leasing	82	8.3	POVERTY STATUS IN 1999		
Professional, scientific, management, administrative, and waste management services	34	3.4	Families	16	2.4
Educational, health and social services	199	20.1	With related children under 18 years	8	2.3
Arts, entertainment, recreation, accommodation and food services	83	8.4	With related children under 5 years	-	-
Other services (except public administration)	75	7.6	Families with female householder, no husband present	8	7.0
Public administration	51	5.2	With related children under 18 years	8	10.5
			With related children under 5 years	-	-
CLASS OF WORKER			Individuals	91	4.0
Private wage and salary workers	784	79.3	18 years and over	80	4.6
Government workers	129	13.0	65 years and over	33	7.4
Self-employed workers in own not incorporated business	76	7.7	Related children under 18 years	11	1.9
Unpaid family workers	-	-	Related children 5 to 17 years	11	2.5
			Unrelated individuals 15 years and over	55	15.9

-Represents zero or rounds to zero. (X) Not applicable.

¹If the denominator of a mean value or per capita value is less than 30, then that value is calculated using a rounded aggregate in the numerator. See text.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-4. Profile of Selected Housing Characteristics: 2000

Geographic area: Matamoras borough, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
Total housing units	977	100.0	OCCUPANTS PER ROOM		
UNITS IN STRUCTURE			Occupied housing units	925	100.0
1-unit, detached	740	75.7	1.00 or less	915	98.9
1-unit, attached	25	2.6	1.01 to 1.50	10	1.1
2 units	106	10.8	1.51 or more	-	-
3 or 4 units	49	5.0			
5 to 9 units	10	1.0	Specified owner-occupied units	597	100.0
10 to 19 units	5	0.5	VALUE		
20 or more units	42	4.3	Less than \$50,000	13	2.2
Mobile home	-	-	\$50,000 to \$99,999	257	43.0
Boat, RV, van, etc	-	-	\$100,000 to \$149,999	283	47.4
			\$150,000 to \$199,999	33	5.5
YEAR STRUCTURE BUILT			\$200,000 to \$299,999	8	1.3
1999 to March 2000	3	0.3	\$300,000 to \$499,999	-	-
1995 to 1998	55	5.6	\$500,000 to \$999,999	-	-
1990 to 1994	30	3.1	\$1,000,000 or more	3	0.5
1980 to 1989	72	7.4	Median (dollars)	104,800	(X)
1970 to 1979	79	8.1			
1960 to 1969	86	8.8	MORTGAGE STATUS AND SELECTED		
1940 to 1959	224	22.9	MONTHLY OWNER COSTS		
1939 or earlier	428	43.8	With a mortgage	362	60.6
			Less than \$300	-	-
ROOMS			\$300 to \$499	-	-
1 room	8	0.8	\$500 to \$699	54	9.0
2 rooms	3	0.3	\$700 to \$999	101	16.9
3 rooms	77	7.9	\$1,000 to \$1,499	169	28.3
4 rooms	152	15.6	\$1,500 to \$1,999	38	6.4
5 rooms	158	16.2	\$2,000 or more	-	-
6 rooms	282	28.9	Median (dollars)	1,050	(X)
7 rooms	185	18.9	Not mortgaged	235	39.4
8 rooms	80	8.2	Median (dollars)	358	(X)
9 or more rooms	32	3.3			
Median (rooms)	5.8	(X)	SELECTED MONTHLY OWNER COSTS		
			AS A PERCENTAGE OF HOUSEHOLD		
Occupied housing units	925	100.0	INCOME IN 1999		
YEAR HOUSEHOLDER MOVED INTO UNIT			Less than 15.0 percent	150	25.1
1999 to March 2000	102	11.0	15.0 to 19.9 percent	115	19.3
1995 to 1998	257	27.8	20.0 to 24.9 percent	76	12.7
1990 to 1994	132	14.3	25.0 to 29.9 percent	98	16.4
1980 to 1989	166	17.9	30.0 to 34.9 percent	57	9.5
1970 to 1979	77	8.3	35.0 percent or more	93	15.6
1969 or earlier	191	20.6	Not computed	8	1.3
VEHICLES AVAILABLE			Specified renter-occupied units	277	100.0
None	100	10.8	GROSS RENT		
1	353	38.2	Less than \$200	-	-
2	378	40.9	\$200 to \$299	20	7.2
3 or more	94	10.2	\$300 to \$499	22	7.9
			\$500 to \$749	117	42.2
HOUSE HEATING FUEL			\$750 to \$999	70	25.3
Utility gas	782	84.5	\$1,000 to \$1,499	25	9.0
Bottled, tank, or LP gas	-	-	\$1,500 or more	6	2.2
Electricity	72	7.8	No cash rent	17	6.1
Fuel oil, kerosene, etc	68	7.4	Median (dollars)	663	(X)
Coal or coke	-	-			
Wood	-	-	GROSS RENT AS A PERCENTAGE OF		
Solar energy	-	-	HOUSEHOLD INCOME IN 1999		
Other fuel	-	-	Less than 15.0 percent	19	6.9
No fuel used	3	0.3	15.0 to 19.9 percent	31	11.2
			20.0 to 24.9 percent	30	10.8
SELECTED CHARACTERISTICS			25.0 to 29.9 percent	48	17.3
Lacking complete plumbing facilities	6	0.6	30.0 to 34.9 percent	20	7.2
Lacking complete kitchen facilities	-	-	35.0 percent or more	112	40.4
No telephone service	-	-	Not computed	17	6.1

-Represents zero or rounds to zero. (X) Not applicable.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-1. Profile of General Demographic Characteristics: 2000

Geographic area: Westfall township, Pike County, Pennsylvania

[For information on confidentiality protection, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
Total population.....	2,430	100.0	HISPANIC OR LATINO AND RACE		
SEX AND AGE			Total population.....	2,430	100.0
Male.....	1,186	48.8	Hispanic or Latino (of any race).....	62	2.6
Female.....	1,244	51.2	Mexican.....	4	0.2
Under 5 years.....	135	5.6	Puerto Rican.....	36	1.5
5 to 9 years.....	174	7.2	Cuban.....	4	0.2
10 to 14 years.....	163	6.7	Other Hispanic or Latino.....	18	0.7
15 to 19 years.....	149	6.1	Not Hispanic or Latino.....	2,368	97.4
20 to 24 years.....	90	3.7	White alone.....	2,297	94.5
25 to 34 years.....	220	9.1	RELATIONSHIP		
35 to 44 years.....	368	15.1	Total population.....	2,430	100.0
45 to 54 years.....	377	15.5	In households.....	2,369	97.5
55 to 59 years.....	146	6.0	Householder.....	951	39.1
60 to 64 years.....	136	5.6	Spouse.....	561	23.1
65 to 74 years.....	242	10.0	Child.....	673	27.7
75 to 84 years.....	145	6.0	Own child under 18 years.....	533	21.9
85 years and over.....	85	3.5	Other relatives.....	106	4.4
Median age (years).....	42.8	(X)	Under 18 years.....	38	1.6
18 years and over.....	1,851	76.2	Nonrelatives.....	78	3.2
Male.....	867	35.7	Unmarried partner.....	50	2.1
Female.....	984	40.5	In group quarters.....	61	2.5
21 years and over.....	1,784	73.4	Institutionalized population.....	61	2.5
62 years and over.....	550	22.6	Noninstitutionalized population.....	-	-
65 years and over.....	472	19.4	HOUSEHOLD BY TYPE		
Male.....	195	8.0	Total households.....	951	100.0
Female.....	277	11.4	Family households (families).....	675	71.0
RACE			With own children under 18 years.....	279	29.3
One race.....	2,393	98.5	Married-couple family.....	561	59.0
White.....	2,342	96.4	With own children under 18 years.....	219	23.0
Black or African American.....	9	0.4	Female householder, no husband present.....	79	8.3
American Indian and Alaska Native.....	5	0.2	With own children under 18 years.....	40	4.2
Asian.....	28	1.2	Nonfamily households.....	276	29.0
Asian Indian.....	18	0.7	Householder living alone.....	237	24.9
Chinese.....	2	0.1	Householder 65 years and over.....	121	12.7
Filipino.....	4	0.2	Households with individuals under 18 years.....	303	31.9
Japanese.....	-	-	Households with individuals 65 years and over.....	307	32.3
Korean.....	1	-	Average household size.....	2.49	(X)
Vietnamese.....	1	-	Average family size.....	2.99	(X)
Other Asian ¹	2	0.1	HOUSING OCCUPANCY		
Native Hawaiian and Other Pacific Islander.....	-	-	Total housing units.....	1,097	100.0
Native Hawaiian.....	-	-	Occupied housing units.....	951	86.7
Guamanian or Chamorro.....	-	-	Vacant housing units.....	146	13.3
Samoan.....	-	-	For seasonal, recreational, or		
Other Pacific Islander ²	-	-	occasional use.....	87	7.9
Some other race.....	9	0.4	Homeowner vacancy rate (percent).....	2.7	(X)
Two or more races.....	37	1.5	Rental vacancy rate (percent).....	6.6	(X)
Race alone or in combination with one			HOUSING TENURE		
or more other races: ³			Occupied housing units.....	951	100.0
White.....	2,378	97.9	Owner-occupied housing units.....	766	80.5
Black or African American.....	12	0.5	Renter-occupied housing units.....	185	19.5
American Indian and Alaska Native.....	38	1.6	Average household size of owner-occupied units.....	2.50	(X)
Asian.....	29	1.2	Average household size of renter-occupied units.....	2.45	(X)
Native Hawaiian and Other Pacific Islander.....	-	-			
Some other race.....	13	0.5			

- Represents zero or rounds to zero. (X) Not applicable.

¹ Other Asian alone, or two or more Asian categories.² Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.³ In combination with one or more of the other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.

Source: U.S. Census Bureau, Census 2000.

Table DP-2. Profile of Selected Social Characteristics: 2000

Geographic area: Westfall township, Pike County, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
SCHOOL ENROLLMENT			NATIVITY AND PLACE OF BIRTH		
Population 3 years and over enrolled in school	551	100.0	Total population	2,430	100.0
Nursery school, preschool	24	4.4	Native	2,302	94.7
Kindergarten	32	5.8	Born in United States	2,291	94.3
Elementary school (grades 1-8)	292	53.0	State of residence	382	15.7
High school (grades 9-12)	135	24.5	Different state	1,909	78.6
College or graduate school	68	12.3	Born outside United States	11	0.5
			Foreign born	128	5.3
			Entered 1990 to March 2000	47	1.9
			Naturalized citizen	69	2.8
			Not a citizen	59	2.4
EDUCATIONAL ATTAINMENT			REGION OF BIRTH OF FOREIGN BORN		
Population 25 years and over	1,720	100.0	Total (excluding born at sea)	128	100.0
Less than 9th grade	81	4.7	Europe	67	52.3
9th to 12th grade, no diploma	252	14.7	Asia	30	23.4
High school graduate (includes equivalency)	611	35.5	Africa	-	-
Some college, no degree	374	21.7	Oceania	2	1.6
Associate degree	103	6.0	Latin America	16	12.5
Bachelor's degree	168	9.8	Northern America	13	10.2
Graduate or professional degree	131	7.6			
Percent high school graduate or higher	80.6	(X)	LANGUAGE SPOKEN AT HOME		
Percent bachelor's degree or higher	17.4	(X)	Population 5 years and over	2,297	100.0
			English only	2,144	93.3
MARITAL STATUS			Language other than English	153	6.7
Population 15 years and over	1,956	100.0	Speak English less than "very well"	54	2.4
Never married	322	16.5	Spanish	61	2.7
Now married, except separated	1,221	62.4	Speak English less than "very well"	18	0.8
Separated	43	2.2	Other Indo-European languages	84	3.7
Widowed	192	9.8	Speak English less than "very well"	36	1.6
Female	162	8.3	Asian and Pacific Island languages	8	0.3
Divorced	178	9.1	Speak English less than "very well"	-	-
Female	92	4.7			
GRANDPARENTS AS CAREGIVERS			ANCESTRY (single or multiple)		
Grandparent living in household with one or more own grandchildren under 18 years	48	100.0	Total population	2,430	100.0
Grandparent responsible for grandchildren	25	52.1	Total ancestries reported	2,925	120.4
			Arab	2	0.1
VETERAN STATUS			Czech ¹	24	1.0
Civilian population 18 years and over ..	1,845	100.0	Danish	10	0.4
Civilian veterans	310	16.8	Dutch	125	5.1
			English	245	10.1
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION			French (except Basque) ¹	87	3.6
Population 5 to 20 years	521	100.0	French Canadian ¹	21	0.9
With a disability	29	5.6	German	725	29.8
			Greek	14	0.6
Population 21 to 64 years	1,299	100.0	Hungarian	41	1.7
With a disability	174	13.4	Irish ¹	481	19.8
Percent employed	59.8	(X)	Italian	408	16.8
No disability	1,125	86.6	Lithuanian	-	-
Percent employed	79.1	(X)	Norwegian	21	0.9
			Polish	155	6.4
Population 65 years and over	410	100.0	Portuguese	-	-
With a disability	191	46.6	Russian	40	1.6
			Scotch-Irish	27	1.1
RESIDENCE IN 1995			Scottish	39	1.6
Population 5 years and over	2,297	100.0	Slovak	4	0.2
Same house in 1995	1,523	66.3	Subsaharan African	-	-
Different house in the U.S. in 1995	749	32.6	Swedish	32	1.3
Same county	283	12.3	Swiss	8	0.3
Different county	466	20.3	Ukrainian	21	0.9
Same state	43	1.9	United States or American	84	3.5
Different state	423	18.4	Welsh	10	0.4
Elsewhere in 1995	25	1.1	West Indian (excluding Hispanic groups)	16	0.7
			Other ancestries	285	11.7

-Represents zero or rounds to zero. (X) Not applicable.

