



Pike County Comprehensive Plan

Growing...Naturally!

Final Plan
November 2006

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PIKE COUNTY COMPREHENSIVE PLAN

Pike County, Pennsylvania

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To the Citizens of Pike County:

Pike County is the fastest growing county in Pennsylvania, and will continue to grow over the next several decades. This Comprehensive Plan will help us manage that growth, retain rural character, encourage more environmentally sound development, and protect the many natural, cultural, scenic and historic resources in the County as development occurs. Pike County is a very special place and we urge all residents to become familiar with the many resources within the County and help us to be stewards of these resources.

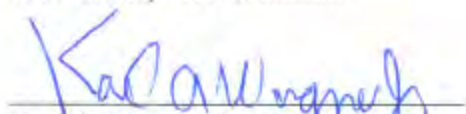
This Plan is really for the citizens of Pike County. It is intended to help protect the quality of your environment and maintain the quality of life the residents of the County enjoy and expect to continue. To accomplish this, it is necessary to create partnerships to achieve the vision for the County presented in this Plan. We are committed to working with the Townships and Boroughs within the County, state and federal governments, and most importantly, you, in addressing the issues facing your County, accomplishing the goals established in this Plan, and implementing the Action Plan set forth in this Plan as well.

We look forward to working with you to assure that Pike County remains the special place that it is and to enable Pike County to successfully provide for sustainable growth and development while maintaining the quality of life that you expect.

Pike County Board of Commissioners


Harry Forbes, Chairman


Rich Caridi, Vice Chairman


Karl A. Wagner, Jr., Commissioner

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RESOLUTION NO. 06-38 COMPREHENSIVE PLAN

WHEREAS, The Pike County Board of Commissioners charged the Pike County Planning Commission with developing a Comprehensive Plan for the County; and

WHEREAS, The Pike County Planning Commission, with the assistance of a Citizens Advisory Board and the Pike County Office of Community Planning, has prepared the 2006 Pike County Comprehensive Plan, as required by the Pennsylvania Municipalities Planning Code; and

WHEREAS, The Plan is consistent with the 1993 Pike County Comprehensive Plan, regional plans, and existing municipal comprehensive plans; and

WHEREAS, The Plan identifies significant needs and opportunities in and throughout the County that will enhance the County's future quality of life; and

WHEREAS, The Plan sets policies and strategies for future growth and development and will help Pike County and its municipalities manage that growth, retain rural character, encourage more environmentally sound development, and protect the many natural, cultural, scenic and historic resources in the County as development occurs; and

WHEREAS, The Pike County Planning Commission has distributed the Plan to all municipalities, adjoining Counties, and school districts, and has sought public comment on the plan consistent with Federal and State planning requirements, and has considered and incorporated all comments received as appropriate into the Plan; and

WHEREAS, the Pike County Planning Commission, at its regular meeting held on August 28, 2006, recommended that the Pike County Board of Commissioners adopt the Pike County Comprehensive Plan.

NOW, THEREFORE, BE IT RESOLVED, that the Pike County Board of Commissioners hereby adopts the 2006 Pike County Comprehensive Plan.

IN WITNESS WHEREOF, we have hereunto set our hands and caused the Great Seal of the County of Pike to be affixed this 1st day of November, 2006.

Attest:

Gary R. Orben, Chief Clerk
November 1, 2006



Pike County Board of Commissioners

Harry Forbes, Chairman
Richard A. Caridi, Vice-Chairman
Karl A. Wagner Jr., Commissioner

FOREWORD

This Comprehensive Plan stresses several major initiatives, including conservation of the County's natural resources, retention of open space and rural character, managing growth, and creating a successful working partnership between the County government and the municipalities within the County. This partnership will enable the County agencies dealing with growth issues to assist the municipalities in planning for the future, protecting resources and open space, managing growth, and encouraging more environmentally sound development.

We want this Plan to be a living document that is implemented and used as a guide in decision making now and for the future. Given the tremendous growth pressures within Pike County, there is a sense of urgency in implementing this Plan, and implementation efforts have already begun.

Grants have been secured for three major initiatives within the County. The County has received approval of a grant application for preparation of the Pike County Open Space, Greenways and Recreation Network Plan (OSGRP). The OSGRP will be a functional component of this Comprehensive Plan and will outline targeted actions for the County in the context of the broader land use policy directions established in the Comprehensive Plan. The OSGRP will lay the groundwork for ensuring open space remains accessible to all County residents and identify opportunities for interconnecting our communities with the surrounding high quality natural features that define the County's rural character and tourist-based economy. The OSGRP will provide direction on the protection of high quality and exceptional water resources in the County and address the intact forested watersheds of the County; retention of the rural character and quality of life of our communities; the connectivity of current public land holdings within the County; and strategies for preservation of open space corridors which will further enhance the County's existing greenways.

Secondly, the Pike County Conservation District has been awarded a grant to perform natural resource audits of municipal ordinances. This program entitled the Community Planning Initiative will assist municipalities in natural resources inventory and mapping; analysis of potential future development patterns based upon existing municipal land use regulations; review of municipalities' comprehensive plans and zoning and subdivision and land development ordinances; recommendations for revisions and additions to existing land use regulations; and updating municipal land use regulations.

This Comprehensive Plan identifies conceptual growth areas in the County, but realizes that the task of providing detailed future land use plans and preparing zoning maps and ordinances to implement those land use plans should be left to the municipality. The Pike County Municipal Planning Initiative is one example of how the County will provide assistance to update plans and implement documents.

The third grant that the County has secured is for hiring a Community and Natural Resource Planner. The planner will assist in efforts to implement the County Comprehensive Plan as it relates to sustainable development practices and integration of natural resource planning with sound land use and community revitalization efforts. The planner will also provide leadership in the County Planning office to guide the development of the Open Space, Greenways and Recreation Plan and foster multi-municipal planning efforts within the County.

The County's high quality natural resource base combined with the current and projected population growth provide municipal officials with some significant challenges in regard to natural resource management and land use decisions over the next decade. Our municipal governments are increasingly challenged to provide the necessary long-range planning for protection of the rural base of their communities while at the same time accommodating the rapid growth. Contained within the Comprehensive Plan are many strategies and concepts that are designed to assist the County and its municipalities to address future needs. These three first steps that have been taken to implement the Pike County Comprehensive Plan will assist municipal officials in successfully addressing the challenges that they face.

Timely consideration of this Plan by local municipal officials and concerned citizens is considered of the utmost importance. For municipalities updating their comprehensive plans and land use regulations to achieve consistency with this Comprehensive Plan, chapters which are particularly important to review are Chapter 3, Pike County's Collective Vision For the Future; Chapter 4, Strategies For Future Growth; the Action Plan contained in Chapters 8 and 9; Conceptual Growth Areas in Chapter 5; information on Greenway and Trail Planning in Chapter 7; and Natural and Scenic Resources Protection in Chapter 6. Initiatives to support economic development of particular importance to State agencies are discussed at the end of Chapter 17. Supplemental information on specific topics and examples of ordinance provisions, which were prepared to accompany this Plan, are found in the Appendices.

In a November 2005 referendum, 68% of Pike County voters supported borrowing up to ten million dollars for county and municipal planning and land and/or easement acquisition to protect open space and create greenways, parks, and recreation areas. Proponents of the Open Space Scenic Rural Preservation Bond see the bond as critical to supporting open space and scenic rural preservation planning and implementation of smart growth techniques (such as infrastructure planning to support compact development) in the County. Preservation of important open spaces can protect water quality and supply, wildlife habitats, scenic ridges, and remaining rural character. In turn, protection of open space can support the tourist industry, which is the main component of the County's economy, and community revitalization, and economic investment in the County by protecting quality of life.

Bond proponents also have presented studies which indicate that residential development typically does not "pay its own way" – it typically requires more in community services than it generates in revenue. (Exceptions may be age-restricted retirement communities and very expensive homes.) Conversely, farmland and open space require much less in cost of services as compared to tax revenue generated. Purchasing land or easements to preserve open space saves money over time because of savings in service costs.

We urge everyone to look to this document as a guide for decision-making as our County continues Growing ... *Naturally!*

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Executive Summary

BACKGROUND

Pike County's natural resources are an extremely important asset locally, regionally and statewide. The County is in the unique position of having all of its major watersheds classified as *High Quality* or *Exceptional Value*. An abundance of wetlands, lakes and streams exist, as well as high quality groundwater resources. The County's rural landscape is largely intact, undisturbed, contiguous forestland. The forests and other open spaces contribute to the excellent water quality, rural character and quality of life of its communities. This largely rural forested environment and the high quality water resources also play a key role in the tourist and recreation based economy of the region.

However, for the past three and a half decades, Pike County has been the most rapidly developing county in Pennsylvania and is among the most rapidly developing counties nationally. U.S. Census Bureau population figures for 1990 - 2000 placed Pike County first in the Commonwealth in population percentage increase for the decade at 65.6%. Using U.S. Census Bureau population estimates starting with Census Day, April 1, 2000, as a base and carrying forward to July 1, 2004, Pike County again had the highest population percentage increase in the Commonwealth at 16.4%. Pike County was the single Pennsylvania entry (85th) on the National List of "Fastest Growing Counties in 2003" and was ranked 81st on this list in 2002.

The estimated population in Pike County on July 1, 2004 was 54,117. Using two fairly conservative methods, population projections show Pike County population reaching between 93,647 and 102,218 by 2025. Pike County build-out population projections based on current zoning in the County show the County population realistically reaching between 150,121 and 153,771 by the year 2025. Using the current zoning and building policies in the county, the projected acreage requirements necessary to handle an additional 47,000 to 55,000 people over the next 20 years would likely range between 45,005 and 53,153 acres.

Ironically, the escalating residential and commercial development pressures present a

serious threat to one of the very features – the County's high quality natural resource base – that is attracting this growth in the first place. Of primary concern are increasing fragmentation of open spaces, deforestation of watershed lands and increasing levels of non-point source pollution, including erosion and sedimentation and stormwater run-off associated with widespread earth disturbance activities and increasing levels of impervious surfaces. Although the window of opportunity is shrinking, Pike County has an opportunity to mitigate natural resource degradation if proactive efforts are undertaken now. New long-term strategies that address sprawl and incorporate growth with sustainable use of land and water resources are urgently needed.



The negative effects of conventional land development practices on land and water resources are well documented. Sprawling development patterns and resulting loss of open space impact the environment in multiple ways. Not only do we lose community valued natural landscape features (stream corridors, forests, wetlands, etc.), we also lose the essential functions and values that these features provide - runoff control, pollutant filtration, groundwater recharge, flood storage, wildlife habitat, recreational and scenic values, to name just a few.

There are a number of planning techniques and options available to local governments that have been used successfully in a variety of urban, suburban and rural settings across the country. Alternative site design strategies have the ability to significantly reduce the impacts of residential and commercial development and to provide a greater degree of protection to open space and water resources. *Conservation zoning, conservation design, low*

impact development, sustainable development are some of the options that offer more environmentally sound alternatives to traditional land use practices.

The County's high quality natural resource base combined with the current and projected population growth provide local municipal officials with some significant challenges in regard to natural resource management and land use decisions over the next decade. The rapid growth and tremendous increases in land values have brought lands previously thought to be somewhat protected from development – such as hunting clubs and summer camps – into the land market. New subdivision activity in the county has increased significantly since late 2001.



Our municipal governments are increasingly challenged to provide the necessary long-range planning for protection of the rural base of their communities while at the same time accommodating the rapid growth. Pike County municipal officials are also increasingly confronted with environmental problems in their communities and, as a result, these officials are seeking the technical and financial assistance required to support the review, revision and implementation of municipal land use regulations to enhance their natural resource protection efforts.

In a Summer 2004 survey of both County residents and municipal officials completed as part of the Comprehensive Planning effort, residents identified what they felt were the key planning issues facing the County in the next 10 years. The top three issues identified included Water Quality Protection (95%), Preserving Environmentally Sensitive Areas (94%) and Growth Management

(92%). Forestland Preservation was listed among the top five planning issues by 90% of the respondents. The residents also felt Joint Comprehensive Planning (83%) and Open Space and Recreation Planning (78%) were among the top areas where more multi-municipal/county cooperation should be directed in future planning efforts.

Pike County municipal officials surveyed felt their municipality's most important assets included rural character, open space, protected green space, large areas of state and federal protected lands and clean water resources. Across the board the officials felt the most important planning issue facing their municipalities and the county as a whole was proper planning for rapid growth, including such aspects as preservation of the rural base of their municipality, water quality and quantity, loss of green space and the quality of existing open space in the face of increased growth.

PRIOR PLANNING EFFORTS

This Comprehensive Plan updates the 1991-1993 Pike County Comprehensive Plan, and continues to address issues identified in that first County Comprehensive Plan. The prior plan noted: "Pike County is a community in transition; transition from a bucolic rural area to a suburban community entangled, for better or worse, in the forces of the regional economy and social framework of the nearby eastern megalopolis. Several major issues have surfaced as pivotal to the future of Pike County. How, and if, these issues are addressed will determine the direction and character of the growth and development of the County. The need for development cannot be ignored, and the importance of environmental quality and rural character must not be forgotten. Balanced growth, that is, economic and community development, in concert with environmental protection and resource conservation, should be the goal."

In 1995, the International Countryside Stewardship Exchange looked at the challenges facing Pike County and issued a similar statement:

"Pike County, containing some of the most beautiful scenery and landscapes found anywhere

in the Northeast, is being transformed into a bedroom community where the workforce relies heavily on the New York-New Jersey employment centers. The fastest growing county in Pennsylvania in terms of percentage population change, it is being impacted by the influx of new residents from the New York City metropolitan area. Pike County is rich in scenic, natural, historic, and cultural resources and the challenge for the County is to strike a balance between the essential economic growth and development of the County, while at the same time protecting the scenic, cultural, and natural environment which drives tourism – the County's largest industry."

The Exchange Team recommended that a County-wide visioning process be conducted to address the lack of an overall vision of what the County residents wanted Pike County to be in the future. A direct result of the International Countryside Stewardship Exchange was the initiation of a visioning process.

The County has had two separate visioning efforts. In 1995, a series of three visioning workshops were conducted. Workshop participants identified environmental resource protection, regional planning and zoning, and preservation of historic resources as the most important issues to the future of Pike County. As a result of these visioning workshops, six task forces were established to further define priorities, goals and objectives for the County's future.

The "Pike County Visioning" process began in 1998 to "enable Pike County to successfully enter the 21st Century and meet the parameter of sustainable growth and development while still maintaining the quality of life that the residents of Pike County expect." At the core of this visioning effort was the establishment of six task forces, each composed of approximately 25 participants. The task forces included economic development, quality of life, environment, government, infrastructure, and land use. The groups met regularly over a 14 month period. Pike County Visioning 1998 to 2020: The Final Report provided the resulting major recommendations and outcomes identified by the task forces. A key phase used in that Report is "Growth is inevitable, quality is planned.

The vision, goals and objectives presented in this Plan are based on these recent visioning processes that have occurred in the County.

OBJECTIVES OF THIS PLAN

A comprehensive plan is required to be just that, comprehensive, and address a number of elements. This Plan is, however, particularly concerned with managing growth, improving the quality of development which occurs in the County, encouraging a sense of stewardship toward the County's resources, initiating actions to protect those resources, and encouraging municipal land use regulations which require development to recognize and protect the natural resources of Pike County.

Some actions can be taken at the County level, such as preparing a County Open Space, Greenways, and Recreation Plan; holding a referendum on a bond issue which could support open space acquisition and increased planning expertise to assist municipalities in coping with rapid development; increasing the size of the County Planning staff to better assist municipalities in their planning; and providing a program to assist municipalities in identifying natural resources, reviewing their land use regulations and plans, and updating their regulations and plans to address resource protection and growth management. Ultimately, the responsibility for growth management, resource protection, and regulation of development rests with the thirteen municipalities in Pike County.

The Pike County Commissioners are committed to working with the County's municipalities and state and federal governments to address the pressing issues facing all Pike County residents. The County will continue to develop, provide and enhance a program of financial and technical assistance to municipalities to help them plan for the future of their communities, in the context of the County Comprehensive Plan and other functional County plans. The Pike County Office of Community Planning and Pike County Conservation District will be spearheading efforts on behalf of the Commissioners. This Comprehensive Plan presents policies and actions which will guide how County government will

work with the municipalities in the future to address growth issues; indicates how the County intends to provide technical assistance to municipalities; identifies sources of funding; and supports and sets priorities for future planning efforts and grant applications which will benefit the municipalities.

This 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. Conceptual growth areas within the County have been identified, but each municipality retains the right to prepare multi-municipal or individual municipal land use plans; to control zoning within its boundaries, whether through individual zoning ordinances or a joint zoning ordinance; and to regulate subdivision and land development.

This Comprehensive Plan is not a means to stopping development, but to encourage smart growth that occurs in designated growth areas where it will not adversely impact the County's character, quality of life, and/or resources.

KEY CHALLENGES

The tremendous population growth the County has experienced, its popularity as a tourist destination, and its predominantly tourist, service, and retail based economy present a number of challenges to be addressed.

- Imbalance between residential growth and economic growth and the resulting tax concerns for residents.
- Increasing economic opportunities within the County without degrading the environmental and aesthetic quality of the County.
- Providing infrastructure to manage growth and foster economic development.
- Protecting natural, historic, and cultural resources and retaining open space as development continues.
- Conserving the beauty of rural landscapes and roads.
- Providing for sustainable tourism.
- Protecting exceptional forest and water resources and wildlife habitats.
- Enhancing the quality of life for Pike County residents.
- Creating a greater sense of community where there is such a large commuting population and so many private developments.

- Scattered, relatively low density residential development patterns which makes infrastructure planning more difficult.
- Increased traffic and the need to manage major road corridors.
- Improving mobility opportunities for seniors.
- Addressing Strip commercial development concerns.
- Retaining the character and charm of existing boroughs, villages, and hamlets.
- Rising land values and housing affordability concerns for seniors and families of those working in Pike County.
- Tremendous seasonal population growth during the summer (more than double the full-time) that influences infrastructure and services.
- Retaining young people in the County by providing additional educational and employment opportunities.
- Sale of hunting clubs, summer camps, and old family estates to create new subdivisions.
- Limited public sewage treatment capacity and poor soils for on-site sewage disposal.
- Developments, which were initially and primarily intended for second homes, are now being used for full-time residency; often have inadequate infrastructure to accommodate this use.
- Funding enhanced municipal services, especially emergency and police.
- Encouraging municipalities and private property owners' associations to discuss responsibilities in provision of services to residents.
- Providing accessible services and facilities for youth and seniors.
- Improving the health care facilities available to County residents.
- Increasing higher education opportunities in the County.

While the challenges facing the County are significant, the sense of urgency, determination to address the challenges, and expanding cooperative efforts in the County all create a sense of optimism that Pike County will manage its growth and retain its rural character and quality of life. Crucial to meeting the challenges are fostering, throughout the County, awareness and appreciation of the resources of Pike County; accepting the responsibility to be stewards of these resources; determining to continue existing partnerships and create new partnerships to protect existing resources, enhance infrastructure, and manage growth in accordance with coordinated county-wide, multi-municipal, and municipal planning; establishing where growth should occur, how much growth will be provided for, and desired patterns of development; coordinating land use and infrastructure for orderly, concentrated and efficient growth; and

setting high standards for development and high expectations for developers.



With challenges come opportunities. As growth continues within Pike County, there is increased awareness among the officials and residents within the County of the challenges growth poses to the natural environment and quality of life within the County. This awareness and the program for implementation of this Plan present exciting opportunities for coordinated action within the County to implement regional approaches to address issues facing the County; to identify and use improved and more efficient development techniques and land use regulations to foster well-planned, attractive development; to conserve natural resources and open space through innovative development techniques, acquisition and conservation programs, land use regulations, and stewardship efforts; to implement corridor management plans, including access management techniques, for major road corridors to improve mobility and safety; to foster increased housing alternatives; to identify programs, planning efforts, and land use regulations which can revitalize existing centers and maintain their character; and to retain the rural fabric which is still largely intact in the County.

Suburban sprawl does not have to be the destiny of Pike County. By acting now to manage and concentrate growth, governments, residents, and community organizations can preserve Pike

County's communities, rural heritage and rural quality of life for future generations. A key is to provide infrastructure to support more concentrated development and economic development in identified areas, including roads, public water supply, wastewater treatment, and stormwater management. To quote Thomas Hylton, Pulitzer Prize winning journalist and author of *Save our Land, Save our Towns*, "We need to build real communities in Pennsylvania, not loose accumulations of buildings, highways, and parking lots."

PIKE COUNTY'S VISION ...

The Vision for Pike County in the 21st Century is a statement of what we want Pike County to be like in the future. The first step in attaining that Vision is setting goals and establishing objectives to achieve those goals. Goals are general aspirations that set the desired direction. Objectives are more specific guidelines to follow in order to realize the goals.

The Vision, Goals, and Objectives presented in this Plan are based on the outcomes of prior visioning processes for the County. The Vision and Goals follow. The Objectives are listed in Chapter 3 of this Plan.

Goals are presented for five elements: resource conservation, land use, government and infrastructure, community services, and economic development. The goals and objectives, and issues identified in Chapter 3, are organized pursuant to the task forces created in "Pike County Visioning." Actions to implement the goals and objectives are organized differently, by major initiatives. Goals are as follows:

VISIONING GOALS

Resource Conservation - Conserve, maintain and enhance the historical, cultural and environmental resources of Pike County.

Land Use - Provide for properly managed and environmentally sound growth that will benefit the economy while retaining the County's rural character and natural beauty.

Government and Infrastructure - Enhance the services provided to the growing population of Pike County, through government and public participation that is responsive and accountable.

Community Services - Broaden existing and provide new services to Pike County.

Economic Development - Promote economic development while avoiding any negative impact on the natural beauty and resources of our community and environment.

OUR VISION FOR PIKE COUNTY IN THE 21ST CENTURY

"Pike County will be a community where social, ethnic, economic, intellectual and cultural diversity is cultivated; individual, family and community health is nurtured; the environment is protected; growth is managed; and individual dignity is revered."

Pike County will continue to experience population growth in the 21st Century, but that growth will not degrade the quality of life within the County. Infrastructure will be in place to meet the needs of the expanding population, and growth will be compatible with the need to conserve Pike County's natural, cultural, historic, and recreational resources. The County will promote programs that will enable residents access to quality health care, educational services, historic and cultural resources, and quality, affordable housing. Systems will be in place to provide for clean water supply and pollution-free waste disposal in appropriate growth areas, and protect water quality and quantity in the County. There will be appreciation for, protection of, and sustainable use of the County's resources for the social and economic benefits of the populace.

Pike County will have a balanced economy and expanding tax base, including a County business park. Competitive paying jobs will be created within the County, enabling residents to work within the County. Enhanced tourism opportunities and related service businesses will complement employment opportunities available within Pike County. Economic development will occur with recognition of the need to preserve the County's environmental, cultural, and historic resources.

Pike County will see continued development of intergovernmental cooperation in planning and providing of services and programs to the County's residents. The County government will encourage and foster such cooperation. Enhancement of the infrastructure in the County will be a result of mutually developed programs involving the owners of public lands, municipalities, the County, and committees within County task forces addressing those issues. Municipal officials in the County will continue to address the needs of their residents and cooperate with the County and other municipalities to assure that land use planning in the County will be compatible with the conservation of the County's resources."

SMART GROWTH

This Comprehensive Plan is about Growing Naturally. An element of growing naturally is growing smartly. The Smart Growth Network, U.S. Environmental Protection Agency (EPA), and International City/County Management Association (ICMA) have described smart growth as “development that serves the economy, community, and the environment. It provides a framework for communities to make informed decisions about how and where they grow. Smart growth makes it possible for communities to grow in ways that support economic development and jobs; create strong neighborhoods with a range of housing, commercial, and transportation options; and achieve healthy communities that provide families with a clean environment.”

The principles of Smart Growth are mixing land uses; taking advantage of compact building design; creating a range of housing opportunities and choices; creating walkable neighborhoods; fostering distinctive, attractive communities with a strong sense of place; preserving open space, farmland, natural beauty, and critical environmental areas; strengthening and directing development towards existing communities; providing a variety of transportation choices; making development decisions predictable, fair and cost effective; and encouraging community and stakeholder collaboration in development decisions.