¹The data represent a combination of two ancestries shown separately in Summary File 3. Czech includes Czechoslovakian. French includes Alsatian. French Canadian includes Acadian/Cajun. Irish includes Celtic.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-3. Profile of Selected Economic Characteristics: 2000

Geographic area: Westfall township, Pike County, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
EMPLOYMENT STATUS			INCOME IN 1999		
Population 16 years and over	1,915	100.0	Households	949	100.0
In labor force	1,168	61.0	Less than \$10,000	58	6.1
Civilian labor force	1,162	60.7	\$10,000 to \$14,999	78	8.2
Employed	1,120	58.5	\$15,000 to \$24,999	85	9.0
Unemployed	42	2.2	\$25,000 to \$34,999	137	14.4
Percent of civilian labor force	3.6	(X)	\$35,000 to \$49,999	180	19.0
Armed Forces	6	0.3	\$50,000 to \$74,999	238	25.1
Not in labor force	747	39.0	\$75,000 to \$99,999	93	9.8
Females 16 years and over	1,008	100.0	\$100,000 to \$149,999	61	6.4
In labor force	537	53.3	\$150,000 to \$199,999	11	1.2
Civilian labor force	537	53.3	\$200,000 or more	8	0.8
Employed	524	52.0	Median household income (dollars)	42,472	(X)
Own children under 6 years	158	100.0	With earnings	722	76.1
All parents in family in labor force	85	53.8	Mean earnings (dollars) ¹	52,127	(X)
COMMUTING TO WORK			With Social Security income	346	36.5
Workers 16 years and over	1,105	100.0	Mean Social Security income (dollars) ¹	12,588	(X)
Car, truck, or van - - drove alone	905	81.9	With Supplemental Security Income	34	3.6
Car, truck, or van - - carpooled	111	10.0	Mean Supplemental Security Income (dollars) ¹	4,387	(X)
Public transportation (including taxicab)	20	1.8	With public assistance income	10	1.1
Walked	17	1.5	Mean public assistance income (dollars) ¹	2,330	(X)
Other means	-	-	With retirement income	210	22.1
Worked at home	52	4.7	Mean retirement income (dollars) ¹	11,337	(X)
Mean travel time to work (minutes) ¹	30.1	(X)	Families	677	100.0
Employed civilian population			Less than \$10,000	13	1.9
16 years and over	1,120	100.0	\$10,000 to \$14,999	32	4.7
OCCUPATION			\$15,000 to \$24,999	45	6.6
Management, professional, and related occupations	336	30.0	\$25,000 to \$34,999	102	15.1
Service occupations	159	14.2	\$35,000 to \$49,999	135	19.9
Sales and office occupations	316	28.2	\$50,000 to \$74,999	193	28.5
Farming, fishing, and forestry occupations	3	0.3	\$75,000 to \$99,999	85	12.6
Construction, extraction, and maintenance occupations	123	11.0	\$100,000 to \$149,999	56	8.3
Production, transportation, and material moving occupations	183	16.3	\$150,000 to \$199,999	11	1.6
INDUSTRY			\$200,000 or more	5	0.7
Agriculture, forestry, fishing and hunting, and mining	8	0.7	Median family income (dollars)	51,065	(X)
Construction	65	5.8	Per capita income (dollars) ¹	20,866	(X)
Manufacturing	130	11.6	Median earnings (dollars):		
Wholesale trade	18	1.6	Male full-time, year-round workers	39,844	(X)
Retail trade	208	18.6	Female full-time, year-round workers	24,118	(X)
Transportation and warehousing, and utilities	70	6.3			
Information	42	3.8		Number below poverty level	Percent below poverty level
Finance, insurance, real estate, and rental and leasing	79	7.1	POVERTY STATUS IN 1999		
Professional, scientific, management, administrative, and waste management services	57	5.1	Families	33	4.9
Educational, health and social services	246	22.0	With related children under 18 years	24	8.1
Arts, entertainment, recreation, accommodation and food services	89	7.9	With related children under 5 years	14	13.0
Other services (except public administration)	51	4.6	Families with female householder, no husband present	16	21.3
Public administration	57	5.1	With related children under 18 years	13	34.2
			With related children under 5 years	8	72.7
CLASS OF WORKER			Individuals	162	6.9
Private wage and salary workers	809	72.2	18 years and over	115	6.4
Government workers	188	16.8	65 years and over	31	7.6
Self-employed workers in own not incorporated business	123	11.0	Related children under 18 years	47	8.2
Unpaid family workers	-	-	Related children 5 to 17 years	31	7.1
			Unrelated individuals 15 years and over	61	18.4

-Represents zero or rounds to zero. (X) Not applicable.

¹If the denominator of a mean value or per capita value is less than 30, then that value is calculated using a rounded aggregate in the numerator. See text.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-4. Profile of Selected Housing Characteristics: 2000

Geographic area: Westfall township, Pike County, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
Total housing units	1,098	100.0	OCCUPANTS PER ROOM		
UNITS IN STRUCTURE			Occupied housing units	951	100.0
1-unit, detached	794	72.3	1.00 or less	938	98.6
1-unit, attached	74	6.7	1.01 to 1.50	11	1.2
2 units	28	2.6	1.51 or more	2	0.2
3 or 4 units	17	1.5			
5 to 9 units	2	0.2	Specified owner-occupied units	569	100.0
10 to 19 units	-	-	VALUE		
20 or more units	-	-	Less than \$50,000	2	0.4
Mobile home	183	16.7	\$50,000 to \$99,999	133	23.4
Boat, RV, van, etc	-	-	\$100,000 to \$149,999	249	43.8
			\$150,000 to \$199,999	114	20.0
YEAR STRUCTURE BUILT			\$200,000 to \$299,999	52	9.1
1999 to March 2000	20	1.8	\$300,000 to \$499,999	13	2.3
1995 to 1998	40	3.6	\$500,000 to \$999,999	6	1.1
1990 to 1994	82	7.5	\$1,000,000 or more	-	-
1980 to 1989	263	24.0	Median (dollars)	129,300	(X)
1970 to 1979	232	21.1			
1960 to 1969	105	9.6	MORTGAGE STATUS AND SELECTED		
1940 to 1959	173	15.8	MONTHLY OWNER COSTS		
1939 or earlier	183	16.7	With a mortgage	375	65.9
			Less than \$300	2	0.4
ROOMS			\$300 to \$499	7	1.2
1 room	-	-	\$500 to \$699	23	4.0
2 rooms	16	1.5	\$700 to \$999	63	11.1
3 rooms	59	5.4	\$1,000 to \$1,499	165	29.0
4 rooms	180	16.4	\$1,500 to \$1,999	75	13.2
5 rooms	287	26.1	\$2,000 or more	40	7.0
6 rooms	252	23.0	Median (dollars)	1,273	(X)
7 rooms	168	15.3	Not mortgaged	194	34.1
8 rooms	64	5.8	Median (dollars)	384	(X)
9 or more rooms	72	6.6			
Median (rooms)	5.5	(X)	SELECTED MONTHLY OWNER COSTS		
			AS A PERCENTAGE OF HOUSEHOLD		
Occupied housing units	951	100.0	INCOME IN 1999		
YEAR HOUSEHOLDER MOVED INTO UNIT			Less than 15.0 percent	158	27.8
1999 to March 2000	93	9.8	15.0 to 19.9 percent	87	15.3
1995 to 1998	219	23.0	20.0 to 24.9 percent	115	20.2
1990 to 1994	208	21.9	25.0 to 29.9 percent	54	9.5
1980 to 1989	216	22.7	30.0 to 34.9 percent	51	9.0
1970 to 1979	134	14.1	35.0 percent or more	101	17.8
1969 or earlier	81	8.5	Not computed	3	0.5
VEHICLES AVAILABLE			Specified renter-occupied units	169	100.0
None	53	5.6	GROSS RENT		
1	279	29.3	Less than \$200	3	1.8
2	445	46.8	\$200 to \$299	6	3.6
3 or more	174	18.3	\$300 to \$499	23	13.6
			\$500 to \$749	57	33.7
HOUSE HEATING FUEL			\$750 to \$999	45	26.6
Utility gas	205	21.6	\$1,000 to \$1,499	10	5.9
Bottled, tank, or LP gas	89	9.4	\$1,500 or more	5	3.0
Electricity	66	6.9	No cash rent	20	11.8
Fuel oil, kerosene, etc	550	57.8	Median (dollars)	675	(X)
Coal or coke	8	0.8			
Wood	31	3.3	GROSS RENT AS A PERCENTAGE OF		
Solar energy	-	-	HOUSEHOLD INCOME IN 1999		
Other fuel	2	0.2	Less than 15.0 percent	27	16.0
No fuel used	-	-	15.0 to 19.9 percent	17	10.1
			20.0 to 24.9 percent	32	18.9
SELECTED CHARACTERISTICS			25.0 to 29.9 percent	16	9.5
Lacking complete plumbing facilities	9	0.9	30.0 to 34.9 percent	12	7.1
Lacking complete kitchen facilities	7	0.7	35.0 percent or more	45	26.6
No telephone service	4	0.4	Not computed	20	11.8

-Represents zero or rounds to zero. (X) Not applicable.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-1. Profile of General Demographic Characteristics: 2000

Geographic area: Pike County, Pennsylvania

[For information on confidentiality protection, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
Total population.....	46,302	100.0	HISPANIC OR LATINO AND RACE		
SEX AND AGE			Total population.....	46,302	100.0
Male.....	23,074	49.8	Hispanic or Latino (of any race).....	2,315	5.0
Female.....	23,228	50.2	Mexican.....	126	0.3
Under 5 years.....	2,723	5.9	Puerto Rican.....	1,354	2.9
5 to 9 years.....	3,666	7.9	Cuban.....	108	0.2
10 to 14 years.....	3,969	8.6	Other Hispanic or Latino.....	727	1.6
15 to 19 years.....	2,904	6.3	Not Hispanic or Latino.....	43,987	95.0
20 to 24 years.....	1,567	3.4	White alone.....	41,569	89.8
25 to 34 years.....	4,625	10.0	RELATIONSHIP		
35 to 44 years.....	8,198	17.7	Total population.....	46,302	100.0
45 to 54 years.....	6,557	14.2	In households.....	45,910	99.2
55 to 59 years.....	2,681	5.8	Householder.....	17,433	37.7
60 to 64 years.....	2,395	5.2	Spouse.....	11,066	23.9
65 to 74 years.....	4,430	9.6	Child.....	14,163	30.6
75 to 84 years.....	2,046	4.4	Own child under 18 years.....	11,620	25.1
85 years and over.....	541	1.2	Other relatives.....	1,595	3.4
Median age (years).....	39.6	(X)	Under 18 years.....	539	1.2
18 years and over.....	33,950	73.3	Nonrelatives.....	1,653	3.6
Male.....	16,741	36.2	Unmarried partner.....	925	2.0
Female.....	17,209	37.2	In group quarters.....	392	0.8
21 years and over.....	32,685	70.6	Institutionalized population.....	263	0.6
62 years and over.....	8,415	18.2	Noninstitutionalized population.....	129	0.3
65 years and over.....	7,017	15.2	HOUSEHOLD BY TYPE		
Male.....	3,386	7.3	Total households.....	17,433	100.0
Female.....	3,631	7.8	Family households (families).....	13,026	74.7
RACE			With own children under 18 years.....	6,002	34.4
One race.....	45,623	98.5	Married-couple family.....	11,066	63.5
White.....	43,109	93.1	With own children under 18 years.....	4,830	27.7
Black or African American.....	1,513	3.3	Female householder, no husband present.....	1,333	7.6
American Indian and Alaska Native.....	111	0.2	With own children under 18 years.....	834	4.8
Asian.....	285	0.6	Nonfamily households.....	4,407	25.3
Asian Indian.....	83	0.2	Householder living alone.....	3,607	20.7
Chinese.....	52	0.1	Householder 65 years and over.....	1,470	8.4
Filipino.....	48	0.1	Households with individuals under 18 years.....	6,400	36.7
Japanese.....	30	0.1	Households with individuals 65 years and over.....	4,846	27.8
Korean.....	28	0.1	Average household size.....	2.63	(X)
Vietnamese.....	4	-	Average family size.....	3.06	(X)
Other Asian ¹	40	0.1	HOUSING OCCUPANCY		
Native Hawaiian and Other Pacific Islander.....	3	-	Total housing units.....	34,681	100.0
Native Hawaiian.....	2	-	Occupied housing units.....	17,433	50.3
Guamanian or Chamorro.....	-	-	Vacant housing units.....	17,248	49.7
Samoan.....	-	-	For seasonal, recreational, or		
Other Pacific Islander ²	1	-	occasional use.....	15,350	44.3
Some other race.....	602	1.3	Homeowner vacancy rate (percent).....	3.6	(X)
Two or more races.....	679	1.5	Rental vacancy rate (percent).....	5.7	(X)
Race alone or in combination with one			HOUSING TENURE		
or more other races: ³			Occupied housing units.....	17,433	100.0
White.....	43,714	94.4	Owner-occupied housing units.....	14,775	84.8
Black or African American.....	1,707	3.7	Renter-occupied housing units.....	2,658	15.2
American Indian and Alaska Native.....	350	0.8	Average household size of owner-occupied units.....	2.64	(X)
Asian.....	370	0.8	Average household size of renter-occupied units.....	2.57	(X)
Native Hawaiian and Other Pacific Islander.....	19	-			
Some other race.....	874	1.9			

- Represents zero or rounds to zero. (X) Not applicable.

¹ Other Asian alone, or two or more Asian categories.² Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.³ In combination with one or more of the other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.

Source: U.S. Census Bureau, Census 2000.

Table DP-2. Profile of Selected Social Characteristics: 2000

Geographic area: Pike County, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
SCHOOL ENROLLMENT			NATIVITY AND PLACE OF BIRTH		
Population 3 years and over enrolled in school	11,944	100.0	Total population	46,302	100.0
Nursery school, preschool	818	6.8	Native	44,010	95.0
Kindergarten	696	5.8	Born in United States	43,626	94.2
Elementary school (grades 1-8)	6,248	52.3	State of residence	9,627	20.8
High school (grades 9-12)	2,770	23.2	Different state	33,999	73.4
College or graduate school	1,412	11.8	Born outside United States	384	0.8
			Foreign born	2,292	5.0
			Entered 1990 to March 2000	338	0.7
			Naturalized citizen	1,493	3.2
			Not a citizen	799	1.7
EDUCATIONAL ATTAINMENT			REGION OF BIRTH OF FOREIGN BORN		
Population 25 years and over	31,525	100.0	Total (excluding born at sea)	2,292	100.0
Less than 9th grade	802	2.5	Europe	1,307	57.0
9th to 12th grade, no diploma	3,364	10.7	Asia	261	11.4
High school graduate (includes equivalency)	13,004	41.2	Africa	29	1.3
Some college, no degree	6,398	20.3	Oceania	15	0.7
Associate degree	1,971	6.3	Latin America	582	25.4
Bachelor's degree	3,861	12.2	Northern America	98	4.3
Graduate or professional degree	2,125	6.7			
Percent high school graduate or higher	86.8	(X)	LANGUAGE SPOKEN AT HOME		
Percent bachelor's degree or higher	19.0	(X)	Population 5 years and over	43,628	100.0
			English only	39,862	91.4
MARITAL STATUS			Language other than English	3,766	8.6
Population 15 years and over	36,003	100.0	Speak English less than "very well"	1,152	2.6
Never married	6,737	18.7	Spanish	1,692	3.9
Now married, except separated	23,265	64.6	Speak English less than "very well"	454	1.0
Separated	714	2.0	Other Indo-European languages	1,783	4.1
Widowed	2,438	6.8	Speak English less than "very well"	596	1.4
Female	1,861	5.2	Asian and Pacific Island languages	212	0.5
Divorced	2,849	7.9	Speak English less than "very well"	82	0.2
Female	1,508	4.2			
GRANDPARENTS AS CAREGIVERS			ANCESTRY (single or multiple)		
Grandparent living in household with one or more own grandchildren under 18 years	734	100.0	Total population	46,302	100.0
Grandparent responsible for grandchildren	239	32.6	Total ancestries reported	57,801	124.8
			Arab	71	0.2
VETERAN STATUS			Czech ¹	388	0.8
Civilian population 18 years and over ..	33,996	100.0	Danish	123	0.3
Civilian veterans	5,915	17.4	Dutch	1,785	3.9
			English	4,230	9.1
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION			French (except Basque) ¹	1,233	2.7
Population 5 to 20 years	10,779	100.0	French Canadian ¹	265	0.6
With a disability	764	7.1	German	11,567	25.0
			Greek	190	0.4
Population 21 to 64 years	25,656	100.0	Hungarian	683	1.5
With a disability	5,096	19.9	Irish ¹	10,994	23.7
Percent employed	58.1	(X)	Italian	9,138	19.7
No disability	20,560	80.1	Lithuanian	156	0.3
Percent employed	72.8	(X)	Norwegian	689	1.5
Population 65 years and over	6,909	100.0	Polish	3,229	7.0
With a disability	2,559	37.0	Portuguese	97	0.2
			Russian	862	1.9
RESIDENCE IN 1995			Scotch-Irish	673	1.5
Population 5 years and over	43,628	100.0	Scottish	813	1.8
Same house in 1995	26,348	60.4	Slovak	325	0.7
Different house in the U.S. in 1995	17,089	39.2	Subsaharan African	67	0.1
Same county	4,006	9.2	Swedish	655	1.4
Different county	13,083	30.0	Swiss	248	0.5
Same state	2,625	6.0	Ukrainian	299	0.6
Different state	10,458	24.0	United States or American	1,812	3.9
Elsewhere in 1995	191	0.4	Welsh	477	1.0
			West Indian (excluding Hispanic groups)	165	0.4
			Other ancestries	6,567	14.2

-Represents zero or rounds to zero. (X) Not applicable.

¹The data represent a combination of two ancestries shown separately in Summary File 3. Czech includes Czechoslovakian. French includes Alsatian. French Canadian includes Acadian/Cajun. Irish includes Celtic.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-3. Profile of Selected Economic Characteristics: 2000

Geographic area: Pike County, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
EMPLOYMENT STATUS			INCOME IN 1999		
Population 16 years and over	35,354	100.0	Households	17,447	100.0
In labor force	20,779	58.8	Less than \$10,000	1,016	5.8
Civilian labor force	20,756	58.7	\$10,000 to \$14,999	1,123	6.4
Employed	19,639	55.5	\$15,000 to \$24,999	2,134	12.2
Unemployed	1,117	3.2	\$25,000 to \$34,999	2,221	12.7
Percent of civilian labor force	5.4	(X)	\$35,000 to \$49,999	3,288	18.8
Armed Forces	23	0.1	\$50,000 to \$74,999	4,106	23.5
Not in labor force	14,575	41.2	\$75,000 to \$99,999	1,957	11.2
Females 16 years and over	17,987	100.0	\$100,000 to \$149,999	1,154	6.6
In labor force	9,314	51.8	\$150,000 to \$199,999	263	1.5
Civilian labor force	9,311	51.8	\$200,000 or more	185	1.1
Employed	8,785	48.8	Median household income (dollars)	44,608	(X)
Own children under 6 years	3,251	100.0	With earnings	13,272	76.1
All parents in family in labor force	1,642	50.5	Mean earnings (dollars) ¹	52,503	(X)
COMMUTING TO WORK			With Social Security income	5,576	32.0
Workers 16 years and over	19,302	100.0	Mean Social Security income (dollars) ¹	13,037	(X)
Car, truck, or van - - drove alone	15,183	78.7	With Supplemental Security Income	630	3.6
Car, truck, or van - - carpooled	2,472	12.8	Mean Supplemental Security Income (dollars) ¹	7,287	(X)
Public transportation (including taxicab)	563	2.9	With public assistance income	281	1.6
Walked	321	1.7	Mean public assistance income (dollars) ¹	2,062	(X)
Other means	104	0.5	With retirement income	4,213	24.1
Worked at home	659	3.4	Mean retirement income (dollars) ¹	19,253	(X)
Mean travel time to work (minutes) ¹	46.0	(X)	Families		
Employed civilian population				13,083	100.0
16 years and over	19,639	100.0	Less than \$10,000	426	3.3
OCCUPATION			\$10,000 to \$14,999	418	3.2
Management, professional, and related occupations	5,618	28.6	\$15,000 to \$24,999	1,390	10.6
Service occupations	3,451	17.6	\$25,000 to \$34,999	1,664	12.7
Sales and office occupations	5,230	26.6	\$35,000 to \$49,999	2,756	21.1
Farming, fishing, and forestry occupations	69	0.4	\$50,000 to \$74,999	3,350	25.6
Construction, extraction, and maintenance occupations	2,467	12.6	\$75,000 to \$99,999	1,712	13.1
Production, transportation, and material moving occupations	2,804	14.3	\$100,000 to \$149,999	1,003	7.7
INDUSTRY			\$150,000 to \$199,999	221	1.7
Agriculture, forestry, fishing and hunting, and mining	138	0.7	\$200,000 or more	143	1.1
Construction	1,751	8.9	Median family income (dollars)	49,340	(X)
Manufacturing	1,973	10.0	Per capita income (dollars) ¹	20,315	(X)
Wholesale trade	623	3.2	Median earnings (dollars):		
Retail trade	2,757	14.0	Male full-time, year-round workers	39,371	(X)
Transportation and warehousing, and utilities	1,284	6.5	Female full-time, year-round workers	26,279	(X)
Information	561	2.9			
Finance, insurance, real estate, and rental and leasing	1,458	7.4			
Professional, scientific, management, administrative, and waste management services	1,478	7.5			
Educational, health and social services	3,583	18.2			
Arts, entertainment, recreation, accommodation and food services	2,129	10.8			
Other services (except public administration)	978	5.0			
Public administration	926	4.7			
CLASS OF WORKER					
Private wage and salary workers	15,034	76.6			
Government workers	2,862	14.6			
Self-employed workers in own not incorporated business	1,677	8.5			
Unpaid family workers	66	0.3			

-Represents zero or rounds to zero. (X) Not applicable.

¹If the denominator of a mean value or per capita value is less than 30, then that value is calculated using a rounded aggregate in the numerator. See text.

Source: U.S. Bureau of the Census, Census 2000.