Smart growth techniques are designed to accommodate growth in a way that protects the environment, protects rural land, enhances the economy, and enhances the quality of life. Particularly important elements of smart growth in Pike County include:

- Encouraging compact development patterns to reduce sprawl, land consumption, and conflicts with natural resources.
- Permanently protecting open space and planning for a system of greenways to connect natural areas and provide hiking and biking trails.
- Providing roadways, public water supply and distribution, wastewater collection and treatment, and stormwater infrastructure to concentrate development and attract new businesses.

- Using traditional village settings containing smaller lots and mixed residential, retail, office, and green space, surrounded by working rural land, such as farmland, forest, and river, to create true communities.

- Revitalize existing towns to encourage infill and appropriate expansion of existing communities.

A number of basic principles for future development in Pike County have been established. These principles should guide County-wide actions to manage growth. Their incorporation into municipal planning efforts is strongly encouraged.

FUTURE DEVELOPMENT PRINCIPLES

1. We will work together to conserve the unique character, open spaces, and beauty of Pike County in the face of continued development pressures.
2. Sprawl is not an acceptable development pattern.
3. County and municipal government should consider forging new partnerships to proactively plan for our future.
4. Growth should be managed and directed to designated growth areas in accordance with multi-municipal and municipal comprehensive plans and implementing land use regulations.
5. Preserve natural, historic, scenic, and cultural resources by protection and integration into future developments.
6. Existing Boroughs, villages, and hamlets in the County should be enhanced and infilled when appropriate.
7. Work to achieve economic growth that preserves the quality of life that has made Pike County an attractive place for tourism and for residents to live and work.
8. Compact, mixed use development patterns will be encouraged. Public sewer and water systems should be provided to permit compact development.
9. Development will be attractive, well-planned, appropriately landscaped, with architecture characteristic of Pike County.
10. Major road corridors will be enhanced and managed to facilitate mobility and increased safety.
11. Greenways, trails, open space and recreation shall continually be provided and expanded commensurate with population growth.
12. Alternatives to automobile traffic, including pedestrian, bicycle, and transit modes, should be encouraged and enhanced.

Planning at the County and municipal level are important elements of growing smartly, but the way that each site is developed is also important to maintaining the County's resources. Developers should be encouraged to have an awareness of, and sensitivity toward, the resources of each tract. Floodplains, wetlands, hydric soils, streams and ponds should be protected. Steep slopes should generally be avoided and native vegetation retained. These resources should be incorporated into open space systems.

Flexible approaches to site design and innovative land development techniques such as Conservation Development and Traditional Neighborhood Development can be used to minimize land consumption, and conserve ecosystems, natural resources, and open space. Visual and physical access to open space systems should be provided and provision made for active and passive recreation. Open space systems should be coordinated among adjoining developments and with other private and public open spaces.

Developers should be concerned with protecting groundwater supplies and stream flows. Groundwater recharge should be encouraged.

The protection, enhancement and adaptive reuse of historic structures should be encouraged where appropriate.

The retention of the scenic character of road corridors should also be encouraged, and a system of greenways and trails provided.

ACTION PLAN

The Action Plan provides a program for implementation of this Comprehensive Plan and realization of the Vision, Goals, and Objectives. An extensive Action Plan is contained in Chapter 9. To make the material in Chapter 9 more accessible, priority action items and a summary of the action items in Chapter 9 are provided in Chapter 8.

Chapters 8 and 9 function on several levels. They identify actions to implement the plan and provide more detailed "how-to" information for some actions. The list of actions also serves as a resource for municipalities to review when preparing municipal comprehensive plans. Further, it is hoped that residents of the County will review the action items, become especially concerned with seeing that an action is accomplished, and become a champion of that action.

Issues in Chapter 2 and Goals and Objectives in Chapter 3 are organized according to the task forces established during "Pike County Visioning," Resource Conservation, Land Use, Government and Infrastructure, Community Services, and Economic Development. Actions have been organized in a more specific manner by 15 initiatives which are crucial to addressing the issues facing Pike County over the next ten years. Organizing actions this way draws more specific attention to these initiatives and allows a more focused priority action item list. For those who want to relate the Action Plan headings to the Visioning task force alignment, the following chart can be used:

VISIONING TASK FORCE SUBJECTS

ACTION PLAN INITIATIVES	Resource Conservation	Land Use	Government and Infrastructure	Community Services	Economic Development
	<ul style="list-style-type: none"> • Protect Natural Resources • Protect Water Resources • Protect Scenic and Historic Resources 	<ul style="list-style-type: none"> • Manage Growth • Establish County - Municipal Partnerships • Multi - Municipal Planning • Address Impacts of Growth • Improve Quality of Development 	<ul style="list-style-type: none"> • Improve the Circulation System • Enhance infrastructure systems • Provide community facilities and services for day-to-day needs of County residents 	<ul style="list-style-type: none"> • Address housing needs • Address efforts of community associations to better serve residents 	<ul style="list-style-type: none"> • Encourage additional economic development • Retain tourism as a major component of economic development

PRIORITY ACTION ITEMS

I. Protect Natural Resources within the County

1. Prepare a County Open Space and Greenways Plan
2. Consider whether to establish an open space bond fund through voter referendum
3. Provide technical and organizational assistance to municipalities for multi-municipal open space and recreation plans
4. Make GIS mapping of natural resources available to municipalities
5. Assist municipalities in preparation of Potential Conservation Lands maps
6. Assist municipalities in ordinance and plan audits to determine build-out potential and degree of resource protection
7. Encourage protection of target-identified areas in open space plans
8. Encourage an organization to assume responsibility for monitoring "protected" lands
9. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land development ordinances to protect natural resources
10. Support formation and actions of regional or municipal Environmental Advisory Councils

II. Protect the County's Water Resources

1. Establish riparian buffers along watercourses
2. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land development ordinances to protect water resources
3. Update existing and complete new Act 167 Stormwater Management Plans and ordinances prepared pursuant to the Plans, to encourage Best Management Practices
4. Prepare a County-Wide Water Resources Plan.

III. Protect Scenic and Historic Resources

1. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land development ordinances to protect scenic and historic resources and regulate signage
2. Support formation and actions of regional or municipal historical commissions
3. Encourage retention of natural buffers within developments and retention of natural and historic landscapes

IV. Manage Growth Within the County

1. Support development of identified growth areas with consistent governmental policies and financial incentives
2. Support development of identified growth areas with locations of community facilities
3. Support development of identified growth areas with road improvements
4. Support development of identified growth areas with sewer planning
5. Support development of identified growth areas with water supply planning
6. Support development of identified growth areas with ordinance provisions allowing higher densities of development when appropriate infrastructure is available
7. Support revitalization efforts in existing Boroughs, Villages and hamlets and provide technical assistance

V. Establish County-Municipal Partnerships to Manage Growth

1. Institute a County Planning Technical Assistance Program for municipalities
2. Provide data to municipalities from the County GIS system and Planning Office
3. Provide a toolbox to municipalities of sample land use regulations
4. Establish a program of workshops with municipal officials on smart growth techniques and other planning topics

VI. Multi-Municipal Planning to Manage Growth

1. Provide organizational and technical assistance
2. Encourage consideration of Smart Growth principles in the plans

VII. Address Impacts of Tremendous Growth

1. Work to increase allocation of PennDOT county maintenance funding
2. Work to secure revisions in State funding allocation formulas, including restoring population adjustments to State Funding formulas
3. Assist municipalities in preparation of Regional Open Space and Recreation Plans so recreation impact fees can be charged
4. Review the appropriateness of using Transportation Impact Fees

VIII. Improve Quality of Development

1. Provide technical assistance, including model ordinance provisions, to municipalities to adopt in their zoning and subdivision ordinances, addressing: interactive processes; data and analysis requirements; design and performance standards; improvement requirements and standards; innovative development techniques; and corridor overlay zoning

IX. Improve the Circulation System Serving the County

1. Work with the County Task Force, municipalities, legislators, and PennDOT to list needed transportation improvements on the 12-year transportation program and accomplish construction of those improvements on the list
2. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land development ordinances to manage access to arterial and collector roads and address road construction standards
3. Enhance transit service in the County and facilitate mobility of seniors
4. Implement major road corridor improvement programs
5. Plan for a system of greenways throughout the County
6. Connect transportation modes to one another

PRIORITY ACTION ITEMS Continued

X. Provision of Community Facilities and Services for Day-to-Day Needs of County Residents

1. Determine the appropriate means to increase higher educational opportunities, and promote environmentally-based education and economic development
2. Provide technical assistance to municipalities in securing open space, recreation, and greenways planning and development grants and in increasing access to State and Federal recreation facilities and lands
3. Work to foster an increased sense of County identity and assimilate new residents into the community
4. Continue to address identified needs of seniors within the County
5. Encourage actions to address identified health care needs of County residents
6. Work with representatives of Municipal and State government and private owners associations to determine the most appropriate methods of providing enhanced law enforcement service within the County
7. Organize and support efforts to better plan, improve, fund, and staff emergency services within the County
8. Designate appropriate County personnel to coordinate grant applications and work with municipalities in securing grants

XI. Encourage Additional Economic Development

1. Prepare a strategic plan for economic development in the County
2. Determine the most appropriate marketing approach for the County
3. Work to provide a variety of business environments in the County, coordinated with municipal zoning ordinances and infrastructure
4. Facilitate development of the County Business Park
5. Work to provide "shovel-ready" sites for businesses in the County
6. Complete a feasibility study for a Pike County Business Incubator
7. Identify a multi-faceted approach to retaining young people within the County after completion of high school
8. Identify opportunities to participate in the Pennsylvania Economic Stimulus Package
9. Strategic revitalization efforts in Milford and Matamoras

XII. Retain Tourism as a Major Component of Economic Development

1. Promote sustainable ecotourism
2. Identify and support the most appropriate marketing approach for Pike County and expand tourism marketing
3. Promote Arts/Culture, Heritage, and Water-related tourism

XIII. Address Efforts of Community Associations to Serve Residents

1. Establish a task force of representatives of the County, municipalities, community associations, DCED, County legislators, and builders to address what can be done to support efforts of community associations in providing services, facilities, and infrastructure to residents; how such associations should be organized and managed; how the associations can more effectively accomplish their responsibilities; how future problems can be minimized through effective review and development processes, requirements and standards for developers, and actions and contributions of developers; and how public safety concerns can be addressed within and outside private communities.
2. Identify mechanisms to assure appropriate infrastructure is in place prior to transfer of responsibilities from developers to community associations.
3. Discuss approaches to dealing with individually owned lots within developments that regularly appear on tax sale lists.

XIV. Address Housing Needs

1. Determine whether a separate Pike County housing agency, such as a Housing Authority or Community Housing Development Organization (CHDO), 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.
2. Encourage municipal zoning to allow a variety of housing types and densities at appropriate locations within the County, consistent with land use goals.
3. Use designated Recorder of Deeds fees for increasing housing choices for County residents

XV. Enhance Infrastructure Systems

1. Work with a County Sewer and Water Task Force, municipalities, PaDEP, PENNVEST, DCED and users to develop an approach to facilitate construction and/or extension of public sewer and water facilities as necessary within growth areas to serve existing and future needs and support higher densities and varieties in type of appropriate uses.
2. Continue to encourage improvement of telecommunications facilities within the County through the Pocono Telecommunications Task Force.
3. Secure additional PennDOT aid in facilitating vehicular movement throughout the County during periods of impaired driving conditions.
4. Work with PennDOT to secure recognition of the special transportation needs within the County because of rapid growth, typical winter conditions, and the large number of long-distance commuters.
5. Pursue funding for studies of, or additional PennDOT studies of, the major road corridors serving growth areas, to identify means of improving, managing, enhancing, and beautifying those corridors, including Route 6/209, Route 6, Route 507, Route 739, Route 390, SR 2001 (Milford Road), SR 2004 (Silver Lake Road) and Log Tavern Road

OTHER PLAN HIGHLIGHTS

Conceptual Growth Areas

A growth area is a geographic area within which development at higher densities is encouraged and infrastructure (roads, water, sewer) to serve such development is provided for or planned. Outside of this area, land is planned to remain predominantly rural. Growth areas are used to geographically indicate where more development is appropriate and public investment in infrastructure development is most suitable.

In establishing future growth areas, the major criteria were to identify areas where growth has or is occurring and areas adjacent to such areas; areas designated for development in municipal comprehensive plans and zoning maps; areas where there is a general absence of severe natural limitations to development; areas which do not contain important natural areas on the Natural Areas Inventory; areas reasonably well served by the existing transportation network, including arterial and collector roads; and areas with reasonable proximity to community facilities.

The Conceptual Growth Areas Map in Chapter 5 identifies major growth areas; infill/corridor growth areas; minor growth areas; villages; and hamlets.

The purpose of establishing the Conceptual Growth Areas map is to identify logical areas for further growth in the County. Identifying areas for growth will then help set priorities for road improvements and providing centralized sewer and water facilities to enable the concentration of development at higher densities than would occur if on-site facilities were utilized. In areas that are to experience growth, this plan supports higher densities of development to reduce development pressure on other portions of the County, which have not been identified as conceptual growth areas.

The Growth Areas map is not a future land use plan, and does not try to map future land uses throughout the County. That is a function of municipal and multimunicipal comprehensive plans. The Conceptual Growth Areas map identifies areas where development seems

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appropriate and should be encouraged. No breakdown is made into specific types of land uses within the growth areas, such as Residential, Commercial, and Industrial. That also is a function of municipal and multimunicipal Comprehensive Plans.

Municipalities will determine the appropriate patterns, types and densities of development within the growth areas, and enact appropriate zoning provisions to allow for those patterns, types, and densities.

Greenway and Trail Planning

The Pennsylvania Greenway Partnership Commission defines a greenway as follows:

"A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wide corridors that incorporate diverse natural, cultural, and scenic features. Greenways can be land- or water-based, running along stream corridors, shorelines, lakes, waterfalls, or wetlands. Some follow old railways, canals, ridgetops, or other features. They can incorporate both public and private property. Some greenways are primarily recreational corridors, while others function almost exclusively for environmental protection and are not designed for human passage. Greenways differ in their location and function, but overall, a greenway network will protect natural, cultural, and scenic resources, provide recreational benefits, enhance the natural beauty and the quality of life in neighborhoods and communities, and stimulate economic development opportunities."

Greenways have a number of benefits. They protect natural, cultural, and scenic resources; link communities together; provide for recreational opportunities; enhance the quality of life and promote revitalization in communities; provide educational and interpretive opportunities; enhance tourism and economic development; maintain habitat linkages and ecosystems; allow access to natural, scenic and cultural resources; preserve and build upon existing trail networks; provide alternatives to vehicular travel; provide

riparian buffers to protect water quality; and provide linkages to trails of regional significance. The Conceptual Greenways and Trail System map in Chapter 7 shows a system for further analysis for feasibility during preparation of the County Open Space, Greenways and Recreation Plan. The system is conceptual, and subject to further refinement, but is the starting point to plan a County-wide system. While the system focuses on major greenways, on the local level greenways and trails can be considered along creeks, as connections to existing local trails, and connections to subdivisions, recreational facilities, municipal facilities, and businesses.

In planning the conceptual system, the major objectives were to provide distribution of greenways throughout the County; connect Conceptual Growth Areas and existing centers; incorporate and connect existing and proposed major trails and trail systems, such as the McDade Trail, Pinchot Greenway, and Route 6 Bicycle Trail; protect watercourses; and connect and access major open spaces, tourist destinations, historic sites, recreation facilities, community facilities, transportation nodes, County facilities, employment areas, and shopping areas.

Pike County has two outstanding opportunities to highlight scenic, historic and natural features of the region and make important connections between these resources and the economic development and tourism opportunities they provide for the local communities. The Lackawaxen and Delaware River corridors provide key greenway planning opportunities. Planning for a Delaware River Water Trail is already underway. Making connections between the River Trail and the other elements of the County Greenway system will be important. Proper planning for and development of a scenic greenway along the Lackawaxen River Corridor from Lackawaxen to Hawley will also be an important component of the County's overall greenway system.

Natural and Scenic Resources Protection

Pike County's rural character and proximity to major metropolitan centers has made it an attractive place to have a vacation home or a permanent residence. The County is rich in scenic and natural resources; but the scenic and natural

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environments that have attracted so many people to the County are quickly being lost because of increasing development pressure. A balance is necessary between growth and the natural resources of the County, and this can only be accomplished by guiding development away from the most environmentally sensitive areas.

To plan development and ensure protection for environmentally sensitive areas and plant and animal habitats, it is necessary to catalog the locations and importance of the sites. Knowing where the sites exist, and their quality and significance, can help prevent conflicts over land use. Determining which sites are most threatened can direct protection efforts and limited conservation dollars to those areas first.

Natural areas identified in the Natural Areas Inventory for the County are listed in Appendix 9. Maps in Chapter 6 show the locations of the Natural Areas, slopes of 15 to 25%, slopes greater than 25%, forest density, major watersheds, floodplains, wetlands, hydric soils, stream uses and potential sources of contamination, and geologic formations and aquifer yield. The natural features of the County perform a number of important functions, and Chapter 6 outlines the importance of protecting steep slopes, forest, floodplains, groundwater, wetlands, hydric soils, watercourses, lakes, and waterfalls.

All major watersheds within the County are High Quality (HQ) or Exceptional Value (EV) waters. These waters are required to be maintained at their existing quality, except that HQ waters can be degraded if certain social and economic justifications are met. This has particularly important ramifications for determining a strategy and methods for providing public sewage disposal within the County.

Scenic resources which have been mapped include scenic roads, the Upper Delaware Scenic and Recreational River, and observation sites at Lake Wallenpaupack. Scenic roadways are dependent upon retention of natural resources and limiting intrusions along the roads. Maintaining scenic routes enhances the driving experience and appreciation of natural resources for County residents and contributes to tourism.

One element in protecting the resources within the County is to plan for open space. The role of the County Open Space, Greenways, and Recreation Plan will be to further prioritize conservation efforts in the County and target areas for permanent protection. In addition to conserving natural resources and biodiversity, open space acquisition enhances ecotourism; conserves hunting, fishing, hiking, boating and other recreational environments; enhances the quality of life for residents, which can also attract businesses interested in the quality of life for their employees; contributes to the enhancement of property values; conserves historical and cultural landscapes, and thus maintains scenic road corridors; and can prevent added costs to taxpayers, such as expenditures on schools, infrastructure, and services, resulting from new development.

Another means of protecting the County's resources is for municipalities to adopt appropriate zoning and subdivision and land development ordinance provisions. Techniques are detailed in Chapter 13 and include restricting development of resource areas, requiring riparian buffers along rivers and streams, requiring developers to prepare resource analyses of their proposed development and protect identified resources, adopting scenic road overlay zoning, encouraging development techniques which result in open space conservation, and requiring use of best management practices for storm water management.

Administrative means of protecting natural resources include open space, watershed, wellhead protection, and stormwater management planning; acquisition of natural areas or conservation easements on those areas; formation of municipal Environmental Advisory Councils, citizen associations, and conservancies; increasing public awareness; and managing on-lot sewage disposal.

Historic Resources

Pike County contains beautiful towns and buildings, but there has been a tendency to neglect and undervalue the cultural heritage of the County. The Historical Resources Map in Chapter 12 locates historical resources within the County. The complete listing of those resources

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Major themes in Pike County history which have been identified include initial Native American settlement; pioneer settlement; establishment of communities, which were influenced by road, canal, and railroad construction and development of the lumber and wood products, bluestone and tourist industries; and impact of the automobile, which included development of recreational areas, tourist attractions, resorts, foliage tourism, and residential subdivisions.



To protect historic resources and the character of existing communities in the County, municipalities can encourage active involvement of historical commissions to identify, evaluate, mark and foster awareness of historic resources; investigate participation in the State Certified Local Government Program; investigate creation of

historic districts; encourage retention, restoration, enhancement and appropriate adaptive re-use of historic resources and discourage removal of historic structures; and conceive programs, events and interpretive signage and exhibits which emphasize the history of the municipality.

Municipalities can also utilize Historic Resource Overlay Zoning; utilize demolition by neglect provisions in zoning ordinances; adopt Town Center and Rural Village design standards; and require historic resource impact studies for subdivisions and land developments.

Land Use and Infrastructure

The primary land uses within the County are public lands, woodland, hunt clubs, vacant residential lots, and residential land. Agriculture and industry are not major land uses. Even though a third of the County land is in public ownership, there are still many important natural areas which are vulnerable to degradation.

Most of the residential development has occurred within large, private subdivisions. These subdivisions often started as second home developments, generally are managed by community associations, have private street systems, and do not receive full municipal services. In some cases, community associations have difficulty in funding appropriate levels of services and making necessary improvements to substandard infrastructure. The large subdivisions are not typically interconnected and have limited access points, which makes provision of emergency services less efficient.



There are still thousands of vacant lots within the subdivisions, but infill has slowed. Development of these lots is not considered a major component of accommodating growth within the County because of concerns of community associations that additional development will tax their financial resources, concern over the ability of infrastructure to support substantial amount of additional development, and concern for environmental consequences of development on land with severe physical limitations to development.

If existing subdivisions will not accommodate substantial amounts of future growth in the County, availability of public sewer and water systems will be important to minimize land consumption, concentrate development, retain open space, and conserve natural resources within the County. The County Commissioners have solicited interest of the County municipalities in participating in a County-wide Sewer and Water Task Force. The Task Force would be charged with looking at how existing development and future growth areas could best be served by public sewage disposal. Public systems are critical to concentrating growth in future growth areas, as well as serving economic development.

A particularly important issue facing Pike County is how to provide for additional sewage treatment capacity in light of the limitations posed because of the high quality of the County's waters.



As the County's population continues to grow and traffic volumes continue to increase, it is critical to prevent decline of the County's transportation system and proactively work to improve the

system. Crucial to maintaining and enhancing the transportation system is implementing corridor improvement programs. State and federal road corridors are key elements in moving traffic from residential subdivisions to destinations within and outside the County, carrying through traffic, serving tourists, connecting centers within the County, and providing access to commercial development. No major road building projects are anticipated in the County, and this makes it even more important to maintain and improve the County's existing arterial and collector road system. High priority Transportation Improvement Plan (TIP) projects, Inclusion Consideration projects for the TIP, and recommended traffic studies are listed in Chapter 15.

Creation of family sustaining jobs in the County can help address the travel time to work issue. Creation of those jobs can also help address housing affordability concerns in the County. While the housing costs in Pike County are relatively affordable for many people moving from even higher-cost areas in metropolitan New York and New Jersey, the housing costs do present a problem in finding suitable affordable housing for many people residing and working, or on fixed incomes, in Pike County. Young families and families with low to moderate incomes increasingly have a difficult time finding affordable housing in the County.

Economic Development

Economic development is important because enhanced tax revenue from business development can help balance the residential share of the property tax base and family sustaining jobs in a variety of appropriate employment fields can be created and maintained for County residents. It is critical, however, that as development occurs the natural environment must be protected, adequate infrastructure must be in place or put in place to accommodate the impacts of development, and businesses must be willing participants in protecting the County's resources and character.

Economic vitality can be approached directly, such as providing land for commercial and business development, providing opportunities for adaptive reuse of older buildings, fostering partnerships to attract and support the business

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community, marketing opportunities within the County, and strengthening the streetscape of the commercial areas along Main Streets. This is not the entire solution.

This Plan is concerned with preserving the quality of life and conserving and enhancing the special features of the County, assuring that the County will remain an attractive place in which to live and work.

This will be accomplished by managing the pace, quality, and location of development, while preserving natural features, residential neighborhoods, historic resources, open space, and greenway corridors. Planning to achieve a desirable quality of life makes economic sense, as it can encourage additional investment in the County. Preserving community history and culture helps maintain a sense of place and can attract people and businesses.



In Pike County, maintaining a sense of place most importantly involves protecting the natural environment. The rural character, beautiful landscapes, natural resources, recreational opportunities, and important natural areas which have drawn people to visit and live in the County must be retained to continue to make the County such a special place, and to retain the character which distinguishes it from other areas.