Table DP-4. Profile of Selected Housing Characteristics: 2000

Geographic area: Pike County, Pennsylvania

[Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
Total housing units	34,681	100.0	OCCUPANTS PER ROOM		
UNITS IN STRUCTURE			Occupied housing units	17,433	100.0
1-unit, detached	27,986	80.7	1.00 or less	17,217	98.8
1-unit, attached	697	2.0	1.01 to 1.50	178	1.0
2 units	354	1.0	1.51 or more	38	0.2
3 or 4 units	293	0.8			
5 to 9 units	124	0.4	Specified owner-occupied units	13,091	100.0
10 to 19 units	40	0.1	VALUE		
20 or more units	61	0.2	Less than \$50,000	232	1.8
Mobile home	5,088	14.7	\$50,000 to \$99,999	4,414	33.7
Boat, RV, van, etc	38	0.1	\$100,000 to \$149,999	4,812	36.8
			\$150,000 to \$199,999	2,133	16.3
YEAR STRUCTURE BUILT			\$200,000 to \$299,999	1,157	8.8
1999 to March 2000	656	1.9	\$300,000 to \$499,999	278	2.1
1995 to 1998	2,943	8.5	\$500,000 to \$999,999	51	0.4
1990 to 1994	5,025	14.5	\$1,000,000 or more	14	0.1
1980 to 1989	9,618	27.7	Median (dollars)	118,300	(X)
1970 to 1979	7,341	21.2			
1960 to 1969	3,454	10.0	MORTGAGE STATUS AND SELECTED		
1940 to 1959	2,997	8.6	MONTHLY OWNER COSTS		
1939 or earlier	2,647	7.6	With a mortgage	9,252	70.7
			Less than \$300	19	0.1
ROOMS			\$300 to \$499	226	1.7
1 room	135	0.4	\$500 to \$699	977	7.5
2 rooms	1,190	3.4	\$700 to \$999	2,751	21.0
3 rooms	1,938	5.6	\$1,000 to \$1,499	3,846	29.4
4 rooms	6,039	17.4	\$1,500 to \$1,999	1,099	8.4
5 rooms	8,029	23.2	\$2,000 or more	334	2.6
6 rooms	8,180	23.6	Median (dollars)	1,069	(X)
7 rooms	4,777	13.8	Not mortgaged	3,839	29.3
8 rooms	2,335	6.7	Median (dollars)	332	(X)
9 or more rooms	2,058	5.9			
Median (rooms)	5.5	(X)	SELECTED MONTHLY OWNER COSTS		
			AS A PERCENTAGE OF HOUSEHOLD		
Occupied housing units	17,433	100.0	INCOME IN 1999		
YEAR HOUSEHOLDER MOVED INTO UNIT			Less than 15.0 percent	3,733	28.5
1999 to March 2000	2,432	14.0	15.0 to 19.9 percent	2,139	16.3
1995 to 1998	4,906	28.1	20.0 to 24.9 percent	1,818	13.9
1990 to 1994	3,720	21.3	25.0 to 29.9 percent	1,485	11.3
1980 to 1989	4,009	23.0	30.0 to 34.9 percent	1,080	8.2
1970 to 1979	1,412	8.1	35.0 percent or more	2,749	21.0
1969 or earlier	954	5.5	Not computed	87	0.7
VEHICLES AVAILABLE			Specified renter-occupied units	2,538	100.0
None	676	3.9	GROSS RENT		
1	5,406	31.0	Less than \$200	16	0.6
2	7,769	44.6	\$200 to \$299	52	2.0
3 or more	3,582	20.5	\$300 to \$499	292	11.5
			\$500 to \$749	924	36.4
HOUSE HEATING FUEL			\$750 to \$999	697	27.5
Utility gas	1,629	9.3	\$1,000 to \$1,499	241	9.5
Bottled, tank, or LP gas	2,691	15.4	\$1,500 or more	19	0.7
Electricity	6,207	35.6	No cash rent	297	11.7
Fuel oil, kerosene, etc	5,276	30.3	Median (dollars)	701	(X)
Coal or coke	353	2.0			
Wood	1,131	6.5	GROSS RENT AS A PERCENTAGE OF		
Solar energy	-	-	HOUSEHOLD INCOME IN 1999		
Other fuel	119	0.7	Less than 15.0 percent	319	12.6
No fuel used	27	0.2	15.0 to 19.9 percent	304	12.0
			20.0 to 24.9 percent	306	12.1
SELECTED CHARACTERISTICS			25.0 to 29.9 percent	285	11.2
Lacking complete plumbing facilities	75	0.4	30.0 to 34.9 percent	172	6.8
Lacking complete kitchen facilities	67	0.4	35.0 percent or more	832	32.8
No telephone service	96	0.6	Not computed	320	12.6

-Represents zero or rounds to zero. (X) Not applicable.

Source: U.S. Bureau of the Census, Census 2000.

PENNSYLVANIA AVENUE REVITALIZATION PLAN

INTRODUCTION

Overview

This Revitalization Plan focuses on the Pennsylvania Avenue corridor extending through Matamoras Borough and into Westfall Township to Mountain Avenue. It includes a brief discussion of the revitalization goals, the economic history of the Planning Area, its existing assets and weaknesses, current revitalization initiatives, a market analysis, and recommendations for future actions. Its overall aim is to provide recommendations for ways to improve the Pennsylvania Avenue corridor that will assist existing businesses, attract new businesses, and promote economic activity.

Background

Matamoras Borough is located along the Upper Delaware River at the boundary of Pennsylvania, New Jersey, and New York. The Delaware River has had an enormous impact on the region's economy. *It provided fertile lowlands for farming and enabled commercial transportation of timber and bluestone for the buildings and sidewalks of many major cities. Tourists arrived by train via Port Jervis and Pond Eddy/Shohola and were picked up by stagecoaches and transported to their tourist destinations. Although the Great Depression closed the doors of many popular boarding houses and luxury hotels, the prosperity at the close of World War I and World War II encouraged urban families to build summer homes and permanent homes in the region.*¹ Tourism and retail are still the economic mainstays of the Planning Area's economy.



Prior to World War II, the downtown was the focal point of most American communities. A mix of retail shops, offices, apartments, civic uses and government offices brought people into the downtown on a daily basis. The downtown served as the center of the community's business activity, and the center of its social life. In more recent years, the role of the downtown as a hub of activity has diminished. This is true of many of America's downtowns, including Matamoras Borough. Vehicular travel and the expanding road system enabled people to travel farther to obtain goods and services and to travel outside of their community's for work. Today, most residents of the Planning Area no longer work in the immediate vicinity, resulting in a declining daytime population that strains local businesses.

While the Planning Area has undergone numerous changes over the years, it remains intact as a river front community largely dependent on small retail and the tourist economy. With the Port Jervis bridge and the construction of I-84, Pennsylvania Avenue has become more accessible. The Borough and Township recognize the need to revitalize Pennsylvania Avenue and make it a more attractive place to visit and do business.

¹ Osterberg, Matthew M., Matamoras to Shohola, Pennsylvania: A Journey Through Time (Images of America Series). Arcadia Publishing SC, 1998.

REVITALIZATION GOAL AND OBJECTIVES

Revitalization Goal **Enhance the Pennsylvania Avenue Corridor and Matamoras Borough's downtown setting.**

Pennsylvania Avenue has great potential. It contains a mix of residential, retail and office uses housed in buildings - some historic - that exemplify the rural, small town character of the Planning Area. Physical improvements to Pennsylvania Avenue along with a strong connection to the Delaware River can begin to restore the appeal of the downtown and attract new economic and social activity.

Objectives

Organization **Develop a volunteer-driven, community-based committee as the key element of the revitalization program.**

- Demonstrate local commitment for revitalization with an active and well organized committee comprised of residents, business owners and local government representatives.
- Involve individuals who are willing to take leadership roles in the revitalization process.
- Foster community involvement and participation in the revitalization effort.

MAIN STREET

As a unique economic development tool, the Main Street Four-Point Approach® is the foundation for local initiatives to revitalize their districts by leveraging local assets—from cultural or architectural heritage to local enterprises and community pride.

The four points of the Main Street approach work together to build a sustainable and complete community revitalization effort. Coincidentally, the four points of the Main Street approach correspond with the four forces of real estate value, which are social, political, physical, and economic.

Organization involves getting everyone working toward the same goal and assembling the appropriate human and financial resources to implement a Main Street revitalization program. A governing board and standing committees make up the fundamental organizational structure of the volunteer-driven program. Volunteers are coordinated and supported by a paid program director as well. This structure not only divides the workload and clearly delineates responsibilities, but also builds consensus and cooperation among the various stakeholders.

Promotion sells a positive image of the commercial district and encourages consumers and investors to live, work, shop, play and invest in the Main Street district.

Design means getting Main Street into top physical shape.

Economic Restructuring strengthens a community's existing economic assets while expanding and diversifying its economic base.

Source: Main Street, National Trust for Historic Preservation

Physical Improvements

Improve the appearance of Pennsylvania Avenue.

- Beautify Pennsylvania Avenue by removing litter and dirt and installing planters and similar streetscape amenities.
- Enhance the Pennsylvania Avenue streetscape.
- Improve the appearance of buildings along Pennsylvania Avenue.

Public Safety

Maintain a safe environment along Pennsylvania Avenue.

- Maintain public safety.
- Enforce traffic laws.
- Enforce zoning regulations.

Pedestrians

Promote pedestrian access along Pennsylvania Avenue.

- Create a safe pedestrian environment.
- Enhance pedestrian amenities.

Parking

Improve parking conditions by using existing parking facilities more efficiently.

Traffic

Improve traffic conditions along Pennsylvania Avenue.

- Maintain Pennsylvania Avenue as a two-lane road through Matamoras Borough.
- Control the flow of traffic along Pennsylvania Avenue.

Economic Development

Achieve a balanced mix of residential, retail, office, and institutional uses along Pennsylvania Avenue.

- Support the expansion of public infrastructure in the Borough.
- Support improvements to downtown neighborhoods.
- Expand retail establishments to serve the local economy.
- Expand retail and entertainment offerings to capitalize on the regional tourism economy.
- Use the Delaware River and other natural features to draw visitors to Pennsylvania Avenue.
- Use the Borough's historic resources to draw visitors.

EXISTING CONDITIONS

Physical Assessment

The physical assessment involves the identification of the Pennsylvania Avenues assets and its weaknesses. Assets are the positive features, which should be supported and continued, and upon which the Borough and Township can build its revitalization effort. Weaknesses can be in the form of features that are a detriment or pose a threat to the community and its revitalization effort. Weaknesses must be overcome in order to advance the revitalization effort.

Assets

Pennsylvania Avenue has a number of assets upon which to build a revitalization effort:



- Existing Business Owners - Many of the businesses along Pennsylvania Avenue have been in existence for years, providing an existing retail base. Some business owners have demonstrated an interest in improving Pennsylvania Avenue and have initiated a campaign to beautify the streetscape.



- Rural, Small Town Character - Pennsylvania Avenue is lined with residential and commercial buildings that define the Planning Area's rural, small town setting. Maintenance and restoration of these buildings is critical to the survival of the rural downtown character.



- Delaware River - The Planning Area's location along the Delaware River is a unique and important asset. The river can be used to attract businesses, recreation enthusiasts, and tourists to Pennsylvania Avenue. The northern end of Pennsylvania Avenue terminates at the River. The Borough owns the land along the River from the Port Jervis Bridge west to the Westfall Township boundary. The remaining land along the river to the east and south is in private ownership. There is a set of stairs on the riverbank at Avenue C where canoeists often exit the river and walk to businesses on Pennsylvania Avenue. This access is very steep and difficult to maneuver. There is another access point at Airport Park, but it is also difficult to navigate due to rugged terrain.

- Airport Park - Airport Park is five blocks from Pennsylvania Avenue. It contains several ball fields and is used by athletic leagues from the Borough and the Township. It also contains the Borough's only access to the Delaware River. The facilities at Airport Park attract local residents to the Borough, and can be used to attract people from a wider area who might then use the retail services provided along Pennsylvania Avenue.

- Gateway to Pennsylvania - Matamoras Borough is one of Pennsylvania's gateway communities. Thousands of tourists and commuters enter Pennsylvania through Matamoras from New Jersey, New York, and states to the north and east. The flow of traffic passing along Pennsylvania Avenue presents an opportunity for local businesses.

- Proximity to the Port Jervis Train Station - Commuters pass along Pennsylvania Avenue daily on their way to the Port Jervis Train Station. Daily commuters passing along Pennsylvania Avenue presents an opportunity for local businesses.
- Regional Tourism - The regional tourism economy is strong and brings visitors and their dollars into the Planning Area and to the businesses along Pennsylvania Avenue.
- Natural and Historic Resources - The region's tourism economy is based on its natural and historic features and the recreational opportunities they provide. The continued vitality of the tourism economy and local businesses depends on the preservation of the area's natural and historic resources.

Challenges

While Pennsylvania Avenue has many positive features, numerous challenges have also been identified. These weaknesses are detrimental to existing businesses and inhibit business growth. Identified challenges are as follows:

- Organization - Many of the business owners along Pennsylvania are unfamiliar with each other. This is due in part to the lack of a local business organization that would bring business owners together. An informal gathering of business owners that meets regularly to socialize and discuss business matters would perhaps foster connections and strengthen efforts improve the business atmosphere in the Borough.



- Unattractive Streetscape - Pennsylvania Avenue suffers from dirt and litter along existing sidewalks and the roadway, unattractive signage, a lack of street trees and landscaping, and unattractive utility poles and overhead wires. This streetscape is uninviting to the passerby and potentially deters shoppers.

- Unattractive Storefronts - Many storefronts are cluttered with window displays and signage that detract from the store's appearance. This cluttered, unkempt appearance can actually have the unintended effect of deterring shoppers, rather than attracting them to the business. It negatively impacts the business itself and the entire atmosphere of Pennsylvania Avenue.



- Unfriendly Pedestrian Environment - Although the Borough has made much progress with the installation of sidewalks and street lamps on the east side of Pennsylvania Avenue, the project remains to be completed. Existing sidewalks are often covered with dirt and litter, and crosswalks are non-existent. Pedestrians can wait several minutes to cross heavily congested Pennsylvania Avenue. The new sidewalks are a great improvement, however more work remains to be done.

- Nearby Retail Centers - Nearby retail centers along Route 6/209 in Westfall Township housing large, national retailers are an asset in terms of bringing people to the area, but they are a threat in that they often out-compete smaller retailers and inhibit the establishment of any new retailers. In order to compete, smaller businesses must find a niche market that the larger retailers do not serve.

- Lack of Infrastructure - As noted above, Matamoras Borough is served by a central water system but relies on individual on-lot septic systems for its wastewater treatment. The lack of central sewer prevents any significant business development in the commercial corridor. The Planning Area also lacks a local television station, which is important for advertising community and business events.
- Traffic - Traffic volumes are extremely heavy along Pennsylvania Avenue, especially at peak times. Vehicles trying make left turns and those trying to enter Pennsylvania Avenue have to wait for several minutes to before proceeding. The inability to maneuver freely frustrates potential customers and frequently causes them to go elsewhere for services. As mentioned above, however, traffic can be good for business as it increases the likelihood of business patronage.
- Parking - Lack of parking is a major problem in downtown Matamoras. Very few businesses have their own parking lot. There are no public parking lots. Parking is primarily accommodated on-street. The Borough used to have a two hour parking limit along Pennsylvania Avenue, but that was eliminated. Now, vehicles park on Pennsylvania Avenue all day long, taking the prime parking spots directly in front of the stores and businesses. When customers cannot get parking in front of a store they simply go elsewhere and the business loses another shopper.

CURRENT REVITALIZATION INITIATIVES

Three organizations are currently pursuing efforts to revitalize Pennsylvania Avenue.

Matamoras Revitalization Committee

Appointed by the Borough Council, The Matamoras Revitalization Committee (MRC) is charged with spearheading revitalization efforts and has successfully obtained the funds necessary to implement the sidewalk and street lamp installation project on Pennsylvania Avenue. Sidewalks and street lamps have been installed on the east side of Pennsylvania Avenue up to First Avenue. More funding is needed to complete improvements on the east side of the Avenue and to begin improvements on its west side. The MRC is currently pursuing additional funding.



Keystone Community Club

The Matamoras Keystone Community Club is supported by dues-paying members. It is concerned with all aspects of the Borough, including the beautification of Pennsylvania Avenue. The Club planted flowers and street trees along Pennsylvania Avenue and installed decorative Christmas lights. Members remain active in efforts to revitalize Pennsylvania Avenue.

Avenue in Bloom

Avenue in Bloom is volunteer group that was started by a Pennsylvania Avenue business owner. Its mission is to beautify Pennsylvania Avenue by enlisting volunteers to sweep sidewalks and curbs, pick-up litter, pull weeds, and plant and water flowers and shrubs. Approximately 50 volunteers work one hour per week to beautify Pennsylvania Avenue. The

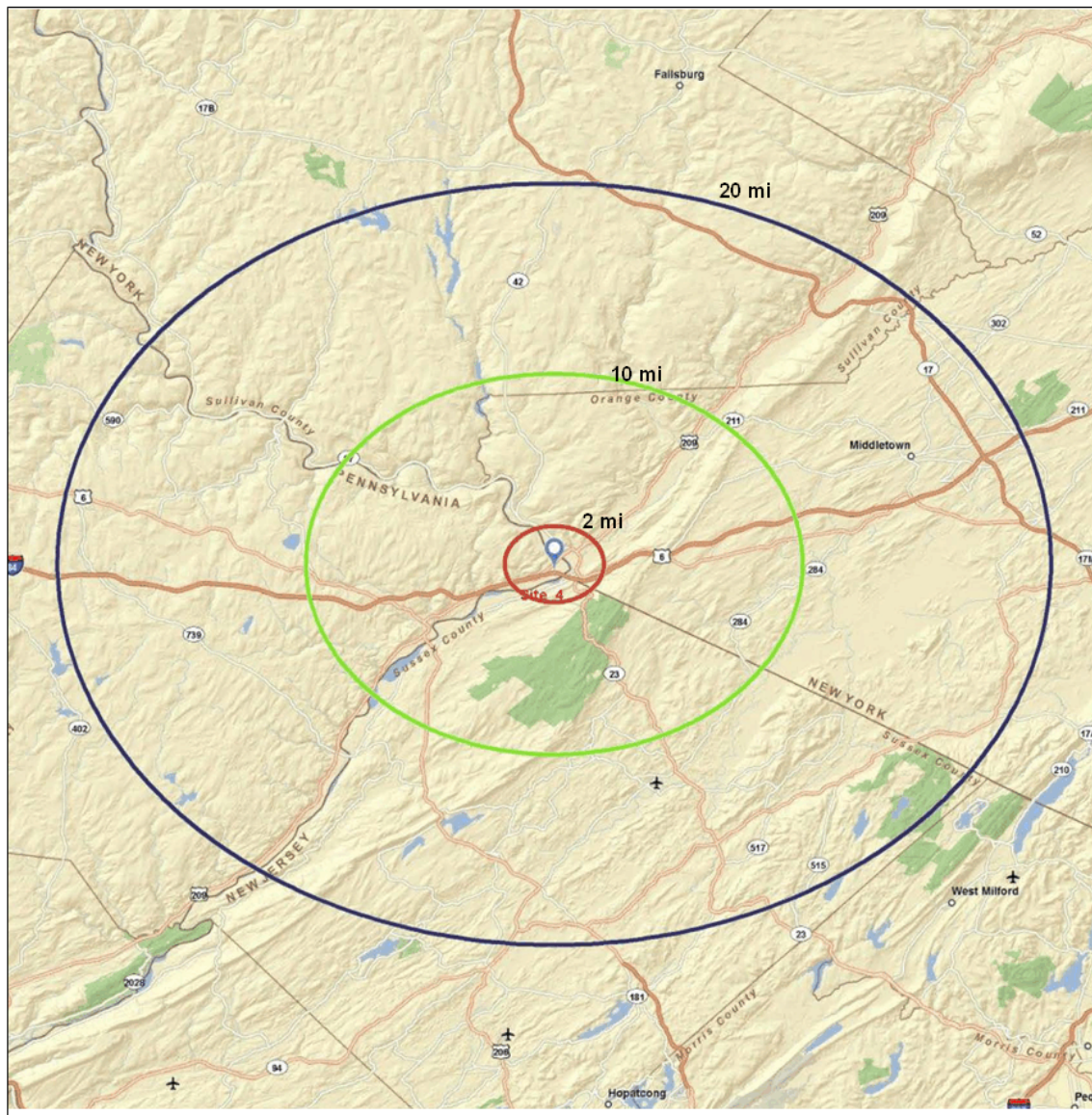
group plans to expand its volunteer base and eventually install planters along Pennsylvania Avenue.

MARKET CONDITIONS

Retail Trade Area

The retail trade area is a geographic area from which businesses along Pennsylvania Avenue draw the bulk of their customers (See *Retail Trade Area Figure*). For the purposes of this study, three trade areas have been delineated. The primary trade area is delineated by a two-mile radius around the center of the Pennsylvania Avenue corridor. This trade area encompasses Matamoras Borough and Port Jervis and represents the residential population in the immediate downtown area that most often patronize the local businesses.

Retail Trade Area



Source: ESRI

The secondary trade area is defined by a ten-mile radius. This area represents the population that must travel slightly farther to reach the Pennsylvania Avenue businesses. It encompasses Westfall and Milford Townships, Milford Borough, and small portions of Sussex County, New Jersey and Orange County, New York.

The tertiary trade area is defined by a twenty-mile radius. This area represents the population that would most likely travel to Pennsylvania Avenue to reach a specific destination business. It encompasses Shohola and Delaware Townships; parts of Lackawaxen, Blooming Grove, Porter, and Lehman Townships; part of Sussex County, New Jersey; and parts of Orange and Sullivan Counties, New York.

Trade Area Demographics

Demographics are reported for each of the three trade areas (2, 10, and 20-mile radii) for the 2000 Census, 2009 estimates, and 2014 projections. Key demographic and economic indicators, including population, households, families, and income are reported. (See *Demographic & Income Profile Tables* on the following pages.)

The data show that within each of the three trade areas population, number of households, number of families, number of owner-occupied housing units, and median household income have all increased since the 2000 census, and are expected to continue to rise over the next five years. Annual growth rates in the secondary and tertiary trade areas exceed the nationwide growth rates with the exception of median household income. In the primary trade area, the projected income growth rate (1.87%) exceeds the national growth rate (0.80%). These figures are favorable to the revitalization effort because they show consistent growth across all demographic variables and across all trade areas.

Of particular interest is the difference in income levels among the three trade areas. The 2014 median household income is \$47,840 in the primary trade area, \$62,310 in the secondary trade area, and \$67,780 in the tertiary trade area. This indicates that income (and presumably disposable income) in the primary trade area is not sufficient to support growth the local Pennsylvania Avenue economy; however, a broader market exists beyond the primary trade area, and revitalization and economic development may depend on the ability to tap into that market.

Summary		2000	2009	2014		
Population	12,542	13,835	14,452			
Households	5,006	5,561	5,831			
Families	3,191	3,445	3,566			
Average Household Size	2.48	2.47	2.46			
Owner Occupied HUs	2,708	3,024	3,309			
Renter Occupied HUs	2,298	2,537	2,522			
Median Age	36.9	37.5	37.0			
Trends: 2009-2014 Annual Rate		Area	State	National		
Population	0.88%	0%	0.91%			
Households	0.95%	0%	0.94%			
Families	0.69%	0%	0.74%			
Owner HHs	1.82%	0%	1.19%			
Median Household Income	1.87%	0%	0.80%			
Households by Income		2000	2009	2014		
	Number	Percent	Number	Percent	Number	Percent
< \$15,000	902	18.0%	663	11.9%	692	11.9%
\$15,000 - \$24,999	971	19.4%	819	14.7%	794	13.6%
\$25,000 - \$34,999	724	14.5%	723	13.0%	647	11.1%
\$35,000 - \$49,999	857	17.1%	894	16.1%	889	15.2%
\$50,000 - \$74,999	959	19.2%	1,219	21.9%	1,350	23.2%
\$75,000 - \$99,999	322	6.4%	713	12.8%	863	14.8%
\$100,000 - \$149,999	194	3.9%	393	7.1%	434	7.4%
\$150,000 - \$199,000	39	0.8%	75	1.3%	88	1.5%
\$200,000+	35	0.7%	61	1.1%	73	1.3%
Median Household Income	\$33,367		\$43,603		\$47,840	
Average Household Income	\$42,762		\$54,295		\$57,185	
Per Capita Income	\$17,392		\$21,766		\$23,007	
Population by Age		2000	2009	2014		
	Number	Percent	Number	Percent	Number	Percent
0 - 4	879	7.0%	992	7.2%	1,026	7.1%
5 - 9	939	7.5%	900	6.5%	942	6.5%
10 - 14	1,013	8.1%	898	6.5%	933	6.5%
15 - 19	879	7.0%	947	6.8%	854	5.9%
20 - 24	677	5.4%	999	7.2%	993	6.9%
25 - 34	1,507	12.0%	1,807	13.1%	2,153	14.9%
35 - 44	1,945	15.5%	1,656	12.0%	1,597	11.0%
45 - 54	1,629	13.0%	1,999	14.4%	1,866	12.9%
55 - 64	1,052	8.4%	1,580	11.4%	1,793	12.4%
65 - 74	970	7.7%	975	7.0%	1,255	8.7%
75 - 84	780	6.2%	726	5.2%	680	4.7%
85+	271	2.2%	359	2.6%	361	2.5%
Race and Ethnicity		2000	2009	2014		
	Number	Percent	Number	Percent	Number	Percent
White Alone	11,502	91.7%	12,347	89.2%	12,696	87.9%
Black Alone	423	3.4%	575	4.2%	660	4.6%
American Indian Alone	63	0.5%	78	0.6%	84	0.6%
Asian Alone	92	0.7%	150	1.1%	187	1.3%
Pacific Islander Alone	2	0.0%	4	0.0%	5	0.0%
Some Other Race Alone	216	1.7%	315	2.3%	375	2.6%
Two or More Races	245	2.0%	367	2.7%	444	3.1%
Hispanic Origin (Any Race)	779	6.2%	1,121	8.1%	1,333	9.2%

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Demographic & Income Profile - Secondary Trade Area (10 miles)