The top 15 employers in the County include resorts and recreational organizations, school districts, governments, and retailers. According to the 2000 Census, the industries having the greatest number of establishments in Pike County in 2000 were retail trade, construction, accommodation

and food services. The sectors having the largest number of employees and payrolls in the County, by far, are accommodations and food services and retail trade. The tourist and retail industries typically do not provide an abundance of high-paying jobs.

Efforts are underway to create more family-sustaining jobs in the County. Pike County has begun a process which could lead to preparation of a Pike County Business Incubator Feasibility Study. The Pike County Business Park contains 319 acres along Route 434, south of Route 6. The goals of the Pike County Industrial and Commercial Development Corporation (PIDCO) are to develop sources of funding to support PIDCO endeavors, provide educational opportunities to help local businesses succeed, make businesses aware of and help them to access economic stimulus programs, and assist with the implementation of this Comprehensive Plan.

The Pike County Industrial Development Authority has established goals of assisting and supporting the reorganization and revitalization of the Mountain Laurel Center; working with the County and local government to help provide the infrastructure needed to support the business community; assisting with the implementation of this Plan; helping attract appropriate businesses to Pike County; assisting with the retention and expansion of existing local businesses; and assisting Pike County entrepreneurs interested in starting up a new business.



Key elements of economic development include **Formation**; **Expansion** (variety of business venues available, such as flex rental buildings,

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multiple-tenant buildings, and shovel-ready sites); **Retention** (including workforce education and availability, promotions, and attention to needs); and **Attraction** (marketing).

The rural quality of life, including small towns, recreational and cultural amenities, and beautiful natural landscapes, which has attracted tourists and commuters, could be used as a marketing appeal to attract new businesses and entrepreneurs and build a more diverse economy with higher-paying jobs to the County, if appropriate infrastructure were available.

One approach to attracting tourists and new business is to market Pike County as having the highest quality of life and greenest setting in the greater New York and Philadelphia regions, being the closest rural tourism destination, and the gateway to nature for New York and Philadelphia.

The Comprehensive Plan is intended to proactively manage growth, discourage suburban sprawl, improve the quality of development, and foster a sense of stewardship for the conservation of the natural resources of the County in order to maintain and enhance the quality of life for County residents.

The Plan encourages smart growth - growing in ways that support economic development and jobs; creating strong neighborhoods with a range of housing, commercial and transportation options; and achieving healthy communities that provide families with a clean environment. Elements of smart growth include compact development, permanent protection of open space, greenway systems, infrastructure to concentrate development and attract new business, use of traditional village settings surrounded by rural working land, and the revitalization of existing towns.

CHAPTER 1

INTRODUCTION TO THE PLAN

CHAPTER 1 INTRODUCTION TO THE PLAN

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;*

Specific planning goals and recommendations are outlined in Chapter 9 – Actions to Address Major Issues in the County.



CONTINUITY OF PLANNING IN PIKE COUNTY

This Comprehensive Plan update is a major step in the continuum of planning which has occurred in Pike County since preparation of the initial comprehensive plan in 1991-1993. Functional plans will follow, such as a County-wide Open Space, Greenways, and Recreation Plan, as well as County-wide partnerships to implement the Action Plan contained within this Plan.

This Plan update should be considered a living document. It is not an end point, but an important step in identifying what must be done in the future to successfully address the challenges facing Pike County.

1991-1993 PIKE COUNTY COMPREHENSIVE PLAN

This current comprehensive planning effort for the County is an update of the 1991-1993 Comprehensive Plan. The prior comprehensive plan consisted of six elements:

- “Community Facilities and Services, June 1991
- Transportation Issues, April 1992
- Economic Development Needs, April 1993
- Housing Needs Assessment, July 1992
- Land Use Issues, November 1992
- Interrelationships of Plan Elements, 1992

Companion documents to the Comprehensive Plan included Pike County Growth and Change, Pike County Recorded Subdivisions, Second Home Owners in Pike County, Origin and Destination Study, Milford-Montague Bridge, Dingmans Choice Bridge, and Affordable Housing in Pike County.

In the discussion of major issues facing Pike County, the Comprehensive Plan noted:

“Pike County is a community in transition; transition from a bucolic rural area to a suburban community entangled, for better or worse, in the forces of the regional economy and social framework of the nearby eastern megalopolis. Several major issues have surfaced as pivotal to the future of Pike County. How, and if, these issues are addressed will determine the direction and character of the growth and development of the County. The need for development cannot be ignored, and the importance of environmental quality and rural character must not be forgotten. Balanced growth, that is, economic and community development, in concert with environmental protection and resource conservation, should be the goal.”

In the listing of associated issues, needs, and strategies for residential development, the plan listed strategies which are still being discussed today:

- **Encourage higher density residential development** near current commercial/activity centers to reduce travel distance.
- **Recognize the need to accept higher residential densities** to meet affordable housing needs.
- **Consider use of joint planning and zoning** to “regionalize” residential density to allow for concentration of higher density residential and heavy commercial in

appropriate areas of the County rather than in each individual municipality as dictated by the zoning “fair share” doctrine.

- **Develop adequate community facilities**, i.e. water supply, sewage disposal, roads, etc. in areas where higher density residential and commercial development are encouraged.
- **Identify sewage disposal needs and solutions**, and encourage [PADEP] to permit the use of alternatives.
- **Consider the use of “transfer of development rights”** to shift residential density from “conservation” areas to “development” areas. Development areas must be willing to accept higher density as trade-off for preservation of open space in conservation areas.
- **Encourage the use of planned residential development, cluster development, and lot averaging** to preserve open space and reduce development costs associated with large lot zoning (i.e., road and utility costs).”

This Comprehensive Plan update will update and expand on the pertinent recommendations and data contained in the original Pike County Comprehensive Plan.

INTERNATIONAL COUNTRYSIDE STEWARDSHIP EXCHANGE

In 1995, the International Countryside Stewardship Exchange In Rural Pennsylvania, a program of the Countryside Institute coordinated by the Center for Rural Pennsylvania, looked at the challenges facing Pike County. Its report, based on the findings of an Exchange Team of seven international rural development professionals, noted that:

“Pike County, containing some of the most beautiful scenery and landscapes found anywhere in the Northeast, is being transformed into a bedroom community where the workforce relies heavily on the New York-New Jersey employment centers. The fastest growing county in Pennsylvania in terms of percentage population change; it is being impacted by the influx of new residents from the New York City metropolitan area. Pike County is rich in scenic, natural, historic, and cultural resources and the challenge for the County is to strike a balance between the essential economic growth and development of the County, while at the same time protecting the scenic, cultural, and natural environment which drives tourism – the County’s largest industry.”

The Exchange Team report recognized what a special place Pike County is, and that the County is blessed with a multitude of assets which at times are undervalued. The Exchange Team recommended that a County-wide visioning process be conducted to address the lack of an overall vision of what the County residents wanted Pike



County to be in the future. A direct result of the International Countryside Stewardship Exchange was the initiation of a County-wide visioning process.

COUNTYWIDE VISIONING PROCESSES

Since the development of Pike County's last Comprehensive Plan, the County has had two separate visioning efforts. In 1996, a series of three visioning workshops were conducted. Workshop participants identified environmental resource protection, regional planning and zoning, and preservation of historic resources as the most important issues to the future of Pike County. As a result of these visioning workshops, six task forces were established to further define priorities, goals and objectives for the County's future.

A second visioning effort conducted in 1998 assembled more than 100 Pike County residents to begin the "Pike County Visioning" process. At the core of this visioning effort was the establishment of six task forces, each composed of approximately 25 participants. The task forces included economic development, quality of life, environment, government, infrastructure, and land use. The groups met regularly over a 14-month period. *Pike County Visioning: 1998 to 2020: The Final Report* provided the resulting major recommendations and outcomes identified by the task forces.



The Visioning Benchmark Committee, an outcome of this second visioning process, was named to work towards the implementation of the recommendations identified. The Committee continued actively providing input to the County and working to carry out implementation tasks until late 2004 when the Commissioners integrated their efforts with the Comprehensive Plan Citizens Advisory Board for this Plan update.

The vision, goals and objectives presented in Chapter 3 are based on these recent processes which have occurred in the County.

MANAGING GROWTH

Pike County Visioning was undertaken to "enable Pike County to successfully enter the 21st Century and meet the parameter of sustainable growth and development while still maintaining the quality of life that the residents of Pike County expect." A concept

phrase used in the Visioning Final Report is that “growth is inevitable, quality is planned...” Growth will continue in Pike County, but several themes will be emphasized in this Comprehensive Plan: *growth must be managed, the quality of development must be improved, and development must occur with recognition and protection of the natural resources of Pike County.* Thus, the title of this Plan, “Growing...Naturally.” Growth must occur in a logical manner, recognize existing communities, follow available infrastructure, and recognize the special natural character of Pike County. Sprawl is not considered an acceptable alternative. As Thomas Hylton, author of “Save Our Lands Save Our Towns” has stated, “...sprawl has already degraded our commonwealth, and it threatens to rob us of our cities and towns, our farms and forests, of those things we hold most dear: our sense of place and belonging.”

STEWARDSHIP

The report of the Pennsylvania 21st Century Environment Commission states that “We are all stewards, charged with the care of something that belongs to someone else. To be good stewards, you must begin now, with purpose and urgency, to build on the foundations we have.” Critical to the future of Pike County is a sense of stewardship of the County’s resources and initiation of actions to protect those resources in the face of growth. This Plan is not an attempt to stop growth, but to manage it with a sense of urgency before it is too late.

PARTNERSHIPS

Another theme of this plan is *creating partnerships to achieve the vision for the County.* The Pike County Commissioners are committed to working with the County’s 13 municipalities and state and federal governments to address the pressing issues facing all Pike County municipal officials and residents. Municipal officials in the County, having adopted their own specific land use controls, have a great responsibility for the future development and overall success of their planning efforts. The County, recognizing the importance of the role and duties of municipal officials, will continue to provide and enhance a program of technical and other assistance to municipalities to help them plan for the future of their communities, in the context of the County Plan and other functional County plans. The Pike County Office of Community Planning and Pike County Conservation District will be spearheading efforts on behalf of the Pike County Board of Commissioners.

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.



WHY HAVE A COMPREHENSIVE PLAN

Abraham Lincoln once said, “We must ask where we are and whether we are tending.” The Comprehensive Plan does just that – it takes stock of where the County is and where it is headed. The focus of the first portions of this Plan is to identify issues and challenges, where Pike County should be headed, and how to get there. Background information will be presented later in this plan.

Why prepare a Comprehensive Plan and what does it accomplish?

1. *The Plan forms the basis for **future partnerships** between the County and municipalities in addressing growth issues within Pike County.*
2. *The Comprehensive Plan identifies how the County and its 13 municipalities can work together proactively to **shape the future** of the County in accordance with the shared vision for Pike County.*
3. *The Plan enables the County and the municipalities to **manage growth**, rather than just react to the growth.*
4. *The Plan contains **goals, objectives, policies, and strategies** for realizing the vision for Pike County in the 21st Century.*
5. *The Comprehensive Plan **identifies the many resources** within Pike County which are worthy of protection and preservation.*
6. *The Plan **compiles data on conditions** within the County for current use and identification of long-term trends.*
7. *The Plan creates an improved **GIS database**, which can be used by the County and municipalities in future planning efforts.*
8. *The Plan **identifies challenges, issues, and opportunities** to be addressed in the following years.*
9. *The Plan **identifies implications of current land use policies** in the County and the ability of current regulations to protect the County’s resources.*
10. *The Plan **contains policies** that will serve as a guide for public and private decision making.*
11. *The Comprehensive Plan provides a **program of actions** to implement policies, and thus realize the goals and objectives, and ultimately the Vision for the County.*
12. *The Plan contains a **foundation for municipalities** in preparing their own plans and land use regulations.*
13. *The Comprehensive Plan establishes a basis for future **consistency reviews** of plans and land use regulations within the County.*
14. *Counties are **required to have a Comprehensive Plan** by the Pennsylvania Municipalities Planning Code.*

This Comprehensive Plan supports major initiatives underway in the County, such as watershed planning and water resource protection; downtown revitalization efforts in Milford and Matamoras; promotion of smart growth techniques; and efforts of conservation groups to preserve open space.

Municipal Guideline

This 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.

PREPARATION OF THE PLAN

This plan was prepared through the efforts of the Pike County Commissioners, Pike County Office of Community Planning, and an appointed Citizens Advisory Board, working with a planning consultant.

Valuable input to the plan was gained through a survey of County residents, a survey of municipal officials, public meetings in October 2004, feedback at the 2003 and 2004 Annual Conventions of the Pike County Association of Township Officials, and citizen input at official public meetings and hearings.

The foundation for this plan was provided by Pike County Visioning.

Maps were prepared with the assistance of Pike County GIS, the Pike County Conservation District, and the Milford Experimental Forest.

CHAPTER 2

CONTEXT FOR PLANNING ACTIONS

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In studying the possible reasons as to why Pike County continues to grow, we need to assess the past and current events. In this chapter, we will look at our past and current growth trends, project our future growth, present possible issues and challenges that need to be considered, and discuss the keys to dealing with growth and the opportunities that can be realized.

GROWTH IN PIKE COUNTY

It is well documented that Pike County possesses desirable features, most notably the natural environment, and proximity to metropolitan areas of New York and New Jersey. As intensive growth continues, the County's natural environment and its residents' quality of life can be diminished without appropriate land use controls in place.



The Numbers:

Pike County was the fastest growing County in Pennsylvania between 1990 and 2000 (65.6% population increase) and the fastest growing County in Pennsylvania since 1970. Further, Pike County was the 36th fastest growing County in the U.S. between 1990 and 2000, and the fastest growing in Northeastern United States.

Pike County continues to be the fastest growing County in Pennsylvania with an estimated 4% population increase between 2002 and 2003 and 3.6% increase from 2003 to 2004 and a 4.2% increase between 2004 and 2005. In comparison to Pike County's growth, according to the U.S. Census Bureau, Monroe County was next with 3.6%, 2.8%, and 2.8% growth, respectively. Thirty-three (33) of the State's 67 counties lost

population from 2002 to 2003, 32 lost population from 2003 to 2004, and 31 from 2004 to 2005. Pike County had the 72nd highest population percentage increase among U.S. counties from 2004 to 2005.

The estimated population total for Pike County continues to show the growth pressures. County growth between 2000 and 2004 went from 46,302 to 56,337, up 10,035 or 21.7%.

Currently, there are about 37,000 acres of developed land in the County and approximately 131,000 “buildable” acres in the County. There are about 193,000 acres of land in the County which are not readily buildable because of public ownership or limiting natural features.

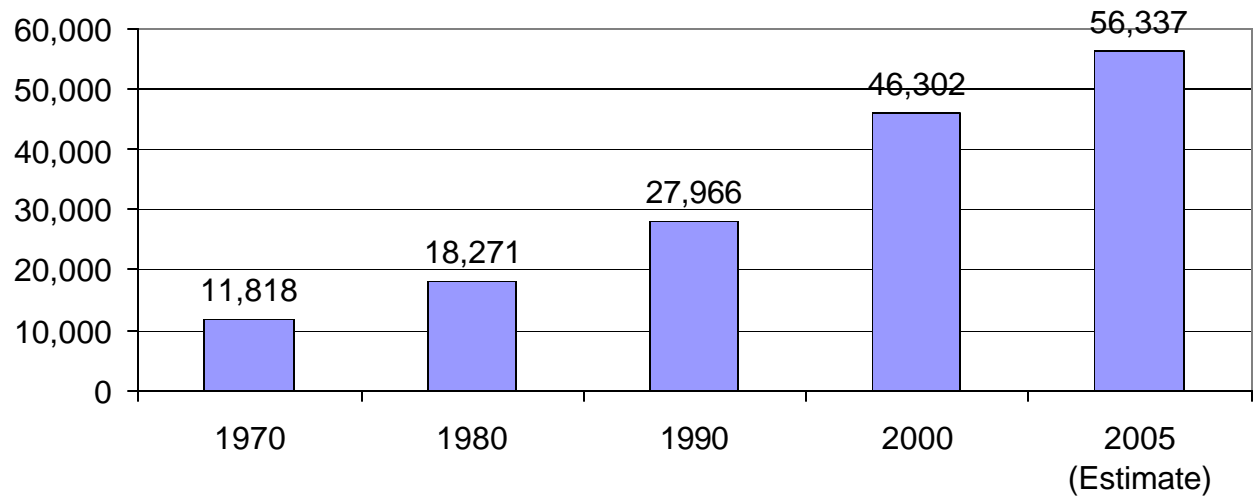
Why does Pike County continue to grow?

People are drawn to the County’s natural resources, beauty, quietness, recreational opportunities, and quality of life. Also contributing to the growth are the relatively low housing costs and taxes compared to New York and New Jersey metropolitan areas. Individuals are also attracted to the existing large subdivided tracts of land and the additional land available for development, and somewhat favorable regulatory climate for developers as compared to neighboring New York and New Jersey.



Pike County has a perceived relative safety as compared to neighboring New York and New Jersey. Also, due to the existing sufficient access to metropolitan New York and New Jersey via I84, Routes 206 and 15, I80, and mass transit, there are acceptable, though long, commutes. Milford Borough is 70 miles from Newark, New Jersey, 75 miles from New York City, and 125 miles from Philadelphia, Pennsylvania.

Table 1
Pike County
Population Growth
1970 - 2005



Source: U.S. Census Bureau

IMPLICATIONS OF GROWTH

The rapid growth of population in the County creates several unintended consequences. While people are attracted to Pike County because of the abundant natural resources, open space, and high water quality, the resulting development adversely affects these resources that they were drawn to.

An attraction of Pike County is the relatively favorable tax situation compared to the metropolitan areas. As the population of the County increases, demand for municipal, county, and school district services increase. Infrastructure upgrades are also inevitably necessary. This demand creates an upward pressure on taxes which is not offset by corresponding increases in the commercial and industrial tax base.

The school districts are particularly affected when second homes are converted to permanent residences as more school-aged children will be educated in Pike County. There are insufficient increases in value of property to offset increased expenses for educating children.

Accessibility to places of work outside the County also contributes to the development of the County as a bedroom community. Roads will become more congested, and the commuting times will increase if the road network is not upgraded, additional access to mass transit is not provided, and/or additional local job opportunities are not provided.

The availability of public sewage disposal is important to managing growth in the County and reducing conversion of open space to residential land. Many of the soils in Pike County are not suitable for onsite sewage disposal. The high quality of Pike County streams makes it difficult to utilize stream discharge from sewage treatment plants. Winter conditions, soil conditions, and the need for large areas of land make land application of sewage effluent more complicated.

To compound this issue, land values in the County are increasing, and more upscale housing is being built. Existing housing prices in the County are also on the rise. Average single-family home sale price in 2000 was \$105,314 compared to \$197,809 in 2005, an 88% increase. One of the attractions of the County has been the relatively low housing prices compared to New York and New Jersey metropolitan areas. While the increase in housing prices may be affordable to people working outside the County, it is often more difficult for people who live and work in Pike County to afford housing.

Transience, Change and Developing a Sense of Permanence

Two major themes, Transience and Change, are presented in the *Historical Resources Study* discussed in Chapter 12. The County experienced an agricultural period, a period of timbering, a period of quarrying, development of the tourist industry, and residential development. Residential development is also viewed as exhibiting transience, because

many of the people who live in the County commute to work outside the County and many of the residences built in the County were initially built as second homes.

An objective of this Comprehensive Plan is to help create a greater sense of permanence within the County. Developing a sense of permanence includes:

- Preserving the abundant natural resources and open space within the County.
- Protecting and enhancing existing communities.
- Building an increased sense of identity for the County and providing community facilities within the County, such as health care facilities and educational facilities, to serve permanent residents.
- Developing infrastructure to help diversify and expand the economy of the County, to provide jobs to keep workers and young people within the County.
- Securing development of true communities, of mixed use, that are not solely “bedroom communities”.
- Fostering increased interest and participation in the civic affairs of the community among people who live within Pike County.



POPULATION PROJECTIONS

Population projections help to predict future needs and conditions. They also enable us to calculate projected land area demand needed to accommodate projected growth and the impacts on infrastructure needs. Pike County's situation is unique as migration plays a major role in projecting the rate of population increase. Birth and death rates are also utilized to formulate projected population growth, however, some inconsistencies in birth and death reporting may occur due to the lack of a hospital within the County and the use of Zip Codes that cross county lines. As land and housing values and costs continue to escalate in those urbanized markets, and the comparable costs in Pike County remain cost effective and desirable, the in-migration of new residents will continue. The state of the regional economy also plays a major role in the actual growth of the County.

The following table, prepared by the Pike County Office of Community Planning, presents Pike County Population Projections for 2000 to 2010. For the County, the starting point was the 2000 Census figure of 46,302. U.S. Census Bureau estimates were used for 2001, 2002, 2003, and 2004. The average annual increase from 2000 to 2004 was used for each year from 2004 to 2010 to project the population for the following year. It is projected that by 2010 the County population will be 69,347, an increase of 23,045 or 49.8% from 2000 to 2010. This compares to an increase of 54.6% from 1970 to 1980, 53.1% from 1980 to 1990, and 65.6% from 1990 to 2000. These continued high percentage rates of population increase are attributable to the County's proximity to the metropolitan New York-New Jersey area.

Table 2
Pike County and Municipal Population Projections - 2000 – 2010

	Total Population Census 2000	Total Population: July 1, 2001	2000 - 2001 % increase	Total Population: July 1, 2002	2001-2002 % increase	Total Population: July 1, 2003	2002 - 2003 % increase	Total Population: July 1, 2004	2003-2004 % increase	2000-2004 Average % Increase	Total Population: July 1, 2005	2004 - 2005 % increase	Total Population: July 1, 2006	2005 - 2006 % increase	Total Population: July 1, 2007	2006 - 2007 % increase	Total Population: July 1, 2008	2007 - 2008 % increase	Total Population: July 1, 2009	2008 - 2009 % increase	2010 Estimate	2009 - 2010 % increase	2000 to 2010 % increase
Pike County	46,302	48205	3.3%	50086	4.3%	52227	3.6%	54117	3.6%	4.2%	56401	4.2%	58780	4.2%	61261	4.2%	63846	4.2%	66540	4.2%	69347	4.2%	49.8%
Blooming Grove Twp	3621	3763	3.9%	3895	3.5%	4062	4.3%	4232	4.2%	4.2%	4411	4.2%	4597	4.2%	4790	4.2%	4993	4.2%	5203	4.2%	5423	4.2%	49.8%
Delaware Township	6319	6638	5.0%	6918	4.2%	7235	4.6%	7548	4.3%	4.9%	7915	4.9%	8300	4.9%	8703	4.9%	9127	4.9%	9570	4.9%	10036	4.9%	58.8%
Dingman Township	8788	9264	5.4%	9740	5.1%	10267	5.4%	10699	4.2%	5.4%	11281	5.4%	11894	5.4%	12541	5.4%	13222	5.4%	13941	5.4%	14699	5.4%	67.3%
Greene Township	3149	3263	3.6%	3356	2.9%	3456	3.0%	3509	1.5%	2.9%	3609	2.9%	3712	2.9%	3819	2.9%	3928	2.9%	4040	2.9%	4155	2.9%	32.0%
Lackawaxen Township	4154	4289	3.2%	4436	3.4%	4599	3.7%	4800	4.4%	3.9%	4987	3.9%	5180	3.9%	5382	3.9%	5591	3.9%	5808	3.9%	6034	3.9%	45.3%
Lehman Township	7515	7866	4.7%	8167	3.8%	8526	4.4%	8969	5.2%	4.8%	9403	4.8%	9858	4.8%	10334	4.8%	10834	4.8%	11358	4.8%	11908	4.8%	58.5%
Matamoras Borough	2312	2366	2.3%	2427	2.6%	2487	2.5%	2541	2.2%	2.5%	2604	2.5%	2668	2.5%	2734	2.5%	2802	2.5%	2872	2.5%	2943	2.5%	27.3%
Milford Borough	1104	1130	2.4%	1156	2.3%	1176	1.7%	1199	2.0%	2.2%	1225	2.2%	1251	2.2%	1278	2.2%	1306	2.2%	1334	2.2%	1362	2.2%	23.4%
Milford Township	1292	1338	3.6%	1384	3.4%	1463	5.7%	1539	5.2%	4.8%	1613	4.8%	1690	4.8%	1770	4.8%	1855	4.8%	1944	4.8%	2037	4.8%	57.6%
Palmyra Township	3145	3244	3.1%	3342	3.0%	3447	3.1%	3544	2.8%	3.2%	3656	3.2%	3772	3.2%	3892	3.2%	4015	3.2%	4143	3.2%	4274	3.2%	35.9%
Porter Township	385	397	3.1%	408	2.8%	417	2.2%	430	3.1%	2.9%	443	2.9%	455	2.9%	469	2.9%	483	2.9%	497	2.9%	511	2.9%	32.8%
Shohola Township	2088	2181	4.5%	2260	3.6%	2336	3.4%	2334	-0.1%	2.9%	2403	2.9%	2474	2.9%	2546	2.9%	2621	2.9%	2699	2.9%	2778	2.9%	33.0%
Westfall Township	2430	2528	4.0%	2606	3.1%	2692	3.3%	2773	3.0%	3.5%	2871	3.5%	2972	3.5%	3077	3.5%	3186	3.5%	3298	3.5%	3414	3.5%	40.5%

The following table presents population projections for Pike County from 2010 to 2030 based on two different methods. The underlying assumption for both methods is that the projected trend from 2000 to 2010, whether by percentage or numeric method, will continue in the future.