Summary	2000		2009		2014	
Population	42,323		49,580		53,092	
Households	15,722		18,517		19,884	
Families	11,251		13,007		13,832	
Average Household Size	2.68		2.67		2.66	
Owner Occupied HUs	11,460		13,422		14,808	
Renter Occupied HUs	4,262		5,095		5,076	
Median Age	37.6		39.8		39.9	
Trends: 2009-2014 Annual Rate	Area		State		National	
Population	1.38%		0%		0.91%	
Households	1.43%		0%		0.94%	
Families	1.24%		0%		0.74%	
Owner HHS	1.98%		0%		1.19%	
Median Household Income	0.74%		0%		0.80%	
	2000		2009		2014	
Households by Income	Number	Percent	Number	Percent	Number	Percent
< \$15,000	2,118	13.5%	1,659	9.0%	1,738	8.7%
\$15,000 - \$24,999	1,973	12.6%	1,741	9.4%	1,683	8.5%
\$25,000 - \$34,999	1,881	12.0%	1,663	9.0%	1,542	7.8%
\$35,000 - \$49,999	2,727	17.4%	2,722	14.7%	2,791	14.0%
\$50,000 - \$74,999	3,390	21.6%	4,299	23.2%	4,641	23.3%
\$75,000 - \$99,999	1,941	12.4%	2,768	14.9%	3,262	16.4%
\$100,000 - \$149,999	1,239	7.9%	2,691	14.5%	3,069	15.4%
\$150,000 - \$199,000	223	1.4%	607	3.3%	721	3.6%
\$200,000+	172	1.1%	367	2.0%	437	2.2%
Median Household Income	\$45,240		\$60,042		\$62,310	
Average Household Income	\$54,024		\$69,115		\$72,251	
Per Capita Income	\$20,207		\$25,875		\$27,125	
	2000		2009		2014	
Population by Age	Number	Percent	Number	Percent	Number	Percent
0 - 4	2,771	6.5%	3,210	6.5%	3,370	6.3%
5 - 9	3,364	7.9%	3,297	6.6%	3,516	6.6%
10 - 14	3,549	8.4%	3,488	7.0%	3,696	7.0%
15 - 19	2,936	6.9%	3,602	7.3%	3,393	6.4%
20 - 24	1,860	4.4%	2,760	5.6%	2,966	5.6%
25 - 34	4,806	11.4%	5,534	11.2%	6,459	12.2%
35 - 44	7,319	17.3%	6,593	13.3%	6,514	12.3%
45 - 54	6,255	14.8%	8,176	16.5%	7,854	14.8%
55 - 64	3,978	9.4%	6,370	12.8%	7,448	14.0%
65 - 74	2,924	6.9%	3,528	7.1%	4,703	8.9%
75 - 84	1,936	4.6%	2,135	4.3%	2,214	4.2%
85+	625	1.5%	887	1.8%	959	1.8%
	2000		2009		2014	
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent
White Alone	40,058	94.6%	46,136	93.1%	48,895	92.1%
Black Alone	806	1.9%	1,138	2.3%	1,335	2.5%
American Indian Alone	127	0.3%	172	0.3%	198	0.4%
Asian Alone	283	0.7%	494	1.0%	641	1.2%
Pacific Islander Alone	6	0.0%	10	0.0%	13	0.0%
Some Other Race Alone	442	1.0%	685	1.4%	845	1.6%
Two or More Races	601	1.4%	945	1.9%	1,165	2.2%
Hispanic Origin (Any Race)	1,843	4.4%	2,902	5.9%	3,600	6.8%

Source: U.S. Census Bureau, 2000. ESRI forecasts for 2009 and 2014.

Summary		2000	2009	2014		
Population		230,140	262,702	277,659		
Households		82,415	95,115	101,027		
Families		59,839	68,090	71,754		
Average Household Size		2.73	2.70	2.69		
Owner Occupied HUs		59,596	68,724	74,953		
Renter Occupied HUs		22,819	26,391	26,074		
Median Age		37.0	39.4	39.6		
Trends: 2009-2014 Annual Rate		Area	State	National		
Population		1.11%	0%	0.91%		
Households		1.21%	0%	0.94%		
Families		1.05%	0%	0.74%		
Owner HHs		1.75%	0%	1.19%		
Median Household Income		0.71%	0%	0.80%		
		2000	2009	2014		
Households by Income	Number	Percent	Number	Percent	Number	Percent
< \$15,000	9,730	11.8%	7,451	7.8%	7,587	7.5%
\$15,000 - \$24,999	8,653	10.5%	7,592	8.0%	7,306	7.2%
\$25,000 - \$34,999	8,628	10.5%	6,901	7.3%	6,372	6.3%
\$35,000 - \$49,999	13,532	16.4%	11,988	12.6%	12,465	12.3%
\$50,000 - \$74,999	18,895	23.0%	21,616	22.7%	22,322	22.1%
\$75,000 - \$99,999	11,245	13.7%	14,894	15.7%	16,851	16.7%
\$100,000 - \$149,999	8,297	10.1%	16,934	17.8%	19,088	18.9%
\$150,000 - \$199,000	2,021	2.5%	4,676	4.9%	5,419	5.4%
\$200,000+	1,326	1.6%	3,063	3.2%	3,617	3.6%
Median Household Income	\$50,601		\$65,426		\$67,780	
Average Household Income	\$60,272		\$78,384		\$81,544	
Per Capita Income	\$21,902		\$28,718		\$30,032	
		2000	2009	2014		
Population by Age	Number	Percent	Number	Percent	Number	Percent
0 - 4	15,124	6.6%	16,825	6.4%	17,463	6.3%
5 - 9	18,349	8.0%	17,554	6.7%	18,453	6.6%
10 - 14	19,184	8.3%	18,418	7.0%	19,214	6.9%
15 - 19	15,696	6.8%	19,051	7.3%	17,722	6.4%
20 - 24	10,591	4.6%	14,838	5.6%	15,797	5.7%
25 - 34	28,045	12.2%	29,973	11.4%	34,384	12.4%
35 - 44	41,508	18.0%	36,231	13.8%	35,006	12.6%
45 - 54	34,294	14.9%	43,657	16.6%	41,444	14.9%
55 - 64	20,812	9.0%	33,199	12.6%	38,117	13.7%
65 - 74	13,988	6.1%	17,714	6.7%	23,864	8.6%
75 - 84	9,073	3.9%	10,546	4.0%	11,127	4.0%
85+	3,476	1.5%	4,696	1.8%	5,068	1.8%
		2000	2009	2014		
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent
White Alone	205,045	89.1%	228,592	87.0%	238,227	85.8%
Black Alone	11,833	5.1%	15,052	5.7%	16,753	6.0%
American Indian Alone	663	0.3%	837	0.3%	929	0.3%
Asian Alone	2,648	1.2%	4,222	1.6%	5,285	1.9%
Pacific Islander Alone	62	0.0%	92	0.0%	108	0.0%
Some Other Race Alone	5,647	2.5%	7,696	2.9%	8,916	3.2%
Two or More Races	4,242	1.8%	6,211	2.4%	7,441	2.7%
Hispanic Origin (Any Race)	18,960	8.2%	26,658	10.1%	31,417	11.3%

Matamoras Borough - Westfall Township Comprehensive Plan

Business Inventory

A business inventory was conducted in the summer of 2009 to determine the types of businesses that currently exist along Pennsylvania Avenue from Mountain Avenue at the Westfall Fire Department to the Delaware River Bridge. The inventory revealed that there is a mix of 60 retail businesses, restaurants, professional offices, and service establishments. In addition, 38 residences and 6 vacant lots/buildings are located along the Avenue. The type and number of businesses are as shown in the following *Type of Business Table*:

TYPE OF BUSINESS	#
Professional Office	7
Auto Dealer	2
Auto Parts	1
Auto Repair	4
Bank, Financial Service	3
Cable TV Service	1
Consignment Shop	1
Convenience Store	2
Dance Studio	1
Fireworks Store	2
Hair/Beauty/Tanning Salon	4
Gas Station	3
Grocery Store/Supermarket	1
Home/Outdoor Furnishings	2
Medical Clinic/Office	7
Miscellaneous Retail (Greeting Card, Party Supply, Craft Supply, Flea Market)	4
Motel	1
Post Office	1
Restaurant, Full Service	2
Restaurant, Fast Food/Limited Service	5
Restaurant & Bar	1
Taxidermy Shop	1
Tobacco Shop	4
Total Businesses	60
Vacant Building/Lot	6
Residence	38

Retail Potential

Retail potential data (included on the following pages) provides an indication of the degree to which demand for various goods is being met within a market area, and where people are spending their money. It is measured by comparing expected retail expenditures (i.e. demand) to retail sales (i.e. supply) for various categories of goods. The numerical difference between expenditures and sales represents the *Retail Gap*. The *Leakage/Surplus Factor* measures the relationship between supply and demand, and represents market opportunity. It is measured on a scale ranging from +100 to -100, where +100 is a total leakage and -100 is a total surplus. A *leakage* (positive numbers) appears where demand within the market area exceeds supply, and indicates that demand is not being met; that is, consumers must go outside of the market area to satisfy their demand. For example, if there were demand for a product that is not available in the secondary market area, the leakage/surplus factor would be 100 (total leakage), meaning that consumers are traveling outside of the 10-mile radius to get that product. There could be an opportunity to open a store to capture this demand. A *surplus* (negative numbers) appears where sales are higher than expenditures. This indicates that the market is being served and that consumers are being drawn in from areas outside of the market area.

The Retail Potential data for the three Pennsylvania Avenue trade areas suggests that demand is being met and consumers are coming into the primary trade area for a wide range of products and services such as auto parts stores, building materials stores, grocery stores, general merchandise stores, and limited service eating places, among others. The data also indicate that demand within the primary market area is not being met for several other types of products such as *other motor vehicle dealers, electronics and appliance stores, and specialty food stores*, among others. This suggests that there is an opportunity for these types of businesses within the primary trade area.

Expanding the analysis beyond the two-mile radius reveals that there is unmet demand across all three trade areas for the following products:

- Other Motor Vehicle Dealers
- Home Furnishings Stores
- Electronics & Appliance Stores
- Specialty Food Stores
- Gasoline Stations
- Clothing and Clothing Accessories Stores
- Book, Periodical, and Music Stores
- Office Supplies, Stationery, and Gift Stores
- Full-Service Restaurants
- Drinking Places

This suggests that there is an opportunity for these types of businesses. Such businesses could possibly locate in the Pennsylvania Avenue corridor with the understanding that they would need to market to consumers beyond the immediate downtown area and consider other similar businesses which already operate in the area.

Retail Potential - Primary Trade Area (2 miles)

Industry Summary	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Total Retail Trade and Food & Drink (NAICS 44-45, 722)	\$116,123,281	\$136,503,337	\$-20,380,056	-8.1	163
Total Retail Trade (NAICS 44-45)	\$98,476,055	\$116,482,969	\$-18,006,914	-8.4	121
Total Food & Drink (NAICS 722)	\$17,647,226	\$20,020,368	\$-2,373,142	-6.3	42
Industry Group	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Motor Vehicle & Parts Dealers (NAICS 441)	\$23,715,962	\$33,554,660	\$-9,838,698	-17.2	19
Automobile Dealers (NAICS 4411)	\$20,139,008	\$28,624,523	\$-8,485,515	-17.4	11
Other Motor Vehicle Dealers (NAICS 4412)	\$2,030,811	\$615,461	\$1,415,350	53.5	2
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$1,546,143	\$4,314,676	\$-2,768,533	-47.2	6
Furniture & Home Furnishings Stores (NAICS 442)	\$3,422,186	\$4,265,695	\$-843,509	-11.0	10
Furniture Stores (NAICS 4421)	\$2,126,241	\$3,493,389	\$-1,367,148	-24.3	4
Home Furnishings Stores (NAICS 4422)	\$1,295,945	\$772,306	\$523,639	25.3	6
Electronics & Appliance Stores (NAICS 443/NAICS 4431)	\$2,857,567	\$802,264	\$2,055,303	56.2	4
Bldg Materials, Garden Equip. & Supply Stores (NAICS 444)	\$4,092,011	\$11,737,196	\$-7,645,185	-48.3	11
Building Material and Supplies Dealers (NAICS 4441)	\$3,820,751	\$11,426,832	\$-7,606,081	-49.9	8
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	\$271,260	\$310,364	\$-39,104	-6.7	3
Food & Beverage Stores (NAICS 445)	\$20,750,648	\$29,473,722	\$-8,723,074	-17.4	18
Grocery Stores (NAICS 4451)	\$18,169,964	\$28,404,994	\$-10,235,030	-22.0	14
Specialty Food Stores (NAICS 4452)	\$1,250,720	\$214,757	\$1,035,963	70.7	2
Beer, Wine, and Liquor Stores (NAICS 4453)	\$1,329,964	\$853,971	\$475,993	21.8	2
Health & Personal Care Stores (NAICS 446/NAICS 4461)	\$5,118,751	\$5,563,588	\$-444,837	-4.2	8
Gasoline Stations (NAICS 447/4471)	\$15,894,094	\$7,045,389	\$8,848,705	38.6	2
Clothing and Clothing Accessories Stores (NAICS 448)	\$4,880,318	\$4,239,305	\$641,013	7.0	9
Clothing Stores (NAICS 4481)	\$3,726,526	\$3,617,754	\$108,772	1.5	5
Shoe Stores (NAICS 4482)	\$599,734	\$509,501	\$90,233	8.1	2
Jewelry, Luggage, and Leather Goods Stores (NAICS 4483)	\$554,058	\$112,050	\$442,008	66.4	2
Sporting Goods, Hobby, Book, and Music Stores (NAICS 451)	\$1,363,692	\$973,171	\$390,521	16.7	11
Sporting Goods/Hobby/Musical Instrument Stores (NAICS 4511)	\$754,170	\$531,918	\$222,252	17.3	7
Book, Periodical, and Music Stores (NAICS 4512)	\$609,522	\$441,253	\$168,269	16.0	4
General Merchandise Stores (NAICS 452)	\$11,056,796	\$15,454,408	\$-4,397,612	-16.6	6
Department Stores Excluding Leased Depts.(NAICS 4521)	\$5,192,526	\$7,485,521	\$-2,292,995	-18.1	1
Other General Merchandise Stores (NAICS 4529)	\$5,864,270	\$7,968,887	\$-2,104,617	-15.2	5
Miscellaneous Store Retailers (NAICS 453)	\$3,523,424	\$2,108,510	\$1,414,914	25.1	22
Florists (NAICS 4531)	\$481,530	\$510,582	\$-29,052	-2.9	3
Office Supplies, Stationery, and Gift Stores (NAICS 4532)	\$1,086,596	\$204,472	\$882,124	68.3	4
Used Merchandise Stores (NAICS 4533)	\$277,490	\$345,776	\$-68,286	-11.0	9
Other Miscellaneous Store Retailers (NAICS 4539)	\$1,677,808	\$1,047,680	\$630,128	23.1	6
Nonstore Retailers (NAICS 454)	\$1,800,606	\$1,265,061	\$535,545	17.5	1
Electronic Shopping and Mail-Order Houses (NAICS 4541)	\$190,614	\$0	\$190,614	100.0	0
Vending Machine Operators (NAICS 4542)	\$422,358	\$1,265,061	\$-842,703	-49.9	1
Direct Selling Establishments (NAICS 4543)	\$1,187,634	\$0	\$1,187,634	100.0	0
Food Services & Drinking Places (NAICS 722)	\$17,647,226	\$20,020,368	\$-2,373,142	-6.3	42
Full-Service Restaurants (NAICS 7221)	\$9,001,438	\$7,031,275	\$1,970,163	12.3	24
Limited-Service Eating Places (NAICS 7222)	\$5,231,368	\$9,753,524	\$-4,522,156	-30.2	14
Special Food Services (NAICS 7223)	\$2,340,090	\$2,805,233	\$-465,143	-9.0	2
Drinking Places - Alcoholic Beverages (NAICS 7224)	\$1,074,330	\$430,336	\$643,994	42.8	2

Source: ESRI and InfoUSA

Retail Potential - Secondary Trade Area (10 miles)

Industry Summary	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Total Retail Trade and Food & Drink (NAICS 44-45, 722)	\$487,862,466	\$381,946,465	\$105,916,001	12.2	402
Total Retail Trade (NAICS 44-45)	\$415,415,292	\$332,745,508	\$82,669,784	11.0	299
Total Food & Drink (NAICS 722)	\$72,447,174	\$49,200,957	\$23,246,217	19.1	103
Industry Group	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Motor Vehicle & Parts Dealers (NAICS 441)	\$102,932,046	\$51,901,682	\$51,030,364	33.0	37
Automobile Dealers (NAICS 4411)	\$87,444,510	\$39,331,584	\$48,112,926	38.0	18
Other Motor Vehicle Dealers (NAICS 4412)	\$9,065,809	\$6,784,061	\$2,281,748	14.4	10
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$6,421,727	\$5,786,037	\$635,690	5.2	9
Furniture & Home Furnishings Stores (NAICS 442)	\$14,673,797	\$10,282,304	\$4,391,493	17.6	25
Furniture Stores (NAICS 4421)	\$8,856,814	\$7,030,841	\$1,825,973	11.5	11
Home Furnishings Stores (NAICS 4422)	\$5,816,983	\$3,251,463	\$2,565,520	28.3	14
Electronics & Appliance Stores (NAICS 443/NAICS 4431)	\$12,299,342	\$2,207,267	\$10,092,075	69.6	13
Bldg Materials, Garden Equip. & Supply Stores (NAICS 444)	\$18,466,240	\$26,004,922	\$-7,538,682	-17.0	32
Building Material and Supplies Dealers (NAICS 4441)	\$17,129,081	\$25,252,613	\$-8,123,532	-19.2	25
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	\$1,337,159	\$752,309	\$584,850	28.0	7
Food & Beverage Stores (NAICS 445)	\$85,953,857	\$139,451,331	\$-53,497,474	-23.7	37
Grocery Stores (NAICS 4451)	\$75,432,056	\$129,854,163	\$-54,422,107	-26.5	24
Specialty Food Stores (NAICS 4452)	\$4,822,168	\$1,045,210	\$3,776,958	64.4	7
Beer, Wine, and Liquor Stores (NAICS 4453)	\$5,699,633	\$8,551,958	\$-2,852,325	-20.0	6
Health & Personal Care Stores (NAICS 446/NAICS 4461)	\$20,220,031	\$10,186,503	\$10,033,528	33.0	16
Gasoline Stations (NAICS 447/4471)	\$65,158,126	\$38,498,097	\$26,660,029	25.7	11
Clothing and Clothing Accessories Stores (NAICS 448)	\$19,728,190	\$6,280,892	\$13,447,298	51.7	20
Clothing Stores (NAICS 4481)	\$15,180,517	\$4,906,413	\$10,274,104	51.1	12
Shoe Stores (NAICS 4482)	\$2,284,831	\$908,351	\$1,376,480	43.1	3
Jewelry, Luggage, and Leather Goods Stores (NAICS 4483)	\$2,262,842	\$466,128	\$1,796,714	65.8	5
Sporting Goods, Hobby, Book, and Music Stores (NAICS 451)	\$5,424,232	\$2,979,936	\$2,444,296	29.1	33
Sporting Goods/Hobby/Musical Instrument Stores (NAICS 4511)	\$3,252,567	\$2,085,474	\$1,167,093	21.9	26
Book, Periodical, and Music Stores (NAICS 4512)	\$2,171,665	\$894,462	\$1,277,203	41.7	7
General Merchandise Stores (NAICS 452)	\$43,803,963	\$34,147,045	\$9,656,918	12.4	11
Department Stores Excluding Leased Depts. (NAICS 4521)	\$20,665,720	\$20,688,579	\$-22,859	-0.1	4
Other General Merchandise Stores (NAICS 4529)	\$23,138,243	\$13,458,466	\$9,679,777	26.4	7
Miscellaneous Store Retailers (NAICS 453)	\$13,223,237	\$6,582,398	\$6,640,839	33.5	60
Florists (NAICS 4531)	\$2,004,998	\$664,241	\$1,340,757	50.2	5
Office Supplies, Stationery, and Gift Stores (NAICS 4532)	\$4,143,854	\$1,873,982	\$2,269,872	37.7	15
Used Merchandise Stores (NAICS 4533)	\$1,096,164	\$621,139	\$475,025	27.7	17
Other Miscellaneous Store Retailers (NAICS 4539)	\$5,978,221	\$3,423,036	\$2,555,185	27.2	23
Nonstore Retailers (NAICS 454)	\$13,532,231	\$4,223,131	\$9,309,100	52.4	4
Electronic Shopping and Mail-Order Houses (NAICS 4541)	\$5,692,622	\$0	\$5,692,622	100.0	0
Vending Machine Operators (NAICS 4542)	\$1,513,681	\$1,912,486	\$-398,805	-11.6	2
Direct Selling Establishments (NAICS 4543)	\$6,325,928	\$2,310,645	\$4,015,283	46.5	2
Food Services & Drinking Places (NAICS 722)	\$72,447,174	\$49,200,957	\$23,246,217	19.1	103
Full-Service Restaurants (NAICS 7221)	\$37,252,708	\$23,787,200	\$13,465,508	22.1	62
Limited-Service Eating Places (NAICS 7222)	\$21,299,746	\$17,785,941	\$3,513,805	9.0	33
Special Food Services (NAICS 7223)	\$9,430,641	\$6,570,850	\$2,859,791	17.9	4
Drinking Places - Alcoholic Beverages (NAICS 7224)	\$4,464,079	\$1,056,966	\$3,407,113	61.7	4

Source: ESRI and InfoUSA

Retail Potential - Tertiary Trade Area (20 miles)

Industry Summary	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Total Retail Trade and Food & Drink (NAICS 44-45, 722)	\$2,807,866,670	\$2,394,511,855	\$413,354,815	7.9	2,126
Total Retail Trade (NAICS 44-45)	\$2,388,054,141	\$2,147,313,124	\$240,741,017	5.3	1,540
Total Food & Drink (NAICS 722)	\$419,812,529	\$247,198,731	\$172,613,798	25.9	586
Industry Group	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Motor Vehicle & Parts Dealers (NAICS 441)	\$592,086,640	\$757,520,614	\$-165,433,974	-12.3	195
Automobile Dealers (NAICS 4411)	\$506,098,771	\$705,949,797	\$-199,851,026	-16.5	100
Other Motor Vehicle Dealers (NAICS 4412)	\$48,747,228	\$26,868,907	\$21,878,321	28.9	37
Auto Parts, Accessories, and Tire Stores (NAICS 4413)	\$37,240,641	\$24,701,910	\$12,538,731	20.2	58
Furniture & Home Furnishings Stores (NAICS 442)	\$85,490,132	\$59,977,114	\$25,513,018	17.5	120
Furniture Stores (NAICS 4421)	\$50,512,441	\$39,698,798	\$10,813,643	12.0	49
Home Furnishings Stores (NAICS 4422)	\$34,977,691	\$20,278,316	\$14,699,375	26.6	71
Electronics & Appliance Stores (NAICS 443/NAICS 4431)	\$74,184,058	\$22,639,545	\$51,544,513	53.2	81
Bldg Materials, Garden Equip. & Supply Stores (NAICS 444)	\$109,878,629	\$130,701,099	\$-20,822,470	-8.7	170
Building Material and Supplies Dealers (NAICS 4441)	\$101,651,468	\$118,434,797	\$-16,783,329	-7.6	122
Lawn and Garden Equipment and Supplies Stores (NAICS 4442)	\$8,227,161	\$12,266,302	\$-4,039,141	-19.7	48
Food & Beverage Stores (NAICS 445)	\$502,314,904	\$493,452,316	\$8,862,588	0.9	171
Grocery Stores (NAICS 4451)	\$438,714,108	\$447,477,646	\$-8,763,538	-1.0	81
Specialty Food Stores (NAICS 4452)	\$29,200,690	\$13,373,641	\$15,827,049	37.2	48
Beer, Wine, and Liquor Stores (NAICS 4453)	\$34,400,106	\$32,601,029	\$1,799,077	2.7	42
Health & Personal Care Stores (NAICS 446/NAICS 4461)	\$110,600,981	\$63,259,693	\$47,341,288	27.2	86
Gasoline Stations (NAICS 447/4471)	\$366,553,206	\$302,946,591	\$63,606,615	9.5	94
Clothing and Clothing Accessories Stores (NAICS 448)	\$120,107,189	\$45,509,633	\$74,597,556	45.0	127
Clothing Stores (NAICS 4481)	\$94,170,735	\$32,122,844	\$62,047,891	49.1	81
Shoe Stores (NAICS 4482)	\$12,543,676	\$6,215,074	\$6,328,602	33.7	17
Jewelry, Luggage, and Leather Goods Stores (NAICS 4483)	\$13,392,778	\$7,171,715	\$6,221,063	30.3	29
Sporting Goods, Hobby, Book, and Music Stores (NAICS 451)	\$31,290,709	\$24,707,315	\$6,583,394	11.8	132
Sporting Goods/Hobby/Musical Instrument Stores (NAICS 4511)	\$19,629,947	\$18,672,451	\$957,496	2.5	104
Book, Periodical, and Music Stores (NAICS 4512)	\$11,660,762	\$6,034,864	\$5,625,898	31.8	28
General Merchandise Stores (NAICS 452)	\$221,734,301	\$160,557,795	\$61,176,506	16.0	56
Department Stores Excluding Leased Depts. (NAICS 4521)	\$100,851,330	\$96,842,214	\$4,009,116	2.0	24
Other General Merchandise Stores (NAICS 4529)	\$120,882,971	\$63,715,581	\$57,167,390	31.0	32
Miscellaneous Store Retailers (NAICS 453)	\$71,007,157	\$41,773,044	\$29,234,113	25.9	288
Florists (NAICS 4531)	\$10,653,969	\$4,137,476	\$6,516,493	44.1	39
Office Supplies, Stationery, and Gift Stores (NAICS 4532)	\$22,404,160	\$9,786,603	\$12,617,557	39.2	66
Used Merchandise Stores (NAICS 4533)	\$6,312,497	\$3,971,147	\$2,341,350	22.8	75
Other Miscellaneous Store Retailers (NAICS 4539)	\$31,636,531	\$23,877,818	\$7,758,713	14.0	108
Nonstore Retailers (NAICS 454)	\$102,806,235	\$44,268,365	\$58,537,870	39.8	20
Electronic Shopping and Mail-Order Houses (NAICS 4541)	\$54,881,875	\$13,340,369	\$41,541,506	60.9	1
Vending Machine Operators (NAICS 4542)	\$7,595,388	\$2,542,799	\$5,052,589	49.8	4
Direct Selling Establishments (NAICS 4543)	\$40,328,972	\$28,385,197	\$11,943,775	17.4	15
Food Services & Drinking Places (NAICS 722)	\$419,812,529	\$247,198,731	\$172,613,798	25.9	586
Full-Service Restaurants (NAICS 7221)	\$229,383,870	\$120,253,980	\$109,129,890	31.2	348
Limited-Service Eating Places (NAICS 7222)	\$119,954,482	\$92,419,640	\$27,534,842	13.0	171
Special Food Services (NAICS 7223)	\$45,531,887	\$28,020,766	\$17,511,121	23.8	28
Drinking Places - Alcoholic Beverages (NAICS 7224)	\$24,942,290	\$6,504,345	\$18,437,945	58.6	39