Method 1 (Percentage Projection) projects a 49.8% per decade increase from 2010 to 2030. 49.8% is the projected increase in population from 2000 to 2010.

Method 2 (Numerical Projection) utilizes the estimated population growth from 2000 to 2010 to project to 2030. At the current estimated growth rate, the estimated population increase from 2000 to 2010 is 23,045.

Table 3
PIKE COUNTY POPULATION PROJECTIONS

	<u>2010</u>	<u>2020</u>	<u>2030</u>
Method 1:	69,347	103,882	155,615
Method 2:	69,347	92,392	115,437

HOUSEHOLD AND ACREAGE REQUIREMENTS

Once population is projected, it is possible to prepare estimates of household formation and the resulting acreage needed to accommodate that population. The following two tables present household and acreage requirements for Pike County from 2000 to 2030.

Table 4
HOUSEHOLD AND ACREAGE REQUIREMENTS 2000-2030
Using Method 1 Population Projection

Projected Population Increase 2000-2030	Average Household Size ¹	Projected Household Increase	Acreage Requirements Assuming 10,000 Sq.Ft. Lots	Acreage Requirements Assuming 20,000 Sq.Ft. Lots	Acreage Requirements Assuming 1 Acre Lots	Acreage Requirements Assuming 2 Acre Lots
109,313	2.63	41,564	11,875	24,449	51,955	103,910

Table 5
Using Method 2 Population Projection

Projected Population Increase 2000-2030	Average Household Size ¹	Projected Household Increase	Acreage Requirements Assuming 10,000 Sq.Ft. Lots	Acreage Requirements Assuming 20,000 Sq.Ft. Lots	Acreage Requirements Assuming 1 Acre Lots	Acreage Requirements Assuming 2 Acre Lots
69,135	2.63	26,287	7,511	15,463	32,859	65,718

¹From 2000 Census Information

-Assume 20% of tract will be devoted to uses other than lot areas

-Assume Net densities of 3.5; 1.7, 0.8, and 0.4 dwelling units per acre, respectively.

The first column indicates the projected population increase from 2000 to 2030. The second column presents the average household size from the 2000 Census. Dividing the projected population increase by the average household size provides the projected household increase.

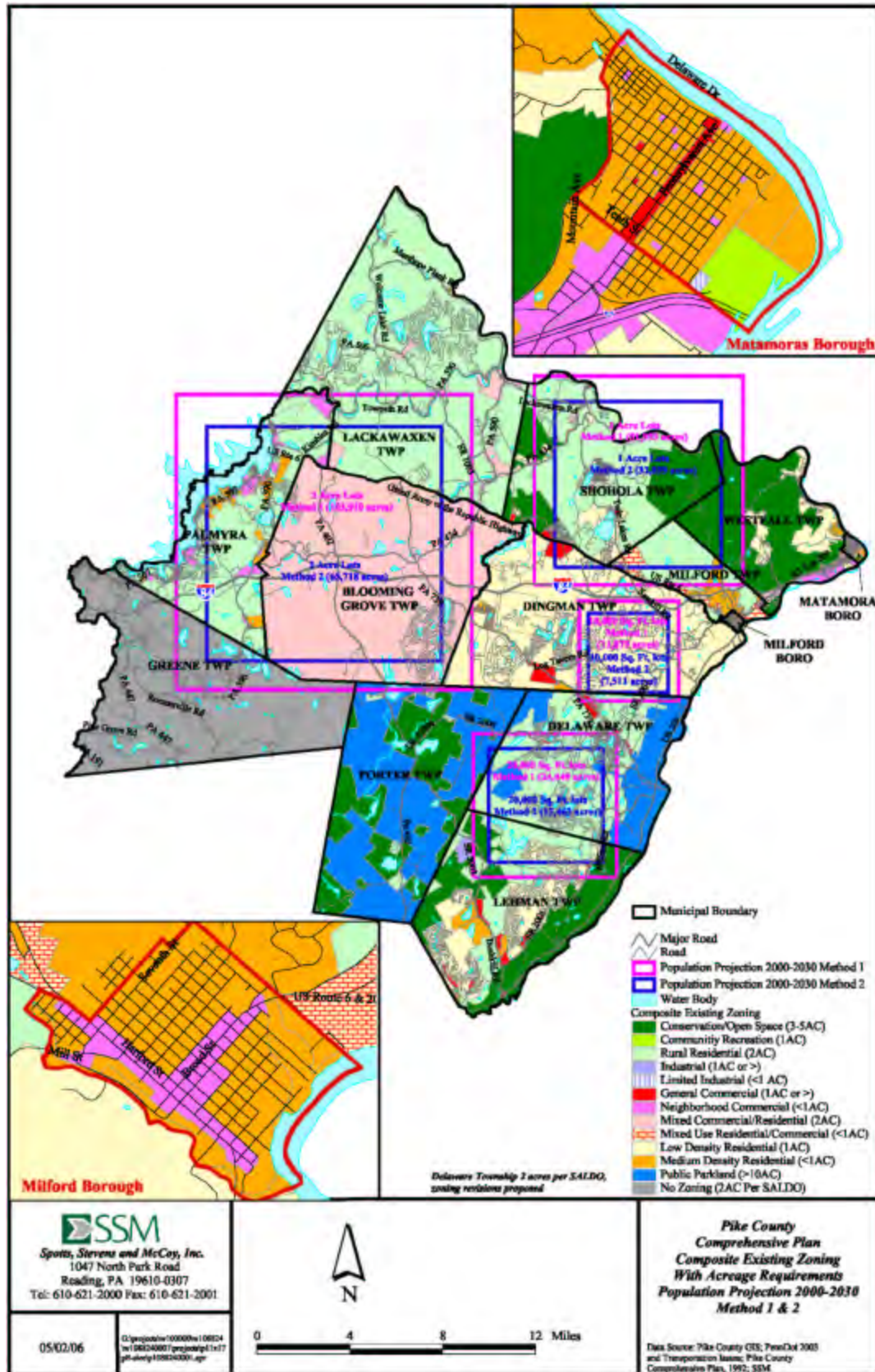
The next four columns indicate the acreage necessary to accommodate the projected household increase, based on different assumptions as to lot size. The first assumption is 10,000 sq. ft. lots, slightly less than $\frac{1}{4}$ acre. The second assumption is 20,000 sq. ft. lots, somewhat less than $\frac{1}{2}$ acre. The third assumption is one acre lots. The fourth assumption is two acre lots.

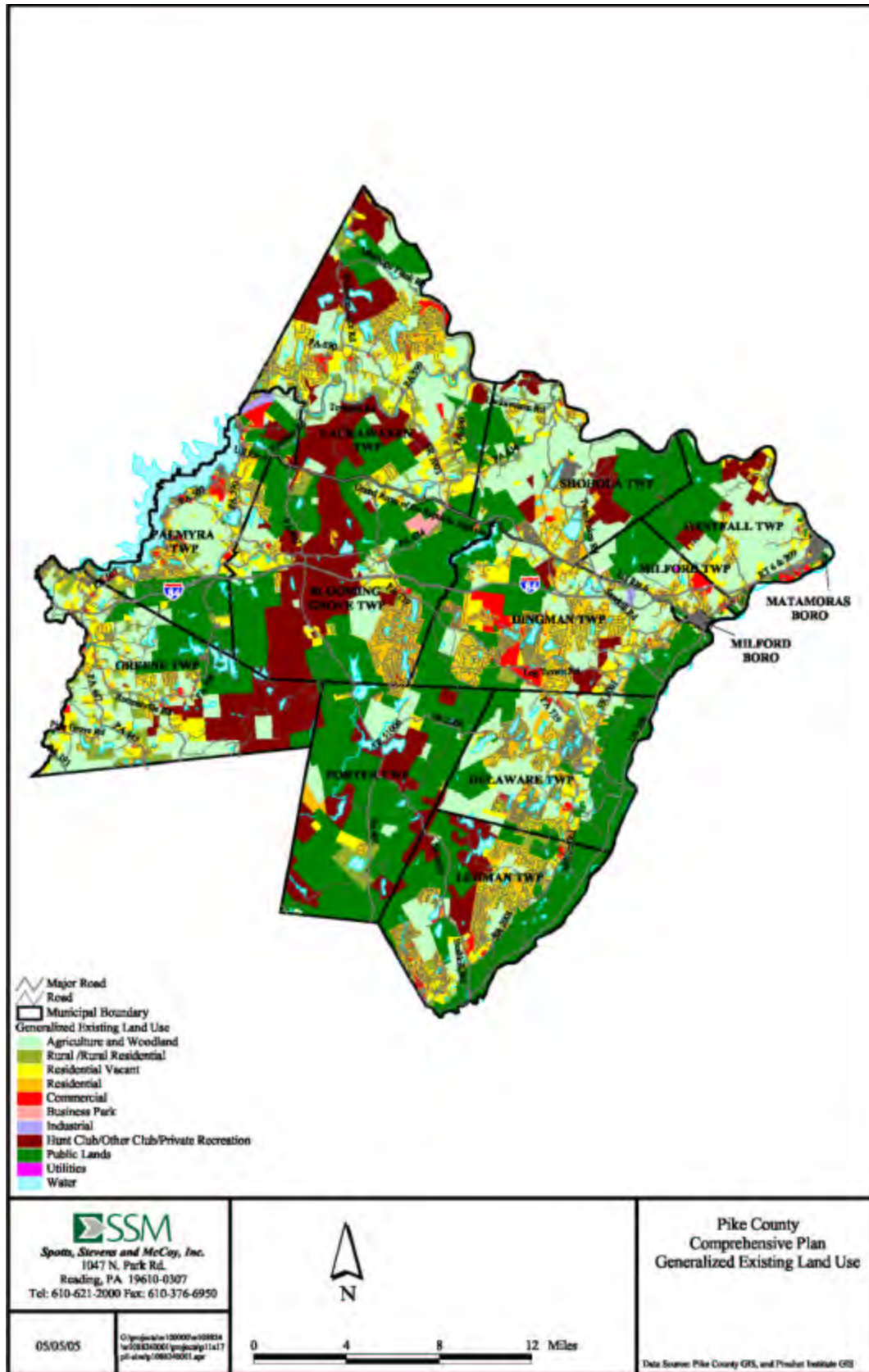
The estimates assume that 20% of developed land would be devoted to infrastructure and other uses than lot areas, and so the net densities of development would be 3.5, 1.7, 0.8, and 0.4 dwelling units per acre, respectively.

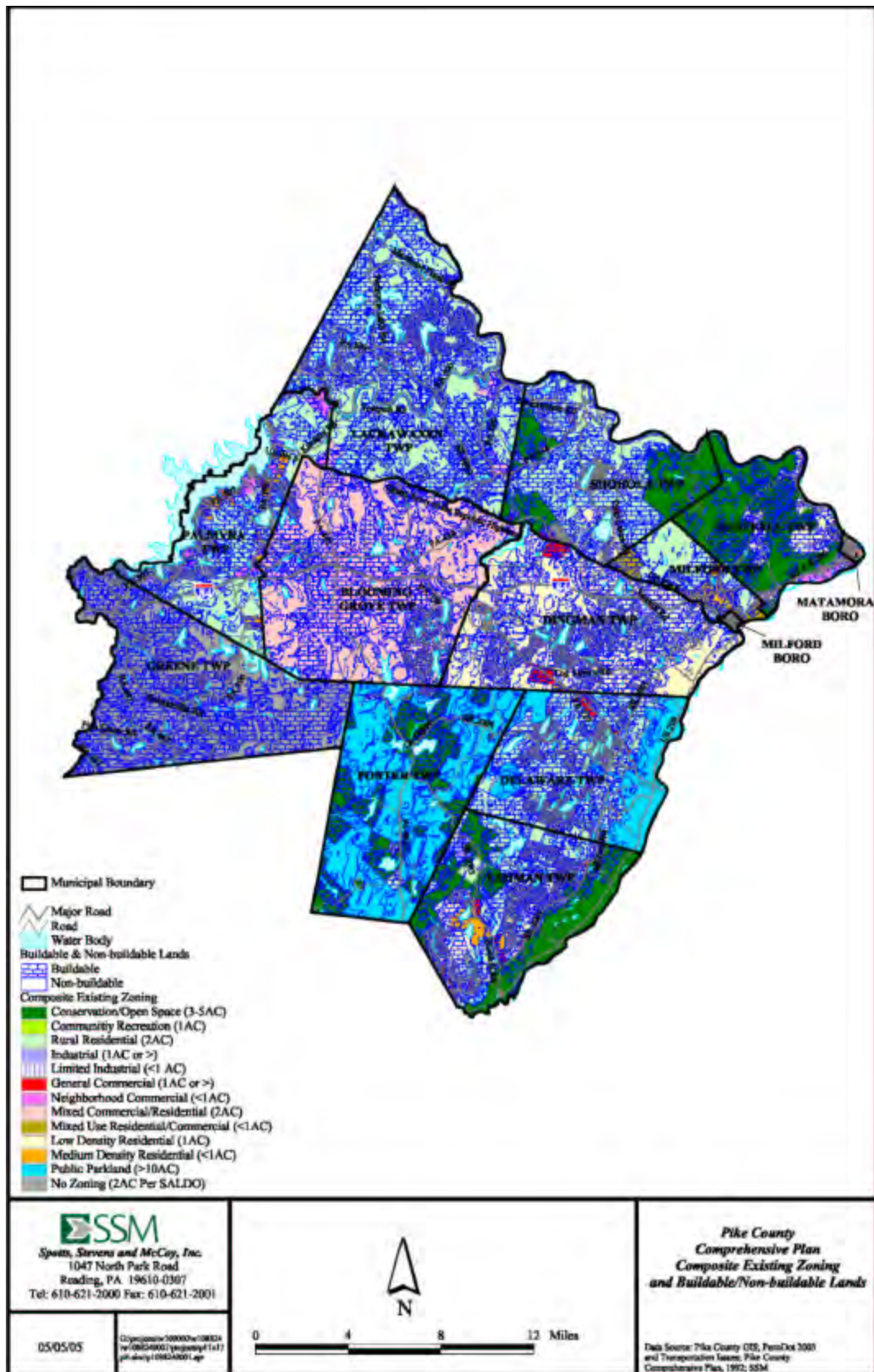
Acreage Requirements Increase as Lot Size Increases

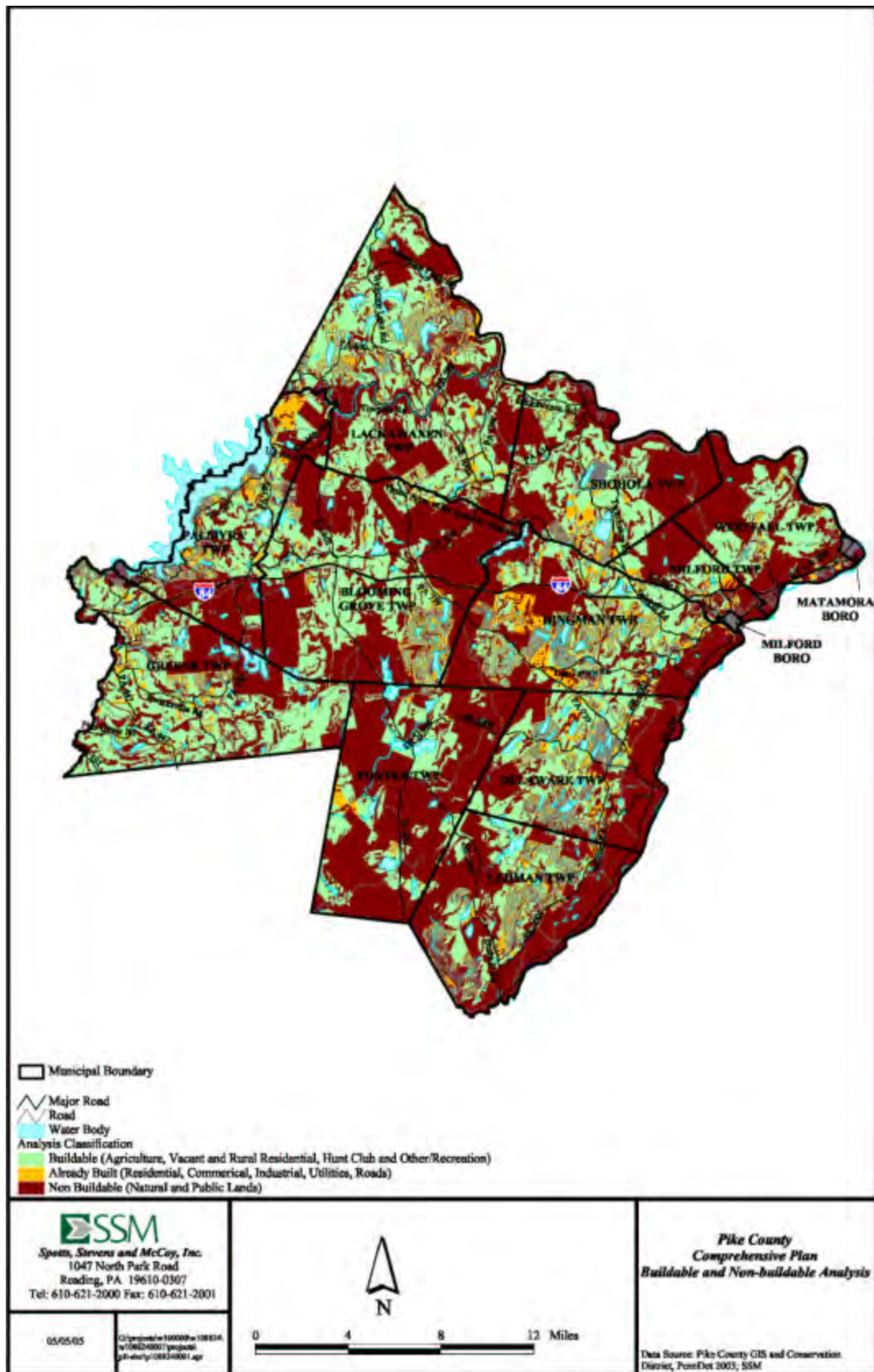
Acreage requirements increase as the lot size increases. Under projection Method 1, the acreage to accommodate population increases, assuming 10,000 sq. ft. lots, would be 11,875. Assuming two acre lots, the required acreage would be 103,910. Under projection Method 2, acreage requirements assuming 10,000 sq. ft. lots would be 7,511. The acreage requirement assuming 2 acre lots would be 65,718. Acreage requirements are shown graphically on the following map. The following three maps provide information that support the Build-Out Analysis.

Zoning policies which allow higher densities of development in designated growth areas when public sanitary sewer and water facilities are available, and infrastructure planning to serve designated growth areas with public sewer and water, are crucial to reducing land consumption in the County. Minimizing land consumption is, in turn, crucial to maintaining rural character in Pike County and protecting vulnerable natural areas. Given the expected continuation of substantial growth in the County, land consumption will be relatively enormous if one and two acre lots are used for most development.









BUILD-OUT ANALYSIS

Factors in the Analysis

A build-out analysis is prepared in order to get an idea of the implications of existing land use policies for future development. When preparing the build-out analysis for Pike County, a series of four maps were prepared. Three of those maps are depicted in the preceding pages.

The first map indicates generalized existing land use within the County, based upon Pike County GIS information.

The second map indicates buildable and non-buildable lands using the Composite Existing Zoning Map as a base. The composite existing zoning map showing zoning within the County is based upon municipal zoning ordinances. Greene Township is not zoned, but the subdivision and land development ordinance establishes a two-acre minimum lot size. The areas in the blue brick pattern are considered buildable and those with no such hatching are considered non-buildable. The non-buildable lands include public lands, existing developed lands, and lands with natural limitations to development, including slopes greater than 25 percent, wetlands, floodplains, and hydric soils.

The third map in the series indicates buildable land, already built land, and non-buildable land.

The build-out analysis is not an exact science, but it does give us a reasonable magnitude of future development under existing zoning policies. Existing zoning is taken at a specific moment in time, and can be changed. While the zoning categories have been generalized to fit into categories noted on the map, there are individual differences from municipality to municipality. Existing land use is also based on a moment in time, and is generalized. While it is the general policy of this plan that slopes over 25 percent, floodplains, wetlands, and hydric soils should not be developed, and some municipalities do not allow them to be developed, development still occurs on these resources in some areas of the County. Hunting & Fishing Clubs are considered buildable land; however, legal documents creating some of the clubs may make development difficult. Calculations as to density of development are generally based upon lack of public sewer and water, which is currently the case in the majority of the County. The projected population for the calculated housing units is based upon the 2000 Census average household size of 2.63 for Pike County. New households moving into the County may have a larger average household size.

Some of the factors noted in the preceding paragraph tend to result in a higher estimated population, some of them tend to result in a lower estimated population. Taken together,

we believe that the estimated population increase is a reasonable estimate of what the magnitude of the population increase could be based upon existing land use policies.

Build-Out Analysis Table

The following table, Table 6, indicates zoning categories of land that is considered buildable in the first column. In the second column, the acres in each zoning category are indicated. In the third column, 20% of the total acres in each zoning category are calculated. It is assumed that 20% of the total acres will be designated for infrastructure and are not included within building lots.

The fourth column indicates available acres for development, subtracting 20% from the total acreage for each zoning category. The fifth column indicates the estimated number of development units per zoning category, based upon the density of the zoning category. A range is given for Conservation/Open Space because of the range of minimum lot sizes. The next column indicates the projected population which could be accommodated within each zoning category. The number of development units is multiplied by the average household size of 2.63 to total population.

In order to assess how this build-out analysis will impact our infrastructure, water consumption, sewage generation and vehicle trip ends were also calculated. In planning for growth, appropriate infrastructure needs must be addressed prior to when the need is projected.

Results of Analysis

The resultant estimated population increase at the projected build-out is a range of 150,121 to 153,771 residents. The estimated July 1, 2004 population of Pike County was 54,117. The projected population increase from the build-out analysis is approximately three times the existing population.

The final three columns estimate some of the impacts of the estimated population increase. The column on Water Consumption estimates water requirements in gallons per day based upon the projected population increase. Consumption is approximately 11,000,000 gallons per day.

Sewage Generated is an estimate of the sewage which would be generated from the projected population increase, and totals approximately 12,000,000 gallons per day.

A final column indicates afternoon peak hour vehicle trips. The additional vehicle trips for the peak P.M. hour are approximately 365,000.

Table 6
PIKE COUNTY BUILD-OUT ANALYSIS

Zones by Buildable Land	Acres	20% Infra- structure	Available Acres	Develop- ment Units	Projected Population* Increase	Water Consumption 175 Gpd per Household 475 Gpd/Acre Commercial 700 Gpd/Acre Industrial	Sewage Generated 200 Gpd per Household 500 Gpd/Acre Commercial 750 Gpd/Acre Industrial	P.M. Peak Hr. Vehicle Trips Generated Trips/Unit Trips/Sq. Ft.
Conservation/Open Space (3-5AC)	13,012.42	2,602.48	10,409.94	3469- 2081	9123-5473	607,075-364,175 Gpd/Household	693,800-416,200 Gpd/Household	3,503-2,101 Trips/Unit
General Commercial (1AC or >)	1,487.67	297.53	1,190.14	1,190	NA	565,250 Gpd/Acre	595,000 Gpd/Acre	180,672 Trips/Sq. Ft.
Industrial (1AC or >)	309.38	61.88	247.50	247	NA	172,900 gpd/acre	185,250 Gpd/Acre	8,069 Trips/Sq. Ft.
Low Density Residential (1AC)	19,010.00	3,802.00	15,208.00	15,208	39,997	2,661,400 Gpd/Household	3,041,600 Gpd/Household	15,360 Trips/Unit
Medium Density Residential (<1AC)	2,249.07	449.81	1,799.26	1,799	4,731	314,825 Gpd/Household	359,800 Gpd/Household	1,816 Trips/Unit
Mixed Use Residential/Commercial (<1AC)	735.61	147.12	588.49	588	1,546	102,900 Gpd/Household	117,600 Gpd/Household	593 Trips/Unit
Mixed Commercial/Residential (2AC)	16,812.72	3,348.00	13,464.72	6,732	17,705	1,178,100 Gpd/Household	1,346,400 Gpd/Household	6799 Trips/Unit
Neighborhood Commercial (<1AC)	907.32	181.46	725.86	725	NA	344,783 Gpd/Acre	362,930 Gpd/Acre	118,253 Trips/Sq. Ft.
No Zoning (2AC)	21,603.31	4,320.66	17,282.65	8,641	22,725	1,512,175 Gpd/Household	1,728,200 Gpd/Household	8,727 Trips/Unit
Public Parkland (>10AC)	59.72	11.94	47.78	4	10	700 Gpd/Household	800 Gpd/Household	4 Trips/Unit
Rural Residential (2AC)	55,071.15	11,014.23	44,056.92	22,028	57,934	3,854,900 Gpd/Household	4,405,600 Gpd/Household	22,248 Trips/Unit
Total	131,258.38	26,237.13	105,021.25	60632- 59,244	153,771- 150,121	11315,008,- 11,072,108 Gpd	12,836,980- 12,559,380 Gpd	366,044- 364,642 Trips

*Based on an average household size of 2.63.

SUMMARY OF COMMUNITY SURVEY RESULTS

In order to assess the needs of the residents of the County of Pike, an extensive survey was distributed throughout the County in June and August of 2004. 25,000 surveys were distributed in total via local newspapers and magazines as well as numerous meetings and presentations. Complete results of the Community Survey are presented in Appendix 1. Some of the results of the survey follow:

- *The three reasons most cited as influencing the original decision to live or spend time in Pike County were Natural Environment (36.2%), affordable housing costs (16.4%), and low taxes (13.2%).*
- *72 percent of respondents indicated they were satisfied or very satisfied when asked if their expectations of Pike County had been met.*
- *67.4 percent of respondents said residential development over the past ten years was very excessive or excessive. 27.6 percent said commercial development was very excessive or excessive and 13.2 percent said industrial development was very excessive or excessive.*
- *The aspects of Pike County with which respondents were most satisfied were environmental quality (87% very satisfied or satisfied), quality of life (83.1%), rural atmosphere/open space (81.2%), fire service (74.8%), and recreational opportunities (71.3%).*
- *The aspects of Pike County with which respondents were least satisfied were job training opportunities (11.5% very satisfied or satisfied), job opportunities (13.6%), higher education (21.9%), day care facilities (22.2%), and rate of development (28.3%).*
- *The issues which the highest percentage of respondents strongly agreed or agreed were important planning issues facing Pike County in the next ten years were water quality protection (95.2%), preserving environmentally sensitive areas (93.7%), growth management (91.9%), road improvements (91.5%), forestland preservation (90.3%), and open space preservation (89.7%).*
- *The initiatives for which the highest percentages of respondents strongly agreed or agreed with a tax increase to support the initiative were road improvements (67.7%), protection of environmental resources (60.8%), increased police/public safety (60.3%), preserving forestland/farmland (60.3%), and preserving open space (58.0%).*
- *The services of which the highest percentage of respondents strongly agreed or agreed more are desirable were preservation of forestland/farmland (75.5%), health services (73.9%), recreational opportunities (50.5%), technology based firms (47.8%), and telecommuting (47.3%).*
- *The services of which the lowest percentages of respondents strongly agreed or agreed more are desirable were Strip malls (10.6%), big box retail (12.5%), medium to heavy manufacturing (13.8%), residential development (15.7%), and warehousing and distribution (19.7%).*
- *The transportation issues which the highest percentage of respondents strongly agreed or agreed were serious issues were road maintenance (90.6%), keeping scenic roads scenic (87.3%), traffic/parking in Milford (72.1%), Route 209 (71.2%), mobility for senior citizens (70.7%), and Route 6/209 between the Boroughs (69.1%).*
- *The housing issues which the highest percentage of respondents strongly agreed or agreed were serious issues were availability of housing for senior citizens (65.3%), housing affordability (55.7%), and availability of retirement communities (55.6%).*
- *The areas in which the highest percentage of respondents strongly agreed or agreed there should be more cooperation among the Townships and Boroughs were emergency medical service (85.7%), solving transportation problems (83.1%), joint comprehensive planning (83.0%), regional fire protection (78.8%), regional police protection (78.0%), and open space and recreation planning (77.8%).*

IDENTIFICATION OF ISSUES

Previous visioning efforts, the Pike County Community Survey, Pike County Comprehensive Plan Advisory Board Workshops, discussions with County Planning staff, and input from residents at public meetings identified a number of issues to address in this plan. The Population Projections and Build-out Analysis indicate that the growth pressures facing the County will not abate, which highlights the urgency of addressing these issues. The issues have been organized generally to follow the task force divisions established in the Visioning process.

**RESOURCE CONSERVATION ISSUES**

- Permanent protection of environmentally sensitive areas.
- Preserving open space and forests and finding means to do it.
- Ridgeline development, including threats to the Bluff overlooking the Delaware and Lackawaxen Rivers.
- Water quality and quantity protection.
- Water resources management.
- Managing the deer population.
- Increasing the awareness of the heritage of Pike County.
- Forestland protection.
- Retaining natural vegetation during development process.
- Historic preservation.
- Keeping scenic roads scenic.
- Preservation and protection of the scenic and historic Lackawaxen River Corridor.
- Maintaining rural character.

LAND USE AND HOUSING ISSUES

- Limited good building land in areas of the County served, or most likely to be served, by public sewer and water; concerns for utilizing on-site sewage disposal, but only limited public sewage treatment capacity.
- Population growth and resulting pressure on taxes, schools, housing costs, and other public services.
- Managing growth through establishment of growth areas and providing infrastructure to those growth areas.
- Maintaining the character of Boroughs, villages, and hamlets.
- Policies for the Delaware River corridor and Lake Wallenpaupack region.
- Impacts of new residents who move from New York/New Jersey metropolitan areas and continue to commute to those areas.
- Expanding public sewer and water service in the growth areas in the County, in the context of High Quality and Exceptional Value streams.
- Protecting the environment and maintaining rural character in the face of development.
- Provision of affordable senior housing and needed assisted housing.
- Balancing residential growth with economic development.
- Improving the quality of commercial development.
- Future development of I-84 interchange areas and Route 6 corridor.
- Fostering appropriate mixed use development.
- Fostering use of Conservation Development and effective cluster development.
- Using the village concept of development.
- Determining the appropriateness of large lot zoning in the County, as 2 acre minimum lot sizes are more widely used in the County.
- Hunting and fishing club and camp properties, which have been open space, could be sold for residential development.
- Limited opportunities for infill within existing private developments because of environmental constraints, infrastructure deficiencies, and concern of community associations on their ability to provide service to additional residents.
- Need for community associations and County work together to address tax sales lots which continue to be sold.
- Reviewing potential impacts of expanded gambling in New York State and potential for gambling in Monroe County.
- Conversion of seasonal dwelling units to full-time residences.

GOVERNMENT AND INFRASTRUCTURE ISSUES

- Development in major road corridors, such as Route 6/209, Route 739, and Route 507, and need to manage traffic and access.
- Improving the condition and safety of rural roads which are windy and narrow, have limited or no shoulders, and have vertical alignment issues.
- Balancing road widening and improvement needs with the resultant impact on scenic roads.
- Improving housing and mobility opportunities for seniors.
- Parking in the Boroughs.
- Develop the technical planning resources of the County as a support center for municipalities.
- Traffic on Route 6/209 from Milford-Montague Bridge to Matamoras.
- Limited public participation/volunteerism of residents basically only spending weekends in the County because of commuting, the large number of private communities in the County, and efforts to develop a greater sense of community.
- Limited history of municipal cooperation in addressing growth issues, and fostering increased intermunicipal cooperation. Importance of getting municipal officials active in Plan Implementation.

- Getting people Countywide involved in implementation of the Comprehensive Plan and cooperative efforts of the County and municipalities in providing municipalities with the tools for implementation, such as updated Comprehensive Plans, Act 537 Sewage Facilities Plans, zoning ordinances, and subdivision and land development ordinances.
- Further improvement of transit service.
- Limitations to on-site sewage disposal and stream discharges because of antidegradation requirements for high quality and exceptional value waters, and the need to investigate feasible use of land-based applications.
- Creation of an interconnected greenway and trail system within the County.
- Stormwater management, including encouraging retention of open spaces and natural systems and use of Best Management Practices.
- Road maintenance.
- Maintaining road functionality in poor weather conditions.
- Increasing traffic volumes, enforcement of speed limits.
- Developments, which were initially primarily intended for second homes but are now being used for full-time residency, often have inadequate infrastructure because of deficient initial requirements, practices of developers, inadequate oversight, and/or lot owners' actions.
- Establishing appropriate design standards and requirements for developers.
- Developing water sources and reliable regional water systems, while protecting existing supplies and viability of existing systems.
- Dam monitoring and maintenance.
- Securing reliable and affordable electric service throughout the County and expanding natural gas service areas outside the Boroughs.
- Expanding GIS databases, access, and use within the County.
- Limited police coverage and substantial reliance on community association security forces.
- Update existing and complete new Act 167 Stormwater Management Plans for all County watersheds.
- State recognition of needs of high growth areas.



COMMUNITY SERVICES ISSUES

- Funding enhanced municipal services, especially emergency services and police services.
- Encouraging municipalities and private property owners' associations to discuss responsibilities in provision of services to residents.
- Providing accessible services and facilities for youth and seniors.
- Improving the health care facilities available to County residents.
- Increasing higher education opportunities in the County.
- Difficulty in getting volunteers to participate in organizations.
- Recognition that given the location, desired rural character, and population of Pike County, there will be limitations on the services which are, can, and will be provided to residents and businesses.
- Further coordination of emergency services within the County.
- Expectations of developers for improvements and contributions.

ECONOMIC DEVELOPMENT ISSUES

- Maintain tourism and related services as the major components of the County's economy.
- Need for economic development, addressing job creation with diversified employers and with a range of employment skills, higher wage jobs, job training, small business development, and child care.
- Orientation of portions of the County to varied areas outside the County, including Scranton-Wilkes Barre, Monroe County, Wayne County, and New York State and New Jersey.
- Keeping young people in the County, with better higher education and training opportunities and family sustaining jobs.
- Viability and future use of older commercial properties.
- Ecotourism and recreation promotion.
- Design and quality of development which occurs.
- Enhancing gateways to the County.
- Determining whether to use impact fees.
- Development of Pike County identity.
- Protecting the environment as economic development occurs.
- Development of Pike County Business Park.
- Facilitating small business start-ups.
- Improving transportation, telecommunications, gas, electric, and sewer and water infrastructure.
- Long time it takes to begin economic development projects and the lack of "shovel-ready" sites.

CHALLENGES FACING PIKE COUNTY

Based on the identified issues listed previously, there are many challenges facing the County. The County's tremendous population growth, its popularity as a tourist destination, and its predominantly tourist, service, and retail based economy present a number of challenges to be addressed. The following represent identified challenges that are to be addressed in this Comprehensive Plan:

- *Protecting water quality and natural resources essential for maintaining quality of life.*
- *The imbalance between residential growth and economic growth and the resulting tax concerns for residents.*
- *Increasing economic opportunities within the County without degrading the environmental and aesthetic quality of the County.*
- *Providing infrastructure to manage growth and foster economic development.*
- *Protecting natural, historic, and cultural resources and retaining open space as development continues.*
- *Conserving the beauty of rural landscapes and roads.*
- *Providing for sustainable tourism.*
- *Protecting exceptional forest and water resources and wildlife habitats.*
- *Enhancing the quality of life for Pike County residents.*
- *Creating a greater sense of community where there is such a large commuting population and so many private developments.*
- *Scattered, relatively low density residential development patterns which makes infrastructure planning more difficult.*
- *Increased traffic.*
- *Strip commercial development.*
- *Retaining the character and charm of existing Boroughs, villages, and hamlets.*
- *Rising land values and housing affordability concerns for seniors and families of those working in Pike County.*
- *Tremendous seasonal population growth during the summer season (more than double the full-time) which taxes infrastructure and services.*
- *Retaining young people in the County by providing additional educational and employment opportunities.*
- *Sale of hunting clubs, summer camps, and old family estates to create new subdivisions.*



KEYS TO MEETING THE CHALLENGES

While the challenges facing the County are significant, the sense of urgency, determination to address the challenges, and expanding cooperative efforts in the County all create a sense of optimism that Pike County will manage its growth and retain its quality of life. The following keys to meet those challenges are crucial, and include:

- *Fostering awareness and appreciation of the resources.*
- *Accepting the responsibility to be stewards of these resources.*
- *Determining to continue existing partnerships and create new partnerships to protect existing resources, enhance infrastructure, and manage growth in accordance with coordinated county-wide, multi-municipal, and municipal planning.*
- *Working with the municipalities to identify and establish where growth should occur, how much growth will be provided for, and desired patterns of development.*
- *Coordinating land use and infrastructure for orderly, concentrated and efficient growth.*
- *Setting high standards for development and high expectations for developers in keeping with the character of the County.*
- *Reviewing and updating of municipal Comprehensive Plans and related development ordinances in a timely manner.*

OPPORTUNITIES FOR PIKE COUNTY

With challenges come opportunities. As growth continues within Pike County, there is increased awareness among the officials and residents of the challenges growth poses to the natural environment and quality of life within the County. This awareness and the program for implementation of this Plan present exciting opportunities for coordinated action within the County to:

- *Implement Regional approaches to addressing issues facing the County.*
- *Identify and use improved and more efficient development techniques and land use regulations to foster well-planned, attractive development.*
- *Conserve natural resources and open space through innovative development techniques, acquisition and conservation programs, land use regulations, and stewardship efforts.*
- *Implement corridor management plans, including access management techniques, for major road corridors to improve mobility and safety.*
- *Foster increased housing alternatives.*
- *Identify programs, planning efforts, and land use regulations which can revitalize existing centers and maintain their character.*
- *Retain the rural fabric which is still largely intact in the County.*

Suburban sprawl does not have to be the destiny of Pike County. By acting now to manage and concentrate growth, municipalities, residents, and community organizations can preserve Pike County's communities, rural heritage and rural quality of life for future generations. A key is to provide infrastructure to support more concentrated development and economic development in identified areas, including roads, public water supply, wastewater treatment, and stormwater management.

CHAPTER 3

**PIKE COUNTY'S
VISION FOR THE FUTURE**

CHAPTER 3

VISION FOR THE FUTURE

VISION FOR PIKE COUNTY IN THE 21ST CENTURY

The Vision for Pike County in the 21st Century is a statement of what Pike County, as a community, should be like in the future. The first step in attaining that Vision for the Future is to set achievable goals and objectives. Goals are general aspirations for the County which set the desired direction. Objectives are more specific guidelines for the County to follow in order to realize those goals. Goals and objectives are basic to formulating policies and strategies. These policies and strategies will be discussed further in Chapter 4. This Chapter provides the identified goals and objectives. Actions to realize the goals and objectives and implement strategies and policies are presented in Chapters 8 and 9.

The Comprehensive Plan Citizen's Advisory Board, which has guided this planning effort, provided many opportunities and numerous avenues for input in the development of this Plan for the Future. The challenges and issues identified through the community surveys, public meetings, and other avenues provided for citizen input, have set the stage for the development of the policy direction to achieve this desired vision.

OUR VISION FOR PIKE COUNTY IN THE 21ST CENTURY

Pike County will be a community where the rural character and quality of life are maintained; social, ethnic, economic, intellectual and cultural diversity is cultivated; individual, family and community health is nurtured; the environment is protected; growth is managed; and individual dignity is revered.

Pike County will continue to experience population growth in the 21st Century, but that growth will not degrade the quality of life within the County. Infrastructure will be in place to meet the needs of the expanding population, and growth will be compatible with the need to conserve Pike County's natural, cultural, historic, and recreational resources. The County will promote programs that will enable resident access to quality health care, educational services, historic and cultural resources, and quality, affordable housing. Systems will be in place to provide for clean water supply and pollution-free waste disposal in appropriate growth areas, and protect water quality and quantity in the County. There will be appreciation for, protection of, and sustainable use of the County's resources for the social and economic benefits of the populace.

Pike County will have a balanced economy and expanding tax base, including a County business park. Competitive paying jobs will be created within the County, enabling residents to work within the County. Enhanced tourism opportunities and related service businesses will complement employment opportunities available within Pike County. Economic development will occur with recognition of the need to preserve the County's environmental, cultural, and historic resources.

Pike County will see continued development of intergovernmental cooperation in planning and providing of services and programs to the County's residents. The County government will encourage and foster such cooperation. Enhancement of the infrastructure in the County will be a result of mutually developed programs involving the owners of public lands, municipalities, the County, and committees within County task forces addressing those issues. Municipal officials in the County will continue to address the needs of their residents and cooperate with the County and other municipalities to assure that land use planning in the County will be compatible with the conservation of the County's resources.

The County's adopted Goals, Objectives and Policies which follow will assist Pike County in achieving the vision for the future. They have been developed through this Pike County Comprehensive Plan Update and are based on citizen and municipal official input provided as part of this planning process as well as the outcome of two county-wide visioning processes conducted in 1996 and 1998 (described in Chapter 1). Realizing the full Pike County Vision for the Future will take time, financial resources, and commitment from numerous agencies located throughout Pike County, including the State and Federal Governments. (More information on Pike County's past Visioning efforts can be found in Appendix 17.)

STATEMENT OF GOALS AND OBJECTIVES FOR PIKE COUNTY

Government and Infrastructure Goal:

Enhance the services provided to the growing population of Pike County, through government and public participation that is responsive and accountable.

Objectives:

Improve the circulation system

- Improve the system of signage directing travelers around the County.
- Improve the information distribution system for travelers, helping them locate products and services in which they are interested, and participate in Pocono Wayfinding/Signage initiatives.
- Promote highway safety.
- Identify strategies for relieving congestion on the County's roads.
- Identify and support appropriate alternatives to reliance upon automobile and truck travel.
- Facilitate transit service and identify appropriate service areas.
- Plan for safe and accessible routes of travel for pedestrians, bicyclists, individuals with disabilities, the elderly, and those without automobiles.
- Develop multi-modal facilities within the County.
- Manage access along the County's roads.
- Improve the efficiency of traffic flow and the safety of the County's roadways.
- Maintain and enhance the capacity of the County's road corridors.
- Maintain the functional integrity of the County's roads.
- Encourage maintenance programs for existing roadways.
- Establish developer responsibilities for transportation improvements.
- Identify trip reduction strategies and determine their appropriateness for the County.
- Address impacts of land uses on major road corridors in the County.
- Protect the scenic road corridors within the County.
- Enhance streetscapes along major road corridors within the County.

Enhance infrastructure systems

- Provide a unified state of the art telecommunications system that will serve the need of the business, private and public sectors of Pike County.
- Continue to encourage the development of, and access to, telecommunications infrastructure.

- Identify methods to assure safe, reliable, and well-maintained sanitary sewage disposal and water supply in the County.
- Coordinate land use and sewer and water planning so the extension of public sewer and water facilities is consistent with the land use and other goals and objectives of this Comprehensive Plan.
- Plan to support growth areas with public sewer and water facilities where feasible.
- Discourage extension of public sewer and water facilities to areas intended to remain rural in character.
- Establish positions on utilization of private central sewer and water systems in the County.
- Encourage proper stormwater management and the long-term operation and maintenance of stormwater facilities.



Provide community facilities

- Maintain the fiscal integrity of the municipalities and the County to enable the residents to receive the services necessary to provide for their health, safety, and welfare.
- Achieve adequate law enforcement protection for all County residents through professional, adequately-funded and equipped police departments commensurate in size with the County's expanding population.
- Ensure that every Pike County resident has access to telecommunications information and services.
- Promote coordination and enhancement of emergency services.

Encourage Education and Outreach

- Establish educational and outreach programs to municipal officials and the public.

Encourage and help facilitate Multi-Municipal Planning

- Encourage coordination between municipalities and authorities on utilities and land use policies.
- Review opportunities for sharing of equipment, services and facilities among municipalities.

Establish County Municipal Partnerships

- Foster Intergovernmental Cooperation, Regionalization and Partnerships.
- Identify opportunities for inter-municipal cooperation and planning.

- Formalize regional partnerships and create appropriate cooperative mechanisms to implement this Comprehensive Plan.
- Develop the County's technical infrastructure and provide a source of funding to assist municipalities in their planning efforts.
- Support efforts for municipal partnerships and public-private partnerships to achieve the objectives of this Plan.
- Support efforts for interregional and regional/county cooperation in addressing transportation, economic development, and community development issues.
- Identify specific techniques for implementation of this Plan, including County functional plans, municipal and regional plans, and land use regulations.

Other Objectives

- Encourage proper operation and maintenance of on-lot sewage disposal systems.
- Identify methods of energy conservation.
- Encourage energy efficient building design and operation.
- Recognize the uniqueness of the County and the quality of its living environment, and protect community character.
- Identify developers' responsibilities in efforts to accomplish the goals and objectives of this Plan.
- Promote efficiency in the development review process.
- Encourage Historic District designations where Architectural standards can be utilized within the County.

Resource Conservation Goal:

Conserve, maintain and enhance the historical, cultural and environmental resources.

Objectives:

Protect Natural Resources

- Promote the economic viability of Pike County's natural environment.
- Encourage development techniques and standards which preserve the County's natural resources and rural character and promote a sustainable economy.
- Promote measures to reduce deterioration of air quality.
- Protect and manage forests.
- Encourage appropriate safeguards for the preservation of the quality of:
 - Important Natural Areas identified in the Natural Areas Inventory
 - Hunting and fishing environments
 - Watersheds, stream corridors, floodplains, and wetlands
 - Steep slopes
 - Natural wildlife habitats, and preserve biodiversity
 - Promote soil conservation practices.



Protect Water Resources

- Support water conservation programs
- Promote soil conservation best management practices (BMP's)
- Encourage appropriate safeguards for the preservation of the high quality of:
 - Groundwater and surface water
 - Lakes, ponds, bogs, barrens and swamps, vernal pools and waterfalls
 - Important groundwater aquifers and recharge areas

Protect Scenic and Historic Resources

- Identify and document the historic and cultural resources of the County and increase the awareness of those resources.
- Encourage appropriate safeguards for the preservation of the quality of:

- Ridgelines
 - The night sky from excessive light pollution
 - Scenic landscapes
 - Scenic road corridors and views along them
 - Viable historic resources.
- Support enhancement efforts to improve the character of the Boroughs, villages and hamlets in the County.
- Encourage compatible development within and adjacent to historic and culturally significant areas.

Encourage and help facilitate Multi-Municipal Planning

- Continue to encourage and develop multi-municipal partnerships.