Source: ESRI and InfoUSA

BUSINESS OWNERS SURVEY

Distribution	As a means of encouraging business owner participation in the planning process, a survey was hand distributed to 70 businesses along Pennsylvania Avenue between the Delaware River Bridge and the traffic signal at the eastern leg of the I-84 interchange. Sixteen completed surveys were returned. A summary of these responses follows:
Ownership	14 independent, 1 corporate, and 1 national.
Years in Business	3 months to 46 years
Advantages/Strengths	<ul style="list-style-type: none"> • good exposure from high traffic • good police protection • good recreation opportunities • area wide strong growth • available parking • good location, centrally located • easy access to I-84, NJ, NY
Disadvantages/Weaknesses	<ul style="list-style-type: none"> • 22-foot parking limitation • high utility costs and insurance rates • employment difficulties • lack of parking - lack of municipal parking • high traffic - difficulty exiting side streets • truck traffic and noise • sign limitations restrict on-site advertising • congestion at 10th Street • poorly maintained buildings - overall poor image • uneven sidewalks • lack of side street sidewalks • lack of Council support • lack of business owner interest • less gas tax in NJ
Market Area	<ul style="list-style-type: none"> • Matamoras-Westfall is the primary market area for respondents • Many rely on the wider region of Pike County, NJ and New York • Tourists are less important

Issues/Obstacles

# Responses	
Lack of Traffic	6
Property Improvements	5
Cost Rent/property	4
Telecom Services	1
Codes/Regs	4
Avail of Employees	3
Employee Skill/Prep	3
Public Safety/Crime	1
Parking	8
Competition	5

**Critical Factors
for Success**

# Responses	
Foot Traffic	8
Financing	6
Marketing	11
Equip/Technology	3
Tourism	6
Qualified Labor	5
Update/Enforce Codes	1

Current Business Level

# Responses	
Rapidly Growing	1
Moderately Growing	1
Same Level/Fairly Steady	8
Moderately Lower	3
Fewer sales/Less Income	4
Rapidly Declining	2

Changes to Business

# Responses	
Expand	3
Reduce	0
No Plans to Change	5
Sell	4
Uncertain	4

**Needed Information/
Assistance**

# Responses	
Marketing/Advertising	10
Employee Hiring/Training	5
Business Expansion	3
Internet for E-Commerce	3
Loan Prep Assistance	1
Management Training	2
Property/Facade Improvements	5
Computer/Tech Assistance	2

**Types of Businesses
Needed to Improve
Pennsylvania Avenue**

- restaurants, mid-priced restaurants
- small shops and boutiques
- bed and breakfast establishments
- theater/cinema
- park with attractions
- limit large competing businesses
- less cigarette shops, flea markets

Improvement and Marketing Actions

- pave Pennsylvania Avenue
- increase parking
- improve property appearance
- funding for property improvements
- complete sidewalks
- limit number of street lamps
- reroute truck traffic, limit jake brakes
- clean up and improve streetscape - flowers, etc.
- put power lines underground
- banners on street lamps
- enforce codes, require repair of dilapidated signs and structures
- provide traffic signals and pedestrian crossing
- need free or low cost newspaper to advertise businesses
- market as open/friendly town to tourists
- create a market image
- improve lighting

Interest in Participating

Ten of the respondents expressed interest in participating in revitalization efforts, 3 expressed some interest and 3 were not interested.

PLANNING IMPLICATIONS

Physical Improvements

Physical improvements are needed along Pennsylvania Avenue. This should be undertaken in a phased approach that will focus first on beautifying the street and sidewalks, second on improving the appearance of buildings, and third on installation of planters, street trees, street lamps and other streetscape amenities.

Business Development

Along with opportunities for the business specified in the retail potential analysis (above), the *destination* component of the market provides an opportunity. Destination businesses draw people from a wide area. They are based on providing a unique experience, which can be related to dining, entertainment, historical and cultural features, and recreation. This is the only segment that is lacking in the Pennsylvania Avenue corridor, particularly in downtown Matamoras.

In addition to retail uses, a healthy downtown contains a mix of residential, office, and institutional uses. The residential neighborhoods in and around Matamoras Borough should be supported and maintained, as they provide the local market for many of the Pennsylvania Avenue businesses. This market area has the potential to grow as future development in neighboring municipalities, particularly in Westfall Township, will provide more potential consumers. Office uses also help to diversify the local economy and increase its daytime population, which in turn supports other businesses. Institutional, cultural, and recreational uses provide further diversification and stability and bring people to the area.

Organization and Commitment

Business development and diversification of the uses along Pennsylvania is a long-term undertaking and will require a high level of organization and commitment.

FUTURE PLANNING POLICIES AND ACTIONS

Funding	<p>Seek funding to finance revitalization efforts.</p> <ul style="list-style-type: none"> • <u>Main Street Program</u> - Apply for assistance from the Main Street Program which provides funding for a staff person to head the revitalization effort. • <u>Elm Street Program</u> - Apply for assistance from the Elm Street Program which provides funding for improvements to neighborhoods surrounding the downtown business core. • <u>State Grant Programs</u> - Apply for funding from state grant programs such as the Community Revitalization Program, Business in our Sites, Community Development Block Grants, and Economic Stimulus Package Technical Assistance Program. • <u>Federal Grant Programs</u> - Apply for funding from federal grant programs including the Economic Development Administration's assistance programs.
Organization	<p>Develop a volunteer-driven, community-based committee as the key element of the revitalization program</p> <ul style="list-style-type: none"> • <u>Business Owner Interaction</u> - Encourage business owners to meet each other and to have regular gatherings – perhaps at the Borough building – to socialize and to discuss business issues. • <u>Current Efforts</u> - Support current revitalization efforts and organizations (such as Avenue in Bloom). • <u>Volunteer Recruitment</u> - Assist current revitalization organizations with advertising and recruiting of volunteers through the Borough and Township newsletters and other media outlets. • <u>Staff</u> - Hire a staff person to spearhead revitalization actions. • <u>Revitalization Committee</u> - Form a Borough or joint Borough-Township committee that meets regularly to discuss revitalization actions and monitor progress of the revitalization effort.
Physical Improvements	<p>Improve the appearance of the Pennsylvania Avenue Corridor.</p> <ul style="list-style-type: none"> • <u>Beautification</u> - Conduct a regularly scheduled clean-up of the streets, sidewalks, and parking areas. Consider purchasing street cleaning equipment. Install trash receptacles, especially in front of eating and drinking establishments. • <u>Sidewalks</u> - Pursue the completion of sidewalk installations along both sides of Pennsylvania Avenue. • <u>Street Trees</u> - Install street trees to provide shade and aesthetic appeal and to screen utility poles and overhead wires.

- Signs - Strengthen sign regulations in the zoning ordinance to limit the number and type of signs permitted on a lot, and enforce the sign regulations.
- Landscaping - Strengthen zoning and SALDO regulations to require landscaping treatments along the Pennsylvania Avenue street frontage and in parking areas.
- Planters - Install planters at appropriate locations along Pennsylvania Avenue.
- Benches - Install benches along Pennsylvania Avenue to provide pedestrians with a place to sit.
- Street Lamps - Pursue the completion of street lamp installations along both sides of Pennsylvania Avenue.
- Outdoor Storage - Strengthen zoning regulations to control the outdoor storage and display of equipment and materials.

Buildings

Improve the appearance of buildings along Pennsylvania Avenue.

- Maintenance - Enforce building maintenance codes in order to improve the appearance of building facades.
- Restoration - Provide incentives to new and existing property owners to restore buildings.
- Design Guidelines - Create design guidelines for building, landscaping, amenities and signs to ensure that improvements and new development are consistent with the community's character.
- Historic Buildings - Identify and document historic buildings along Pennsylvania Avenue and in surrounding neighborhoods. Amend zoning regulations to permit adaptive reuse of these buildings as a means to preserve their historic integrity.

Enforcement

Consistently enforce laws and regulations to achieve a clean, healthy, and safe downtown environment.

- Zoning - Strengthen sign, parking, landscaping, and outdoor storage regulations and enforce them.
- Policing - Maintain a police presence to ensure public safety.
- Litter - Enforce litter laws.

Pedestrians

Create a pedestrian friendly environment.

- Sidewalks - Maintain existing sidewalks, and continue with the installation of new sidewalks along Pennsylvania Avenue.

- Crosswalks - Provide crosswalks at all intersections along Pennsylvania Avenue.
- Right-of Way Signs - Install pedestrian signs at strategic intersections.
- Other Amenities - Install pedestrian amenities, including shade trees and benches.

Infrastructure

Provide needed infrastructure.

- Sewer Service - Work with the West Township Municipal Authority to connect public sewer service from the Township to the Borough when financially feasible.
- Media Communications - Lobby the FCC to get local television and radio coverage.

Parking

Provide sufficient parking.

- On-Street Parking - Maintain on-street parking. On-street parking is important as a convenience to shoppers, as a traffic calming device for drivers, and as a physical and psychological barrier protecting pedestrians from moving vehicles. The conversion of on-street parking to driving lanes often results in faster moving traffic that makes small downtowns less pedestrian-friendly and less business-friendly.
- Zoning - Amend parking regulations to place time limits on on-street parking.
- Parking Meters - Consider the use of parking meters to limit on-street parking and to generate revenue.
- Parking Plan - Develop a parking plan to provide convenient and safe access for business customers and employees.

Traffic

Improve traffic conditions along Pennsylvania Avenue.

Bulbout or curb extension

Bulbouts or curb extensions extend the sidewalk or curb line into the street, reducing the street pavement width. Bulbouts calm traffic speeds and improve pedestrian crossings. They shorten crossing distances and reduce the time pedestrians are exposed to traffic. They also improve visibility for pedestrians and motorists.



Bulbouts placed at an intersection discourage motorists from parking in a crosswalk or from blocking a curb ramp. Motorists may travel more slowly at intersections or midblock locations with bulbouts depending upon how narrow the roadway becomes. Used in sequence, especially with landscaping, bulbouts tighten overly wide streets. The more restricted the street width becomes, the slower motorists tend to travel. Bulbouts also reduce turning speeds at intersections.

<http://www.ecocitycleveland.org/transportation/traffic/tools/bulbout.html>

- Traffic Study - Conduct a detailed traffic study to examine the feasibility of installing traffic calming devices along Pennsylvania Avenue and potential impacts. Such devices might include a traffic signal(s), bulbouts, crosswalks, improved signage, turning lanes and left turn bays.
- Access Management - Create an access management plan for Pennsylvania Avenue.
- Congested Corridor Report - Use the 2004 Congested Corridor Report and initiate pertinent improvements.

**Economic
Development**

Increase economic activity and make Pennsylvania Avenue an area destination by expanding retail, office, and entertainment offerings that will attract local residents and regional consumers and tourists.

- Business Retention - Connect exiting business owners with business resources such as the Small Business Administration and the Pike County Chamber of Commerce for assistance with business management, marketing, and applications for loans.
- Promotion and Marketing - Conduct community events to attract area residents to Pennsylvania Avenue. Examples are holiday festivals, street festivals (e.g., First Friday and/or Third Thursday festivals, etc.), a weekend farmers' market, arts and craft festivals, music festivals, etc. Advertise community events and special events held at local businesses on the radio and in local and regional newspapers.
- Hours of Operation - Encourage businesses to extend their hours on certain days to promote evening and weekend activity on Pennsylvania Avenue.
- New Business Recruitment - Prepare a business recruitment package that markets Pennsylvania Avenue and the local area to prospective retailers and professional offices (refer to the Retail Potential reports for prospective businesses). Work with the real estate community, Chamber of Commerce and other organizations to pursue these businesses.
- Natural, Historic and Recreational Resources - Use the community's natural and historical features and recreational resources to attract tourists. For example, develop a historic walking/driving tour and/or a *natural wonders* tour that highlights the unique resources found in the Borough and the Township.
- Delaware River Access - Increase public access to the Delaware River by improving the existing access in Airport Park and working with DEP and regulatory agencies to develop additional access points.
- River Views - Increase the visibility of the Delaware River by establishing small river front parks, overlook points, and/or a river front promenade.
- River Activities - Support the establishment of businesses that provide services for river activities such as fishing, canoeing, and tubing, and collaborate with existing river businesses to advertise to their customers the various retail and service establishments along Pennsylvania Avenue.
- Airport Park - Promote Airport Park as a regional recreational resource to draw potential consumers to Pennsylvania Avenue.