Encourage Education and Outreach

- Offer quality environmental education opportunities for all residents and visitors

Establish County Municipal Partnerships

- Promote intergovernmental cooperation and governmental-citizen cooperation at all levels to further coordination of and communication among municipalities, government agencies, and interest groups.
- Fully utilize the available capability of the County Geographic Information System (GIS) to inventory and map Pike County's natural resources
- Use Geographic Information Services as a land use and planning tool for both County and municipal decision making.

Land Use Goal:

Provide for properly managed and environmentally sound growth which will benefit the economy while retaining the County's rural character and natural beauty.

Objectives:

Manage Growth

- Within the Pike County Comprehensive Plan, develop broad County-wide growth management concepts which will be detailed, supplemented, and implemented by municipal comprehensive plans and zoning ordinances.
- Identify and plan for growth areas and encourage new development to occur in those areas.
- Plan to provide necessary infrastructure capacity to growth areas.
- Within growth areas, encourage development at densities that will support public sewer and water and transit services.
- Encourage community facilities such as schools to be located within growth areas to maximize accessibility and use as community cultural resources.
- Respect and protect existing living environments in the County.
- Promote infill and revitalization within existing centers, in conformity with the general character of the existing centers.
- Achieve a balance between the need for economic growth and the need for environmental conservation and preservation.
- Minimize the conflict between non-residential and residential uses and attain compatibility between present and future land uses.
- Determine appropriate land use patterns in the vicinity of multi-modal transportation facilities.
- Identify areas which should be protected from development, or receive only very low density development, because of natural constraints or assets, and/or lack of supporting facilities and services.
- Encourage diversity within business development areas.
- Encourage a balance of land uses to meet the needs of existing and future residents.

Address Impacts of Growth

- Relate the type and intensity of development to adequate transportation, water, sewerage, drainage, parks and recreation, and community facilities.
- Identify significant natural resource lands and stream corridors for perpetual open space conservation.
- Encourage conservation of open space.
- Discourage development in areas subject to natural and infrastructure constraints.
- Maintain the rural character of those areas which still have that character.
- Encourage the proper management of forestland.

Improve Quality of Development

- Encourage development adjacent to existing centers to be consistent with the existing character of the centers.
- Maintain connections to natural features, corridors and scenic vistas.
- Provide mechanisms to assure that the use to which land is put within a community will reflect the desires of the people in those communities, while being sensitive to the concerns of surrounding communities and individual property rights.
- Identify appropriate development techniques for use within the County.

- Encourage planned, concentrated development that includes significant open space.
- Encourage well-designed developments, including public and semi-public development, in scale and character of the setting.
- Encourage appropriate mixed-use development.
- Encourage development with pedestrian scale.
- Encourage attractive streetscapes.
- Emphasize open space conservation during residential development.
- Enhance the visual image of the County at entranceways and along road corridors.
- Identify appropriate future character for available commercial and industrial areas.



Encourage and help facilitate Multi-Municipal Planning

- Encourage consistent and compatible land use along municipal boundaries.

Encourage Education and Outreach

- Establish educational and outreach programs to municipal officials and the public.

Establish County Municipal Partnerships

- Establish methods for the County to provide leadership and resources to assist municipalities in designing Pike County's future in a coordinated manner.
- Encourage and facilitate communication regarding growth management issues.
- Use Geographic Information Systems as a planning tool for managing growth.

Community Services Goal:

Broaden existing and provide new services to Pike County.

Objectives:

Address Housing needs

- Work to ensure all Pike County residents have access to quality housing and health services across their life span.
- Encourage provision of areas for a variety of single family, two family, and multiple-family dwellings and a variety of densities to allow housing choices.
- Promote home ownership and retention within the County.
- Encourage provision of housing affordable to those who work within the County.
- Encourage use and maintenance of the existing housing stock.
- Promote rehabilitation and renovation of existing housing.
- Support the development of housing alternatives for the elderly and disabled.
- Accomplish the provision of well-planned, safe, sound and attractive living environments for the County's residents.



Address Human Services and efforts of Community associations to serve residents

- Coordinate community resources to address the needs of children and families at risk.
- Investigate and develop surrogate care services
- Encourage community efforts to bring people together and create community cohesion.
- Create gathering places for community activities.
- Encourage the provision of accessible health and social services necessary to meet the needs of the County's residents.
- Maintain databases on human services programs within the County.
- Coordinate educational resources to reduce redundancy of effort and create synergistic opportunities.
- Increase accessibility of government facilities to the public.
- Make library services accessible to all County residents.
- Identify the need for additional community, cultural and social facilities in the County and support coordinated efforts to meet those needs.

Youth

- Celebrate successes of Pike County youth and education.
- Develop an infrastructure to support all youth and educational volunteer programs.

Recreation & Open Space

- Provide parks, recreation facilities, and open space programs for municipal residents which are accessible, inviting, well maintained and safe.
- Expand greenway and trail systems within the County.
- Establish developer responsibility in providing park and recreation facilities and open space.

Encourage and help facilitate Multi-Municipal Planning

- Continue to encourage and develop multi-municipal partnerships.

Encourage Education and Outreach

- Increase resident awareness of resources and facilities within the County and support efforts to protect, enhance, and increase accessibility of those resources and facilities.

Establish Partnerships

- Evaluate needs for County and municipal services and the opportunities for meeting those needs.
- Encourage increased cooperation of municipalities and school districts in planning activities and utilization of school facilities.

Other Objectives

- Establish developer responsibilities for provision of social and cultural facilities.
- Identify community facilities and services which can aid in the attraction of and support desired economic development.

Economic Development Goal:

Promote economic development while avoiding any negative impact on the natural beauty and resources of our community and environment.

Objectives:

Encourage additional economic development

- Formulate ideas, opinions, and strategies necessary to stimulate and sustain the economic growth of Pike County.
- Promote the expansion of existing businesses and the development of new businesses which will provide quality employment opportunities for County residents.
- Identify areas within Pike County where environmentally friendly industrial and commercial development can take place without unduly stressing the environment and infrastructure.
- Identify and designate appropriate areas for future economic development and determine the types of economic development which are most appropriate for the County.
- Identify strategies to attract desirable firms.
- Encourage mixed use development.
- Promote standards to improve the design and appearance of new development and commercial areas.
- Encourage alternatives to strip commercial development.
- Protect the natural environment as economic development occurs.

Retain Tourism as a major component of economic development

- Protect natural, cultural, historic and recreational resources and landscapes in order to support tourism.



Enhance Existing Infrastructure to provide for new economic opportunities and the enhancement of existing economic interests

- Work to provide the infrastructure necessary to attract and retain businesses.
- Relate economic development to available infrastructure.
- Establish developer responsibilities in providing improvements when they develop.

Provide opportunities for enhancement and support of existing businesses

- Identify the needs of the business community and work to achieve a favorable business climate.
- Support existing revitalization efforts in the Boroughs.
- Encourage the adaptive re-use of viable vacant and underutilized properties in the County.
- Retain existing businesses and industries consistent with the other objectives of this Plan.

Establish Partnerships

- Promote the development of partnerships between Municipal, County, State and Federal agencies to utilize the most contemporary technology to facilitate Economic Development.
- Promote job creation for local residents through cooperative efforts of the County, municipalities, economic development agencies, businesses, and educational institutions.

Encourage Education and Outreach

- Establish educational and outreach programs to municipal officials and the public.

Tax Incentives and Tax base of the Communities

- Achieve an equitably distributed tax base (in which private citizens do not pay an inequitable percentage of the tax burden), capable of maintaining natural resources and environmental amenities.
- Achieve a balanced economy derived from citizens' composition, industrial presence, commercial enterprises, and governmental policies and participation.
- Enhance tax revenue from business development to balance the residential share of the property tax base.
- Support methods to provide relief from dependence on the property tax and identify additional revenue sources to supplement property tax revenues.

Other Objectives

- Identify means of enhancing the capabilities of the County's work force.
- Facilitate opportunities for residents to obtain family sustaining jobs in a variety of appropriate employment fields.

CHAPTER 4

STRATEGIES FOR FUTURE GROWTH

CHAPTER 4

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NEED TO MANAGE GROWTH

New long-term strategies that address sprawl and incorporate growth with sustainable use of land and water resources are urgently needed if the Vision and goals and objectives for Pike County are to be realized. Growth must be managed and natural resource degradation mitigated.

The negative effects of conventional land development practices on land and water resources are well documented. Sprawling development patterns and resulting loss of open space impact the environment in multiple ways. Not only do we lose community valued natural landscape features (stream corridors, forests, wetlands, etc.), we also lose the essential functions and values that these features provide - runoff control, pollutant filtration, groundwater recharge, flood storage, wildlife habitat, recreational and scenic values, to name just a few.

Of primary concern are increasing fragmentation of open spaces associated with widespread earth disturbance activities and increasing levels of impervious surfaces. This includes deforestation of watershed lands and increasing levels of non-point source pollution, including erosion and sedimentation and stormwater run-off.

The County's leading industry is tourism, the basis of which directly relates to the County's scenic rural character and natural resources. Our economic future is dependent upon our ability to grow smartly.



The County's high quality natural resource base combined with the current and projected population growth provide local municipal officials with some significant challenges with regard to natural resource management and land use decisions over the next decade. The rapid growth and tremendous increases in land values have brought lands previously thought to be somewhat protected from development – such as hunting clubs and summer

camps - into the land market. New subdivision activity in the county has increased significantly since late 2001.

With a substantial percentage of the County in public ownership and given the great extent of important natural resource areas in the County (including the primary conservation areas and secondary conservation areas mapped in Chapter 6) there are still many important natural areas that are vulnerable to degradation from development. These include high quality and exceptional value stream corridors; steep slopes, often found along watercourses; important natural areas; woodlands; and other water related features. Protection of these resources is important to protecting ecosystems, maintaining the quality of life within the County, and supporting the tourist industry within the County.

PLANNING TECHNIQUES

Our municipal governments are increasingly challenged to provide the necessary long-range planning for protection of the rural base of their communities while at the same time accommodating the rapid growth. Pike County municipal officials are also increasingly confronted with environmental problems in their communities and, as a result, these officials are seeking the technical and financial assistance required to support the review, revision, and implementation of municipal land use regulations to enhance their natural resource protection efforts.

There are a number of planning techniques and options available to local governments that have been used successfully in a variety of urban, suburban, and rural settings across the country. Alternative site design strategies have the ability to significantly reduce the impacts of residential and commercial development and to provide a greater degree of protection to open space and water resources. *Conservation zoning, conservation design, low impact development, and sustainable development* are some of the options that offer more environmentally sound alternatives to traditional land use practices.

This Plan is particularly concerned with managing growth, improving the quality of development which occurs in the County, encouraging a sense of stewardship toward the County's resources, initiating actions to protect those resources, and encouraging municipal land use regulations which require development to recognize and protect the natural resources of Pike County.

Major policies of this Plan are to manage growth and development pressures, improve County-Municipal cooperation, identify infrastructure needs, preserve sensitive lands/open space, enhance local land use controls, increase housing options, enhance economic development, enhance tourism opportunities, and improve on our quality of life.

Key strategies in furthering the policies of this Plan which are discussed in this Chapter include utilizing smart growth techniques in Pike County and forming municipal partnerships.

The County Commissioners have already increased the size of the County Planning staff to better assist municipalities in their planning efforts and to provide a program to assist municipalities in identifying natural resources, reviewing their land use regulations and plans, and updating their regulations and plans to address resource protection and growth management.

The Pike County Commissioners are committed to working with the County's municipalities, as well as the State and Federal Governments, to address the pressing issues facing all Pike County residents. The County will continue to develop, provide, and enhance a program of financial and technical assistance to municipalities to help them plan for the future of their communities, in the context of the County Comprehensive Plan and other functional County plans. The Pike County Office of Community Planning and Pike County Conservation District will be spearheading these efforts on behalf of the Commissioners.

CONCEPT OF SMART GROWTH

This Comprehensive Plan is about Growing Naturally. An element in growing naturally is growing smartly. The Smart Growth Network, U.S. Environmental Protection Agency (EPA), and International City/County Management Association (ICMA) have described smart growth as “development that serves the economy, community, and the environment. It provides a framework for communities to make informed decisions about how and where they grow. Smart growth makes it possible for communities to grow in ways that support economic development and jobs; create strong neighborhoods with a range of housing, commercial, and transportation options; and achieve healthy communities that provide families with a clean environment.”

The following Smart Growth Principles have been established:

1. *Plan for mixed land uses.*
2. *Take advantage of compact building design.*
3. *Create a range of housing opportunities and choices.*
4. *Create walkable neighborhoods.*
5. *Foster distinctive, attractive communities with a strong sense of place.*
6. *Preserve open space, farmland, natural beauty, and critical environmental areas.*
7. *Strengthen and direct development towards existing communities.*
8. *Provide a variety of transportation choices.*
9. *Make development decisions predictable, fair and cost effective.*
10. *Encourage community and stakeholder collaboration in development decisions.*



Reasons for Smart Growth in Pike County

Some of the reasons for looking to smart growth in Pike County include the recent interest in new subdivision of larger parcels of land, rather than focusing on infill of older subdivisions as was done previously. The furtherance of this practice can result in loss of much of the remaining privately-owned open land in the County. This can, in turn, affect:

- The exceptional water quality of our drinking water, streams, and lakes;
- Pike's abundant wildlife habitat which supports a diversity of animals and plants;
- Scenic views along roads, ridges, and rivers;
- Rural quality of life in our communities;
- Pike's recreational/tourism economy;
- Efficiencies in providing infrastructure.

The promotion of Smart Growth techniques will also preserve our rural community heritage for future generations, assist in reducing our dependency on the automobile and aide in the promotion of public transit. Many of the people moving to the County, with long commutes to workplaces outside the County, are interested in more upscale living environments. Land values in the County have risen dramatically and large development companies are taking increased interest in Pike County. This increasing interest makes the implementation of Smart Growth techniques so important.

Elements of Smart Growth in Pike County

Smart growth techniques are designed to accommodate growth in a way that protects the environment, protects rural land, enhances the economy, and enhances the quality of life. Elements of smart growth in Pike County include compact development, the permanent protection of open space/planning for a system of greenways to connect natural areas and

provide hiking and biking trails, the provision of roads, public water supply and distribution, wastewater collection and treatment, and stormwater infrastructure to concentrate development and attract new business, the use of traditional village settings containing smaller lots and mixed residential, retail, office, and green space uses, surrounded by working rural land, such as farmland, forest, and river, and finally the revitalization of our existing boroughs, villages and hamlets.

Initiatives to Manage Growth

Growth is going to continue in the County. Important initiatives for managing that growth smartly to build a sustainable economy and preserve Pike County's rural quality of life include:

- Encouraging developers to integrate smart growth and conservation into their projects.
- Educating landowners about opportunities to protect their land with easements and government programs, such as:
 - Purchase of land by local or state government from a willing seller. Potential buyers include such agencies as Pennsylvania DCNR and Pennsylvania Game Commission.
 - Establishment of conservation easements, where the landowner permanently gives up the right to develop their land by donating an easement to a land trust such as Delaware Highlands Conservancy or the Nature Conservancy.
 - Finding a conservation buyer who purchases property and protects it by donating a conservation easement to a land trust.
- Community leaders and citizens discussing the important choices we have about how Pike is developed.
- Building a strong and innovative County planning department that provides support for municipal planning.
- Creating a broad coalition of Pike residents to work with local officials to apply smart growth principles.
- Creating educational opportunities on the principles and attributes of smart growth for municipal officials, builders, developers and County residents.

BASIC PRINCIPLES REGARDING FUTURE DEVELOPMENT

The following basic principles regarding future development in Pike County are established. These principles should be considered in guiding actions which influence future land use.

- 1. We will work together to conserve the unique character, open spaces, and beauty of Pike County in the face of continued development pressures.**
- 2. Sprawl is not an acceptable development pattern.**
- 3. County and municipal government should consider forging new partnerships to proactively plan for our future.**
- 4. Growth should be managed and directed to designated growth areas in accordance with multi-municipal and municipal comprehensive plans and implementing land use regulations.**
- 5. Preserve natural, historic, scenic, and cultural resources by protection and integration into future developments.**
- 6. Existing Boroughs, villages, and hamlets in the County should be enhanced and infilled when appropriate.**
- 7. Work to achieve economic growth that preserves the quality of life that has made Pike County an attractive place for tourism and for residents to live and work.**
- 8. Compact, mixed use development patterns will be encouraged. Public sewer and water systems should be provided to permit compact development.**
- 9. Development will be attractive, well-planned, appropriately landscaped, with architecture characteristic of Pike County.**
- 10. Major road corridors will be enhanced and managed to facilitate mobility and increased safety.**
- 11. Greenways, trails, open space and recreation shall continually be provided and expanded commensurate with population growth.**
- 12. Alternatives to automobile traffic, including pedestrian, bicycle, and transit modes, should be encouraged and enhanced.**

Environmental Considerations for Future Development

As development occurs in the County, we must conserve and protect sensitive environmental resources, such as floodplains, wetlands, woodland, and steep slopes identified within each tract of land. An ongoing awareness of, and sensitivity toward, the natural resources of the tract of land should be encouraged and the development should

be concerned with geologic stability, soils suitability, erosion control, stormwater management, groundwater supplies and stream flows. Groundwater resources should be protected against depletion and contamination, and methods of encouraging replenishment of the groundwater supply should be encouraged.

Our streams, ponds and wetlands should be protected against pollution from point sources and runoff while our floodplains, wetlands, and hydric soils should be protected from encroachment. The loss of topsoil should be minimized, possibly through the retention and establishment of native trees and other vegetation. Native vegetation can control erosion, shade surface waters, control stormwater flow, create windbreaks, provide animal habitat, and provide visual amenities.



Steep slopes should generally be avoided and the protection, preservation and enhancement of historic resources should be encouraged. The adaptive reuse of historic structures should also be encouraged where appropriate. Pike County has a long and interesting history that should be protected and/or enhanced. Innovative land development techniques such as Conservation Development and Traditional Neighborhood Development should be used, where appropriate, to minimize land consumption, preserve ecosystems, preserve natural resources and open space, and aide in preserving the rich history.

The provision of open space and recreation areas for active and passive recreation should be encouraged. Visual and physical access to the open space system should be provided and the preservation of our scenic road and water corridors should be promoted. The coordination of open space and circulation systems among adjoining developments

should be encouraged as well as the addition and/or enhancement of a system of trails and greenways. Incorporating all of these resources into development plans is instrumental to future successes. The provision of such flexible approaches to site design to preserve natural resources will aide in preserving the quality of life of Pike County residents and visitors alike.

Role of Infill in the Future

Even though there are a substantial number of undeveloped residential subdivision lots remaining in the County, development of those lots is not viewed as a major component of accommodating future growth within the County. Much of the past development in the County was infill within these subdivisions. Several concerns lead to the conclusion that existing subdivisions cannot be relied upon to absorb much of the future growth. These concerns include:

- Concern on the part of the community associations that additional development within their subdivisions will further tax the financial resources available to the community associations to provide necessary infrastructure improvements and services.
- Concern over the ability of the infrastructure of the subdivisions, often substandard, to support substantial amounts of additional development.
- Concern for environmental consequences of development in areas with severe limitations to development, inadequate storm drainage systems, and reliance on on-lot sewage disposal.
- Many communities are providing incentives for multiple lot ownership.

MULTI-MUNICIPAL PARTNERSHIPS

As growth continues within Pike County, there is increased awareness among the officials and residents within the County of the challenges growth poses to the natural environment and quality of life within the County. This awareness and the program for implementation of this Plan present exciting opportunities for coordinated action within the County to implement regional approaches to address issues facing the municipalities. On a regional basis, the County can identify and use improved and more efficient development techniques and land use regulations to foster well-planned, attractive development; conserve natural resources and open space through innovative development techniques, acquisition and conservation programs, land use regulations, and stewardship efforts; implement corridor management plans, including access management techniques, for major road corridors to improve mobility and safety; foster increased housing alternatives; identify programs, planning efforts, and land use regulations which can revitalize existing centers and maintain their character; and retain the rural fabric which is still largely intact in the County.

A major initiative of Pike County will be to encourage multi-municipal partnerships, particularly for comprehensive, open space, recreation, greenways, and corridor planning. Multi-municipal planning programs are discussed in detail in Chapter 11. Municipalities can also cooperate in other ways, such as sharing equipment, providing services as on a

regional basis, and forming regional commissions and authorities. Potential actions are discussed in Chapter 9, the Action Plan.

Municipal Future Land Use Planning

Future Land Use Planning adopted by municipalities will establish policies for guiding future land use and serve as a guide on which to base regulatory controls, such as municipal zoning maps and zoning ordinances. The zoning ordinances and maps adopted by the municipalities will establish zoning district boundaries, permitted land uses, and the permitted density of development.

Critical elements of Future Land Use Plans should be to protect important and vulnerable natural areas, resources, landscapes, and wildlife habitats; maintain rural character in those areas not served by public sewer and water facilities; minimize strip residential and commercial development along roads and minimize the access management concerns which accompany such development; maintain the character of the County's villages, hamlets, and neighborhoods; and support revitalization in the Boroughs.

Growth in the future should be directed to designated growth areas. A Conceptual Growth Area map is contained in Chapter 5. This map also serves as a starting point for municipal discussion. It is important that policies on public sewer and water facilities be consistent with the land use plans: service areas should be those designated for growth or future development on the Future Land Use Plan.

As development occurs, natural resources should be protected and/or integrated into developments. Development should be landscaped, attractive, and well-planned to provide attractive streetscapes. In existing centers, new growth areas, and corridors, mixed use should be emphasized when appropriate, walkability improved and incorporated into development, road access managed, and traffic impacts mitigated.

Connections to natural features and corridors and scenic vistas should be maintained. Open space conservation should be emphasized and maximized. One of the primary techniques in accomplishing this is by using Conservation Development and incorporating provisions for such development into municipal zoning and subdivision and land development ordinances.

As development occurs, existing living environments must be respected and protected. Development should be in scale and character of the setting in which it occurs and compatible with existing uses. Conflicts between residential and non-residential uses should be mitigated.

Key Role of Municipal Zoning

Ultimately, municipal zoning regulates the use of land. All municipalities in Pike County are currently zoned except for Greene Township. There currently is no County zoning on behalf of Greene Township. County Zoning of Greene Township is not a viable option at this time, nor is it to be considered in the future.

This plan, however, does identify recommended growth areas. The action plan envisions that the next step in the planning process in the County will be development of multi-municipal and municipal comprehensive plans, followed by zoning based on those comprehensive plans.

Recommended considerations for guiding land use decisions at the multi-municipal and municipal basis are contained in Chapter 16 of this plan. Municipal zoning ordinances will actually determine how much land is set aside for commercial and industrial development, where residential development will be permitted and at what density, and whether certain residence-serving commercial uses would be permitted in close proximity to residential development.

The local zoning regulations will also indicate whether strip commercial development will be limited, and planned commercial development encouraged; whether adequate setbacks will be required to facilitate road widening and improvements in the future; whether a diversity of commercial uses will be allowed, including those to serve the needs of the growing permanent population of the County; whether higher densities will be permitted when public sewage is available to address issues of housing affordability and infrastructure feasibility; and whether development techniques such as conservation zoning, lot averaging, and transfer of development rights will be used to conserve open space in the face of development pressure.

After comprehensive plans are prepared, municipal zoning ordinances should be updated to implement the plans. Without effective zoning ordinances, plan goals will not be realized.

In general, municipalities within the County should consider the appropriateness of the following zoning approaches in further protecting resources and managing growth. In some cases these approaches are adequately addressed in municipal ordinances, but in a number of cases they are not.

Zoning Concepts For Municipal Consideration

- Reducing lot sizes for single family dwellings further when public sewer and water are available.
- Increasing the density for multiple family units when public sewer and water are used.
- Coordinating billboard regulations among municipalities sharing road corridors.
- More frequent use of environmental impact statement requirements.
- More frequent use of traffic impact statement requirements.

- Establishing environmental performance standards where none exist and reviewing adequacy of current standards.
- Using net-out provisions for protecting natural resources.
- Using Conservation Zoning to allow Conservation Development.
- Protecting wetlands.
- Buffering water bodies and streams.
- Further protecting floodplains.
- Protecting woodlands.
- Protecting ridgelines.
- Adopting commercial design guidelines.
- Protecting historic resources.
- Utilizing Access Management standards.

SUPPORT OF ECONOMIC DEVELOPMENT

Economic development is important because enhanced tax revenue from business development can balance the residential share of the property tax base. Also, family sustaining jobs in a variety of appropriate employment fields can be created and maintained for County residents. It is critical that as development occurs, the natural environment be protected. Adequate infrastructure must be in place, or put in place, to accommodate the impacts of development. Businesses must be willing participants in protecting the County's resources and character.

Economic vitality can be approached directly, such as providing land for commercial and business development, providing opportunities for adaptive reuse of older buildings, fostering partnerships to attract and support the business community, marketing opportunities within the County, and strengthening the streetscape of the commercial areas along Main Streets. However, this is not the entire solution.

Planning to achieve a desirable quality of life makes economic sense, as it can encourage additional investment in the County. Preserving community history and culture helps maintain a sense of place and can attract people and businesses.

To maintain a sense of place, it is necessary to maintain human scale and provide places for people to live, work, shop, and play safely and securely. In Pike County, maintaining a sense of place most importantly involves protecting the natural environment. The rural character, beautiful landscapes, natural resources, recreational opportunities, and important natural areas which have drawn people to visit and live in the County must be retained to continue to make the County such a special place in which to live and visit, and to retain the character which distinguishes it from other areas.

Economic development must be planned to preserve quality of life and to maintain a sense of place. Areas considered appropriate for growth have been identified on the Conceptual Growth Areas map included in Chapter 5. Generally, such development is encouraged to locate within major transportation corridors, near interchanges with I-84, the County Business Park, and within or near existing centers where a core of such development exists.

This Plan's major task is to preserve the quality of life and to enhance the special features of the County, assuring that the County will remain an attractive place in which to live and work.

This will be accomplished by managing the pace, quality, and location of development, while preserving natural features, residential neighborhoods, historic resources, open space, and greenway corridors.

Alternatives should be provided to strip commercial development. This will occur through well-planned developments, such as the business parks and interconnected and integrated commercial areas.

Appropriate mixed use development is encouraged. The appropriate mix will depend upon the location and type of municipal zoning district.

Standards should be adopted by municipalities to improve the design and appearance of new development and redevelopment. Appropriate attention should be paid to landscaping, lighting, building design, buffering, signage, setbacks, screening, and pedestrian amenities. Development should be designed and constructed to meet environmental performance standards, eliminate adverse impacts on adjacent land uses, and minimize highway access safety hazards.

Improvement and revitalization of existing developed areas such as Milford and Matamoras is important to maintaining an economically vital County. This includes efforts to address transportation concerns and improve streetscapes.

Within the County, emphasis will be given to attract segments such as desirable small business incubation; green and cultural tourism; light industrial, research and development, and high technology, office and service development to supplement existing commercial development; and retention of existing desirable businesses and industries.

Tourism will continue to play an important role in the economy of the Region. There will be continued discussion of the role that tourism should play in the County economy and the appropriate types of tourism to encourage in the County.

It is important to address the needs of existing businesses in the Region. They should be consulted regarding their concerns and needs. Telecommunications companies should work to provide businesses with adequate telecommunications facilities. Increased cell phone tower capacity and more widespread installation of fiber optic lines are also necessary to attract some industries.

Cooperative efforts of municipalities, the County and County economic development agencies, businesses, legislators, educational institutions, and state government must continue if appropriate jobs are to be created in the County.

Key elements of economic development include **Formation** (Small Business Development Center [SBDC], Northeast Pennsylvania Alliance [NEPA], Small Business Administration [SBA], and Business Incubators); **Expansion** (variety of business venues available, such as flex rental buildings, multiple-tenant buildings, and shovel-ready sites); **Retention** (including workforce education and availability, promotions, and attention to needs); and **Attraction** (marketing).

Pike County Industrial Development Corporation (PIDCO)

Pike County Industrial Development Authority (IDA)

There are two economic development agencies in Pike County - the Pike County Industrial Development Corporation (PIDCO) and the Pike County Industrial Development Authority (IDA). Both are dedicated to providing a stable employment base in Pike County while preserving the County's culture and natural beauty. The Pike County economic development organizations have the following objectives:

- Assist in the retention and expansion of existing firms
- Work towards the attraction of new businesses through the provision of financial assistance and training as may be available to prospective firms interested in expanding or locating in Pike County
- Provide consulting services, through the University of Scranton's Small Business Development Center, to all individuals interested in starting, expanding, or improving an existing small business
- Provide research data concerning Pike County's employment, population, financial aid, housing, tax rates, real estate, zoning, transportation and other facilities
- Work with County, State, and Federal agencies to provide such other assistance that may be available and required by interested firms.

PIDCO strategies include developing sources of funding to support PIDCO endeavors; providing educational opportunities to help local businesses succeed; and making businesses aware of help available through their access to economic stimulus programs.

IDA strategies include working with county and local government to help provide the infrastructure needed to support the business community; helping to attract appropriate businesses to Pike County; assisting with the retention and expansion of existing local businesses; and assisting Pike County entrepreneurs interested in starting up new businesses.

Chambers of Commerce

Pike County currently contains two Chambers of Commerce. The Pike County Chamber of Commerce supports the business community throughout the County and the Hawley-Lake Wallenpaupack Chamber of Commerce serves the Lake Wallenpaupack region of the county.

The mission of our local Chambers of Commerce is to accelerate business growth in Pike County by representing businesses in promoting economic development while preserving and enhancing our community's quality of life. This is accomplished by providing value-added programs and benefits to promote membership and to help members achieve success by building partnerships and coalitions for businesses to effectively work with community, government and educational organizations in the shaping of public policy.

The Chambers of Commerce have the following general goals and policies:

1. To represent businesses in promoting economic development while preserving and enhancing our community's quality of life.
2. To position the Chambers as organizations that benefit current and future members and to maintain membership and revenue levels that sustain budgetary requirements.
3. To build partnerships and coalitions for businesses to effectively work with community, government, and educational organizations.

These general goals can be realized through the fostering of supportive operating environments that nurture the growth and development of Pike County's existing, start-up, and relocating businesses by promoting the area's livability and quality of life. The marketing of Pike County is equally important to their success in the support of their mission. Marketing will benefit present members and will enhance the entrepreneurial climate of the region. The Chambers of Commerce provide value-added programs and benefits to help members achieve success. They also continue to develop and refine a marketing plan to attract new members and retain existing members.

The vital role that Chambers of Commerce play in the promotion and retention of local business needs to continue to be nurtured and supported.

Economic Initiatives

The key elements of programs to strengthen centers, such as Main Street Programs, are outlined below. Applicable in Boroughs and Villages, these elements could also be used in established and developing corridors such as the Route 6/209, Route 739, and Route 507 corridors.

- **Improving the image by enhancing physical appearance, as appropriate**
This includes enhancing the appearance of buildings, street lights, window displays, parking areas, signs, sidewalks, benches, landscaping, trash receptacles, utility poles and lines, and graphics. Design in the area should recognize existing desirable physical elements, be compatible with the area's character, and be unified.
- **Securing consensus and cooperation among the groups that are involved in economic development**
Parties which should be involved include municipal officials, business people, bankers, real estate agents, customers, the media, residents, and civic groups.

- **Promoting the Center or Corridor**
The unique characteristics should be promoted to customers, investors, existing businesses, and potential new businesses. A positive image can be fostered through appropriate special events, and other programs. A brochure promoting businesses can be prepared.
- **Strengthening the Economy of the Centers and Corridors**
If the economy is strong, it is possible to maintain and upgrade the buildings in the existing communities. Existing businesses should be helped to expand; new businesses should be recruited; and increased use of any underutilized buildings should be promoted.
- **Affecting Attitudes Towards the Centers and Corridors**
Consumers and investors have more positive attitudes as they see changes taking place such as building improvement projects and new street furniture. Owners of buildings will be more likely to make improvements to their buildings.

Specific tasks to help maintain economic vitality can include:

- Helping businesses identify new sales opportunities
- Promoting the centers and corridors as cohesive shopping areas to market groups
- Listing potential new businesses
- Keeping track of prospective businesses
- Improving the quality of businesses by helping them be more customer responsive and competitive
- Having coordinated business hours that meet consumer needs. Encourage businesses to work together
- Encouraging attractive window and interior merchandise displays
- Maintaining information on the centers and corridors
- Marketing and promoting businesses
- Conducting an advertising campaign
- Helping to maintain existing businesses and encouraging patronage of those businesses
- Working with financial institutions to establish loan pools
- Maintaining a good working relationship between public and private sectors
- Finding new uses for any underutilized or vacant buildings
- Recruiting businesses to complement the retail and service mix
- Identifying sources of grants for physical improvements or providing matching grants for such improvements, including building facades
- Assuring promotional activities create a consistent, positive image, consistent with community characteristics and history
- Scheduling events to bring people into the community on a regular basis
- Understanding the area's history
- Enhancing gateways to the centers or corridor
- Facilitating wayfinding
- Managing parking spaces
- Working with developers to assure attractive, well-planned development

- Enhancing alternatives to auto traffic, including enhanced transit service and enhanced transit hubs with shelters, parking areas, and pedestrian walkways
- Landscaping standards
- Signage standards
- Enhancing the pedestrian system and coordinating with open space, recreation, greenway planning, and River Trail planning
- Managing road corridors
- Providing connections to, and information at, river landings
- Protecting natural resources
- Encouraging appropriate mixed use
- Incorporating open space, natural features and public, people-oriented spaces so they are visible and accessible in order to humanize areas and providing reminders of why the area has attracted so many residents and visitors
- Addressing parking needs
- Recognizing the assets and to define characteristics. Enhance and build upon those identified features. Examples are building stock, architectural traditions, variety of available services, historic resources, walkability, and traditional development patterns.

In conjunction with center/corridor improvement programs, an economic development strategy table like the following can be prepared.

Table 7

<div> <div>Economic Development Task ?</div> <div>Economic Development Incentive</div> </div>	Lighting Improvements	Sidewalk/Curb Improvements	Cross Walk Unique Identifier	Establish New Traffic Patterns/Traffic Improvements	Additional Trash Receptacles	Tree Replacement/Planting Program	Color Selection Coordination	Size Selection Coordination	Style Selection Coordination	Bandwidth Improvements	Overhead to Underground Conversion/Placement	Directional Signage	Deferred or Excused Payment Requirement	Commercial Development Recruitment	Create and Advertise Community Venues	Promote Adaptive Reuse Opportunities
Main Street Revitalization	X	X	X	X	X	X	X		X		X	X		X	X	X
Additional Parking Improvements	X	X		X								X				
Recreation Program Expansion	X	X			X	X					X	X			X	
Public Safety Improvements	X	X	X	X	X						X					
Façade Coordination/Design/Specification							X		X							
Signage Coordination							X	X	X							
Trash/Debris Increased					X											
Communication/Internet Enhancements										X	X			X		
Flat-pad Ready to Build Sites										X	X			X		
Tax Abatement Programs													X	X		X
Utility Incentives										X				X		X
Tourism Recognition													X		X	
Transportation Access				X												

PROVIDING HOUSING OPPORTUNITIES

Opportunities should be provided for accommodating new housing in different dwelling types and at appropriate densities for households of all income levels. This will include providing for single family, two family, multi-family, and mobile home park housing, depending on the municipal zoning district and available infrastructure. Densities of development will also vary with the zoning district and available infrastructure.

While accommodating new housing, the existing character of the County and of existing residential neighborhoods should be retained. Neighborhoods should be protected from adverse impacts of potentially incompatible uses. The housing available in the County should be suitable, safe, and sound for residents. One approach is to encourage necessary maintenance, rehabilitation and renovation of the existing housing stock in need.

New housing developments should be well-planned, attractive living environments. A variety of development options can be made available, such as conservation development, traditional and village patterns, and mixed use development.



A particular concern in the County is to support housing alternatives for seniors that are consistent with the other goals and objectives of this Plan. This could include such projects as smaller-scale senior housing units and retirement villages. Programs that help seniors maintain and remain in their homes can be identified to those in need.

There is a need in Pike County for affordable housing options, particularly for seniors, young families with children, single parents, single person households, and workers employed in Pike County. Providing a variety of housing options, in addition to meeting the needs of the County's population, can help attract and retain business by providing

appropriate housing for a diverse workforce and reduce negative environmental impacts from sprawl.

One approach to providing a variety of housing options is for municipalities to provide for a variety of dwelling types at viable densities within zoning ordinances. Another approach is for municipalities to review the concept of providing density bonuses for the inclusion of affordable housing within developments or construction of developments targeted at groups in need, such as seniors.

Municipalities can maintain building and housing codes which are reasonably based on protecting public health, safety and general welfare, and which do not contain provisions solely to increase the luxury of dwelling units. This is facilitated by use of the Uniform Construction Code. These standards will improve the County's housing stock but may raise housing costs due to material requirements, inspection costs, etc.

To support higher densities and varieties of housing, adequate infrastructure will be required. This will be more feasible if growth is concentrated in existing and planned centers and growth areas. Such a concentration will facilitate access to transportation, shopping, jobs, and supportive programs.

PROTECTION OF HISTORICAL RESOURCES

Protection of historical resources is an element of smart growth – historical resources within the County should be protected through the use of historic resource overlay zoning, utilizing demolition by neglect provisions in zoning ordinances, adopting town center and rural village design standards, and requiring historic resource impact studies for subdivisions and land developments.



Historical resources should be identified and evaluated, and participation in Certified Local Government Programs should be investigated. The creation of historic districts, identification of historical resources and their importance, retention, restoration, enhancement and appropriate adaptive re-use of historical resources are important factors in historical resource protection. Removal of potential historic structures should be strongly discouraged. Programs, events and interpretive signage and exhibits which emphasize the history of the County, and identify contemporary sites for future preservation, should be considered as well.

ADDRESSING TRANSPORTATION ISSUES

Interrelationships of plan elements are particularly evident in approaches to dealing with transportation issues. For instance, land use policies such as public land acquisition, open space preservation, and forestland protection and other conservation easements reduce the amount of land available for development in rural areas and result in fewer trips being generated. Limiting designated growth areas to areas that are served, or can readily be served, by public sewer can concentrate development, making alternative transportation needs more feasible and result in reduced trips in areas with roads not suited for higher traffic volumes and without alternative travel modes. Transportation issues do not follow municipal boundaries; therefore, municipalities need to plan cooperatively to assure that needed transportation infrastructure projects are initiated. The Pike County Road Task Force remains a strong group of municipal collaboration to identify and pursue needed transportation improvement County-wide.

Transferring development rights from rural areas to designated growth areas can concentrate development where transportation infrastructure improvements and alternative transportation modes are planned. Encouraging development within existing centers and corridors with mixed use within and among buildings can reduce vehicle trips and support multi-modal travel and pedestrian and bicycle scale possibilities.

In areas where transportation infrastructure is appropriate, density bonuses can be considered. The utilization of public sewer and water in designated growth areas can be utilized to concentrate development, while limiting or eliminating density bonuses for community sewer and water facilities outside of designated growth areas or areas which are not likely future public sewer and water service areas.

Municipalities can also consider the use of Traffic Impact Fees. Developers can be required to pay their way by requiring on-site improvements and frontage improvements. Traffic Impact studies and ordinances can be done on an individual and/or multi-municipal basis (see Appendix 5 for an outline of the process).

Alternative travel systems such as enhanced pedestrian and bicycle systems through trail, sidewalk and pavement planning and enhanced transit service should be supported.



In existing developed areas, traffic calming can be employed on routes where through traffic is not encouraged. Techniques include active speed reduction (physical changes), passive speed reduction (signage), and streetside design (such as landscaping to affect driver attitudes).

As growth continues in the County, Corridor Management Plans should be considered in the major road corridors within

the County. These techniques are discussed in detail in Chapter 9, the Action Plan. Key elements are access management techniques; corridor overlay zoning; Transportation Development Districts; and optimized and coordinated traffic signal timing.

Additional techniques which are supported are providing sufficient Park and Ride facilities; parking management within the Boroughs; utilizing the 12-year transportation program to complete essential projects; using official map/right-of-way acquisition to facilitate improvements by placing improvements on official maps and beginning to acquire necessary rights-of-way; and implementing Capital Improvements Plans for transportation projects.

PROVIDING COMMUNITY FACILITIES

Public Sewer Facilities

The appropriate planning of public sewer and water facilities is crucial to directing growth to conceptual growth areas identified in Chapter 5 and the implementation of municipal and multi-municipal future land use plans.

Extensions of public sewer and water systems should be within municipally-designated growth areas. Consideration of extending facilities outside the designated growth areas should only occur upon review of the future land use plan and amendments to designated growth areas by municipalities upon recommendation of comprehensive planning committees. The provision of public sewer and water facilities provides the needed infrastructure for development, so local municipal plans should identify the appropriateness of development in the infrastructure improved area.

Proliferation of package sewage treatment plants and localized water systems in the County can encourage sprawl and, particularly with package sewage treatment plants, create maintenance problems in the future that municipalities will have to address. Municipalities in the County should work together and with PADEP to discourage sprawl by emphasizing the use of public sewer and water systems when development occurs. Coordinated planning should explore the most appropriate methods to provide public sewage collection and treatment within growth areas. Generally, community sewer and water systems should be used where on-lot systems are failing and public water and sewer facilities cannot be provided.

Municipalities should consider enforcing sewage management ordinances and state mandates to manage on-lot sewage disposal facilities. This can be accomplished by considering a program of monitoring and maintenance and to assure that the best available technology is utilized.

All waste within the County should be treated and/or disposed of in an approved, environmentally responsible manner. Discharge from sewage treatment plants should be consistent with the water quality designation of affected streams so that streams will not be degraded by discharges through the plants. Discharges must be monitored with the owners and operators of the plants. Preserving stream corridors and water quality within the County is critical to maintaining the quality of streams as habitats, water resources, and recreational resources. Viable alternatives to stream discharge should be investigated.

Public Water Facilities

The high quality of the water in Pike County is one of its greatest assets. Methods for protecting water supplies are identified in Actions to Protect the County's Water Resources in Chapter 9. The identified methods that can be utilized include river and stream corridor protection and riparian buffers; headwaters, aquifer and wellhead protection; groundwater recharge area protection; minimization of impervious surfaces; requiring hydrogeologic impact analyses; watershed-based planning, zoning and education; conserving critical areas; utilizing best management practices; implementing stormwater management planning; greenway development; conservation zoning; and using appropriate sewage treatment and discharge practices.

Regional planning, should examine how to facilitate construction and/or extension of public water facilities within growth areas to serve existing and future needs and support higher densities and varieties in uses.

The County's rapid growth has impacted both natural and man-made resources, including our water resources. Pike County is fortunate to be blessed with an abundant supply of high quality water. While the existence of high-quality and exceptional-value watersheds

in the County provides some protection of existing water quality, new development and growing water demands put pressure on existing water quantity and quality, increasing the risk of groundwater contamination and the threat of soil erosion, sedimentation and storm water runoff. Achieving a balance between growth and development and protecting the County's resources will be a continuing challenge.

A key element in planning for the future of Pike County will be the availability and quality of the County's water supply. In order to ensure that Pike County residents continue to enjoy a plentiful supply of clean water well into the future, Pike County should embark on a process to develop a new Water Resources Plan. The primary objectives of the Water Resources Plan would be to provide an evaluation of existing and projected future water demands and to recommend approaches to deliver water to existing and future residents in the most effective and economical ways possible.

When development plans are reviewed, developers should be required to adequately manage storm water runoff and erosion and sedimentation in manners consistent with the protection of water resources in the area. Storm water management should be considered as part of the hydrologic cycle with consideration of infiltration, reducing pollution, and reducing thermal impacts through the use of Best Management Practices [BMP]. Recommendations and ordinances pursuant to adopted Act 167 Stormwater Management Plans are a useful tool for municipalities in addressing stormwater concerns.

Water planning and review of development should involve fire companies in the area to ensure that there will be ample fire hydrants and volume and pressure of water to provide adequate fire protection.

Public education programs should encourage the community to be aware of potential sources of water supply in their watersheds and to exercise good "housekeeping" and stewardship practices to help protect them. Landscape management programs can be formulated to encourage residents to reduce nutrients and pesticides reaching streams and ground water.

Existing watershed associations should be supported and the formation of new watershed associations and municipal environmental advisory councils encouraged.

Pursuant to the State's Source Water Assessment Program (SWAP), source water areas of public water systems have been identified, potential pollution sources identified, and vulnerability of water supply to pollution sources assessed. The program also encourages and provides a tool for water suppliers, municipalities, and the public to develop methods and programs which reduce or eliminate the contamination of water used for drinking water supplies. Municipalities, watershed associations, and water suppliers should work together to develop a program to protect watersheds.

The consolidation of community water systems should be reviewed in order to minimize the number of separate water systems in the County and assure adequate service in the future. Where separate systems will serve adjoining areas, and where appropriate and feasible, water systems should be interconnected for times of emergency as a way to provide better service.

Drought contingency plans should be prepared by all water suppliers to establish how water supplies will be continued during times of drought. Elements to address include: alternative sources of supply; interconnections between systems; emergency water transfer agreements; and water conservation provisions. Even outside times of drought, water suppliers should implement water conservation programs for both the system and individual users.

The County Commissioners have previously solicited interest of the County municipalities in participating in a County-wide Sewer and Water Task Force. The Task Force, when formed, would be charged with looking at how existing development and future growth areas could best be served by public sewage disposal. Consideration can be given to regionalizing the Sewer and Water Task Force to more appropriately address site-specific needs. These public systems are critical to concentrating growth in future growth areas, as well as serving economic development. A particularly important issue facing Pike County is how to provide for additional sewage treatment capacity in light of the limitations posed because of the high quality of the County's waters.

The County Commissioners have also begun the process to review the recommendations of the County Water Resources Plan and determine the most effective and efficient approach to providing water service in the County. The Task Force, when formed, would be charged with looking at how existing development and future growth areas could best be served by community water systems. Such systems are critical to concentrating growth in future growth areas, as well as serving economic development. Given the tremendous growth the County has experienced and the capacity for and expectation of continued growth, updated water planning is necessary within the County. The Build-Out Analysis for the County indicates a potential increase in water consumption of approximately 11,000,000 gallons per day based on current zoning in the County and a potential increase in sewage generated of 12,500,000 gallons per day. At the County level, a new County Water Resources Plan should be prepared to address how to protect water quality and supplies and serve growth within the County consistent with identified growth areas.

Issues of particular concern are: what are the appropriate roles of private water systems and public water systems in the County; what regionalization efforts should be encouraged; what are the roles of the municipalities; what are appropriate zoning policies in future growth areas to support community systems; and how can the County facilitate planning for centralized water systems.

Recreational Facilities

The County has initiated the preparation of an Open Space, Greenways, and Recreation Network Plan. That plan will emphasize the importance of maintaining open space and a system of greenways in the County and providing additional recreation facilities as the County population continues to grow. Provision of additional recreation facilities outside the existing County Park will likely be a municipal and developer responsibility. Municipal and multi-municipal open space, greenways, and recreation planning is vital and encouraged.



This Plan supports the efforts of open space committees to plan for continued improvement and appropriate development of recreation facilities and programs in the County, such as municipal and regional parks, pursuant to the open space, greenway and recreation plans.

Objectives for recreation are to expand parks, recreation, and open spaces for residents which are accessible, inviting, well maintained and safe, and to establish developer responsibility in providing park and recreation facilities and open space.

Language should be considered in municipal subdivision and land development ordinances to require developers to dedicate land or pay a recreational impact fee in lieu of land for all new residential subdivisions and land developments. Municipalities should review each subdivision and land development to determine whether the dedication of land for open space and recreation or a fee in lieu of land would be more appropriate, based upon the size and location of the development and open space and recreation plans. Subdivision and land development ordinances should maintain standards for recreation

facilities provided by developers, and the standards of the National Park and Recreation Association should be reviewed for appropriateness and for inclusion within the ordinances.

There should be continued cooperation with the school districts to assure availability of school district facilities to the County's residents.

Police Service

A major concern within the County is increasing police protection. Governments within the County should work together to facilitate regional police service. It is also necessary to address increased police presence in private communities, where police protection is generally an association responsibility. The County can be a facilitator, bringing together municipalities to talk regarding opportunities for cooperation and regionalization, working to organize secure funding or services for necessary studies, and analyzing the results of studies with municipalities.

Monitoring of Needs and Intergovernmental Cooperation

An objective for community facilities and services is to provide the necessary community facilities and services to the County's residents in an efficient, cost-effective and quality manner within the financial resources of the County and the municipalities. The County and municipalities should continue to monitor the need and opportunities for additional, expanded, or improved community services and facilities as available financial resources permit. Community facilities may be provided on an individual basis or on cooperative efforts. It is necessary to monitor the needs for specific groups, such as seniors, youth, and families. While some services and facilities can be provided by municipalities or cooperative efforts of municipalities, in some cases it may be necessary to coordinate provision of services to, and facilities for, residents with community or government agencies serving larger geographic areas.

Municipalities should continue to review opportunities and/or needs for regional cooperation in the provision of services, equipment, programs, and facilities as demands for services and costs increase and availability of volunteers continues to be a concern. This would involve continued and expanded cooperation and dialog between the Townships and the Boroughs and agencies such as fire companies, authorities, and school districts. Comprehensive planning, recreation planning; utility planning; transportation planning; implementation of Plans; code enforcement; and emergency services planning should be considered on a regional basis.

The municipalities also have the option to explore the merits of further revenue sharing on a regional basis in the future. Currently, significant revenue sharing occurs among

municipalities in the same school districts, as major portions of local taxes are for funding of the school system.

School District Growth

Continued cooperation of municipalities and the School Districts in planning activities and utilization of school facilities is encouraged. It is also necessary to maintain a dialogue with the school districts regarding development activities, school facilities needs, location of school facilities, and school bus routes.

For example, location of school facilities can affect decisions regarding residential subdivision, and maintaining future land use plans. Location of school facilities also affects school bus routes. School bus route planning should be coordinated with transportation improvements and the availability of roads which are adequate for school bus traffic. Land acquisition policies of the school districts can result in properties being removed from tax roles, and revenue loss to municipalities from this needs to be addressed with the school districts. School locations, bus routes, and bus stops can contribute to traffic congestion if not well planned.



Consideration should be given to how children will be picked up and dropped off within residential developments. School district planners, developers, and reviewing municipal agencies should make sure adequate, well-lit stops are provided.

Expanded information on School District facilities and statistical data can be found in Chapter 18 – Community Facilities and Services

DEVELOPMENT OF COMMUNITY

This plan supports efforts to bring people together at events in the community, promote involvement of new residents in community programs, and enhance community cohesion. This can be accomplished in part by creating appropriate locations for community activities, such as parks and recreation facilities, greens or sitting areas established through streetscape improvements, and the provision of social and cultural facilities. Facilities could be provided by developers, municipalities and/or social service agencies

through the development of senior centers and youth centers and the implementation of open space and recreation plans.

Community cohesion and spirit can be fostered by bringing together citizens, the business community, school districts, governments, and volunteer groups, to plan and organize community-wide activities, events, and programs. Economic development and community attractiveness can also be fostered through such efforts.

To meet the needs of the community, and to help people feel as part of the community, it is necessary to monitor the need for additional community, cultural, and social facilities. This will increase resident awareness of resources and facilities, and support efforts to protect, enhance, and improve accessibility of those resources and facilities. Facilities are important, as are the efforts of community organizations to provide programs for area residents and get people to those facilities and programs.

CHAPTER 5

CONCEPTUAL GROWTH AREAS

CHAPTER 5

CONCEPTUAL GROWTH AREAS

WHAT IS A GROWTH AREA?

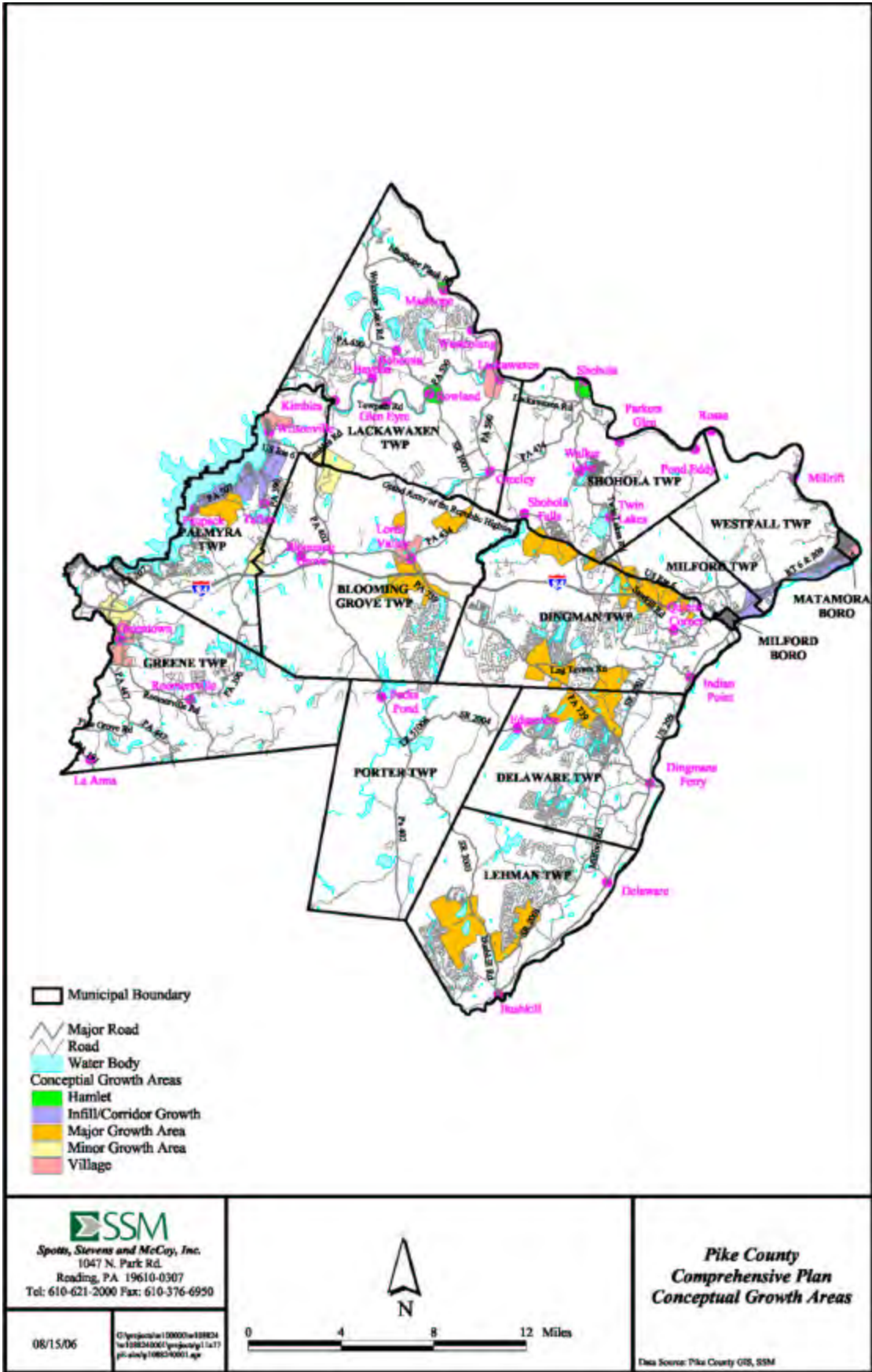
A growth area is a geographic area within which development at higher densities is encouraged and infrastructure (roads, water, sewer) to serve such development is provided for or planned. Growth can include a variety of land uses, including commercial, industrial, and residential development. Sewer and water availability and capacity; transportation improvements; and development in adjacent communities can greatly influence expansion or reduction of growth areas and effect development trends. Geographically, growth areas indicate where development is more appropriate and public investment in infrastructure development is most suitable.

Conceptual Growth Areas Map

The Conceptual Growth Areas Map identifies major growth areas and infill/corridor growth areas throughout the County. All these areas are dependent upon appropriate infrastructure, environmental limitations, and adjacency to present growth and development. The Growth Areas map is not a future land use plan, rather the Conceptual Growth Areas map identifies areas where development seems appropriate and should be encouraged.

Identifying areas for growth will then set priorities for infrastructure improvements, such as roadway expansion, and the provision of centralized sewer and water facilities. The growth areas illustrated will be addressed through the recommendations of *Chapter 9-The Action Plan*. These recommendations address managing growth, establishing partnerships to manage growth, and encouraging multi-municipal planning.

Conceptual growth areas are considered the most likely areas for economic development within the County. These areas have or could have the infrastructure support necessary to provide new business and job formation within the County. Particularly important areas include the County Business Park, Route 6/209 corridor, Route 739 corridor, Route 6 corridor, Route 507 corridor, and near interchanges with I-84.



Criteria for Designating Conceptual Growth Areas

In designating growth areas, existing land use and settlement patterns, zoning, land characteristics, and infrastructure are considered. The major criteria used in designating growth areas were:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Areas of present or recent growth • Designated development areas identified in municipal comprehensive plans and zoning maps • Absence of severe natural limitations to development (e.g., steep slopes, wetlands) | <ul style="list-style-type: none"> • Areas not identified in the Natural Area Inventory • Connectivity to the existing transportation network, including arterial and collector roads • Proximity to community facilities and infrastructure |
|--|---|

Within Conceptual Growth Areas individual properties may have limitations on development due to the presence of sensitive natural resources or the potential for adverse impacts on nearby properties. Best planning practices should be utilized when any property is developed. In particular, see the discussion of Environmental Considerations for Future Development in Chapter 4; Natural and Scenic Resource Protection, Chapter 6; and Actions to Protect Natural Resources Within the County, initiative I in Chapter 9.

After consideration of the above criteria, Conceptual Growth Areas were mapped. Growth areas on the map include:

- Infill/Corridor Growth
- Major Growth Areas
- Minor Growth Areas
- Village Development
- Hamlets

Note:

Pike County recognizes that a Federal Court Order has been issued with regard to particular properties in Westfall Township. This Comprehensive Plan is not intended to interfere with the implementation of that Court Order nor any actions taken by Westfall Township pursuant to the Court Order.

Infill/Corridor Growth

Infill/Corridor Growth Areas are regions that are appropriate for continued growth in existing developed areas.

- The **Route 6/209 corridor** between Matamoras and Milford Boroughs, which has experienced and continues to experience substantial growth, particularly of a commercial nature recently. Growth should be sensitive to the aesthetic value of these corridors, and should not adversely impact scenic resources.
- The **PA 507 corridor** from Paupack to Route 6 and the PA 390 corridor from Tafton to PA 507.

Major Growth Areas

Major Growth Areas are regions that are appropriate for the development of a variety of land uses at high densities. Most new non-infill growth should be encouraged to locate within the Major Growth Areas, as designated on the Conceptual Growth Area Map. These areas should be considered prime locations for economic development activities, due to the proximity to the local workforce as well as available and potential infrastructure.

- The **Route 6 corridor** west of the interchange with I-84 to the vicinity of Shohola Falls. This portion of the Route 6 corridor is designated as a Major Growth Area. The parcels in the immediate vicinity of the I84/Rt. 6 interchange just west of the Interchange and proceeding east along Rt. 6 from the interchange are located within the Zone 2 (Zone of Diversion-capture zone) Area for the Milford Springs as identified in the Source Water Protection Plan for the Milford Springs prepared for the Milford Water Authority and recently approved by the PA Department of Environmental Protection. Development in this area must be done carefully to assure that degradation of the water supply does not occur.
- The **County business park** along PA 434 and the County Jail Complex along PA 739.
- The area of the **interchange of Route 739 and I-84**, at Lords Valley.
- The **Route 739 and Log Tavern Road corridors**, near the triangle formed by SR 2001, Route 739 and Log Tavern Road.
- Areas in Lehman Township **along Bushkill Road SR2003 and Milford-Bushkill Road SR 2001.**
- An area along **Route 507 near Paupack.**



Minor Growth Areas

Minor Growth Areas include regions that are appropriate for growth, however, at a lesser intensity than Major Growth Areas. Development within Minor Growth Areas should be consistent in scale with existing development, and should not adversely impact natural areas or scenic resources.

- The area of the intersection of **Route 6 and Route 402**. Growth potential is limited because of public and hunting and fishing club ownership in the area. Consideration should be give to the protection of the scenic qualities of the US Route 6 corridor, as portions of it have been designated as a National Scenic Byway, and *National Geographic* has called this route one of the top 10 most scenic in the U.S. It travels the length of Pennsylvania, from Lake Erie on the west to Matamoras Borough in Pike County.
- Land along **Route 390 north of the interchange with I-84**, designated Minor Growth Area because of topographic limitations.
- Land in the vicinity of the **interchange of PA 507 and I-84**, north of Greentown.

Village Development

The Conceptual Growth map illustrates potential ‘Village Development’ in the smaller communities and the Boroughs throughout the County. Village areas contain an existing nuclei of development. Infill and expansion of existing development will be encouraged, when appropriate infrastructure is available. Villages are designated in present small communities and the Boroughs of the County.

Matamoras Borough	Lackawaxen
Milford Borough	Wilsonville
Lords Valley	Greentown



Hamlets

Hamlets by definition are generally unincorporated areas commonly identified by locals by name but are part of a larger recognized region. The hamlets that are designated are where smaller concentrations of development have occurred but limited expansion of these areas could be feasible due to environmental and infrastructure restrictions.

Shohola	Masthope	Rowland
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Addressing appropriate development of Conceptual Growth Areas

Once growth areas are designated, strategies must be developed to encourage development within these regions. Use of zoning, municipal regulations, infrastructure policies, and promotion of sound land use planning will promote better development.

ZONING STRATEGIES

Municipal zoning ordinances can determine appropriate provisions to allow proper development patterns, types, and densities. The following strategies are a supplement to the more detailed techniques described in the Chapter 9-Action Plan.

- Determine types of development which are appropriate.
- Zone areas appropriately to allow desired land uses.
- Determine whether design flexibility in ordinances is necessary to achieve appropriate development patterns.
- Determine whether Traditional Neighborhood Development, Village Design and other similar concepts should be used.
- Consider density bonuses to lowest acceptable lot size or highest intensity of use consistent with available sewer and water facilities.
- Consider allowing nearby convenience services where appropriate.
- Where appropriate, consider well-designed, buffered mixed uses or dwelling types, if appropriate infrastructure is available.
- Consider transfer of development rights, perhaps with bonuses, to growth areas from areas targeted for preservation or conservation.
- Eliminate incentives to development in non-growth and non-targeted areas.

PUBLIC RELATIONS STRATEGIES

To ensure that this Comprehensive Plan is a useful tool for guiding future development and policy in an area, it must represent a consensus among the Region's stakeholders. The residents, business owners, community service providers, and municipal officials must each have a part in implementing the policies of the Plan. To accomplish this:

- Inform existing residents and other stakeholders of projects, invite participation in review, and conduct project meetings with developers at initial stages.
- Prepare appropriate protective design standards, such as traffic calming, landscaping, vegetation retention or replacement, and permissible land uses, to minimize adverse impacts on existing residents.

INFRASTRUCTURE POLICIES

The recommendations of a County comprehensive plan are of no use if municipal officials do not implement them. Thus it is critical to not only have the public's involvement in the municipal planning process but also to involve the local officials in County planning initiatives and training to promote better land use decisions, especially those strategies related to infrastructure development because of Pike County's severe natural limitations and abundant natural resources. Therefore, it is crucial that municipalities are comfortable with the designations of the Conceptual Growth Areas Map. Once municipalities are in support of designation of growth areas, it is possible to:

- Identify the need for infrastructure and community facility improvements (new or improved roads, parks, public sewer and water facilities, streetscape improvements, drainage facilities, pathways).
- Identify and obtain grants to assist in infrastructure improvements projects.
- Facilitate transit or paratransit service.
- Facilitate accessibility to community facilities and services (senior centers, community centers, etc.).
- Locate government services near growth and target areas.

The identification of these Conceptual Growth Areas is derived from general land suitability, existing zoning, and available infrastructure; however, the County's Open Space, Greenways, and Recreation plan will also identify and prioritize areas that would be desirable for future public use or general preservation. Careful comparisons will be needed to balance the needs of the public for open space, greenways and recreation and areas where development seems appropriate and should be encouraged. Development of growth areas must still be done carefully to assure that stormwater issues do not arise and that degradation of the water supply does not occur.

CHAPTER 6

NATURAL AND SCENIC RESOURCES PROTECTION

CHAPTER 6

NATURAL AND SCENIC RESOURCES PROTECTION

THE NEED FOR NATURAL RESOURCE PROTECTION

The characteristics of Pike County that attracted many of its citizens has resulted in an unprecedented amount of development pressure. As stated previously, between the 1990-2000 U.S. Census, the population of the County increased by 65%, which continued Pike County's status as the fastest growing county in Pennsylvania and one of the top one-hundred fastest growing counties in the nation. Several communities built or planned in recent years focus on locating near many of the valuable resources of the County, such as its lakes, pristine streams, and forested landscapes. A balance is necessary between growth and the natural resources of the County. Educating the public regarding their resources and county/municipal planning efforts to protect and preserve the natural qualities is necessary to maintain the present quality of life the citizens of Pike County value.



NATURAL RESOURCE AREAS INVENTORY

A Natural Areas Inventory (NAI) prepared by the Pennsylvania Science Office of the Nature Conservancy was completed for Pike County in 1990 and adopted by the Pike County Board of Commissioners in May 1993 (Resolution #93-08). This document provides maps and summaries of all high quality natural areas, and locations of native plants and animals of special concern - endangered, threatened, or rare. In addition, this document evaluates these resources in relation to their quality, uniqueness, and degree of rarity. The purpose of this document is to serve as a guide for comprehensive and natural resource planning in the County. It should also be used as an important tool for setting protection priorities for sensitive areas. An update to this Natural Areas Inventory was completed in 1995 with species of plants of special concern and other natural communities not tabulated in the earlier 1990 document.

The introduction to the Natural Areas Inventory for Pike County makes the following observations regarding the County's natural resources:

- Pike County is rich in scenic and natural resources.

- The County's rural character and proximity to major metropolitan centers has made Pike County an attractive place to have a vacation home or a permanent residence.
- Scenic and natural environments that have attracted so many people to the County are quickly being lost because of increasing development pressure.
- If natural environments and the plants and animals associated with them are to be maintained, wise planning is required.
- A balance is necessary between growth and the natural resources of the County, and this can only be accomplished by guiding development away from the most environmentally sensitive areas.
- In order to plan development and ensure protection for environmentally sensitive areas, county and municipal governments, the public, and development interests must know the locations and importance of the sites. Knowing where the sites exist, and their quality and significance, can help prevent conflicts over land use. Determining which sites are most threatened can help direct protection efforts and limited conservation dollars to those areas first.

The natural areas inventoried for the County by the Pennsylvania Science Office of the Nature Conservancy are listed in Appendix 9 and shown on the following map. This map also shows areas of 15 to 25 percent slopes and slopes greater than 25 percent.

Following the Natural Areas Inventory map are a series of maps throughout this chapter which indicate density of Forest in the County; Major Watersheds, Floodplain, Wetlands, and Hydric Soils; Stream Uses and Potential Sources of Contaminations; and Geologic Formations and Aquifer Yields.

SIGNIFICANCE OF NATURAL FEATURES

In addition to *special* Natural Areas outlined in the County's Inventory, the County also has an abundance of natural features such as floodplains, wetlands, geologic formations, watersheds and watercourses which are important to the protection of soil resources, groundwater recharge, and retention of the high quality surface and groundwater resources. The importance of protecting these natural features in addition to the Natural Areas are summarized below:

Floodplains	Areas adjacent to a watercourse (stream/river) temporarily covered by water when the waterway exceeds its bankfull stage. The 100-year floodplain has been determined by the U.S. Army Corps of Engineers as to where water would be during the 100-year flood event. This flood event has a 1% chance of occurring every year, and is not a flood that 'occurs every 100 years' as commonly believed.
<p>Protection Importance:</p> <p>Prohibiting and limiting development within the floodplain provides for protection of people and property from flood damage and minimizes downstream flood heights.</p> <p>Retention of natural stream/river floodplain corridors increases groundwater recharge and decreases stormwater runoff.</p> <p>Vegetated riparian corridors serve as buffers to sustain and improve water quality via nutrient removal and erosion and sedimentation control.</p> <p>Floodplain wildlife and plant habitats often support wetlands.</p> <p>Floodplain habitats can provide important open space and recreation areas.</p>	<p>Development Implications:</p> <p>Residential development within the floodplain endangers both people and property in the event of a flood. Building, structures and filling within the floodplain increase downstream flood elevations.</p> <p>Compaction of soils and increasing impervious surfaces along a floodway reduces infiltration and increases the rate of runoff, resulting in increased flooding downstream and higher flow velocities that cause increased flood damage.</p> <p>Removal of the natural vegetated riparian buffer along streams and rivers increases potential for water contamination from surface runoff and erosion.</p> <p>Erosion and storm runoff from development can deteriorate stream banks and cause sedimentation of waterways. Sedimentation of streambeds decreases habitat for aquatic life and navigable waterway.</p> <p>Development hinders aesthetic and recreational value of the waterway.</p>
<p>Protection Strategies:</p> <p>Strengthen municipal floodplain ordinance provisions to prohibit buildings, structures and large amounts of impervious surfaces within the 100-year floodplain to prevent damage to life and property.</p> <p>Limit impervious surfaces in developments adjacent to floodways through conservation zoning.</p> <p>Prohibit mobile home developments from floodplain areas.</p> <p>Monitor current developments for poor management practices and offer planning assistance.</p> <p>Purchase conservation easements along streams to protect the floodplains and water quality.</p> <p>Cooperate with watershed associations and conservancies to promote education and outreach and conduct watershed studies.</p>	

Forests	A forest by definition is an area densely populated by trees and other woody plants. Forested lands cover much of Pike County and are characterized by primarily deciduous trees and shrubbery. The higher elevations and ridgelines contain more pine and evergreen varieties. Bogs and glacial swamps are also very common in the County, resulting from the recent Wisconsin Glacier from approximately 10,000-15,000 years ago.
<p>Protection Importance:</p> <p>Large contiguous forested tracts within Pike County play an extremely important role in the protection of the current high quality and exceptional value watersheds and water resources.</p> <p>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.</p> <p>Forested riparian corridors help sustain stream and lake water quality by acting as nutrient filters and by stabilizing soil against erosion.</p> <p>Forested lands are part of the rural character and scenic relief that defines Pike County.</p> <p>Large forested tracts with proper forest management and good timber operations support the local forest products industry.</p> <p>Undeveloped, forested landscapes allow for relatively high rates of infiltration or groundwater recharge and decrease stormwater runoff.</p>	<p>Development Implications:</p> <p>Development of forested lands can fragment habitat for plant and animal species unique to Pike County and Pennsylvania.</p> <p>Removal of forested riparian corridors has implications on water quality and clarity.</p> <p>Loss of these resources could have implications on quality of life and tourism of the County.</p> <p>Poor forest management and timber harvest operations can have lasting impacts on the long range sustainability of our Pike County forests.</p> <p>Improper development and management of forest resources can allow invasive species to proliferate.</p>
<p>Protection Strategies:</p> <p>Creation of Forest Conservation districts in municipal zoning regulations, guiding the type of development occurring in these forested areas.</p> <p>Ordinance provisions and standards which require construction standards, protection of trees during development, landscaping standards which require native species establishment, limit of clearing until development plan approval, erosion/sedimentation plans, stormwater management, retention of forested canopy along waterbody corridors, and best management practices for forest timber operations.</p> <p>Involving DCNR Bureau of Forestry prior to development to assess land and determine best management of resources during development and/or timbering.</p> <p>Create a municipal Best Management Practice guide for development along steep slopes, ridgelines and stream/river corridors.</p> <p>Provide for maximum lot coverage requirements and minimum open space areas in residential subdivisions.</p>	

Groundwater

In Pike County, groundwater supplies are found in either of two basic types of earth materials: consolidated bedrock such as sandstone or shale or unconsolidated glacial debris consisting of silt, sand, gravel and rocks.

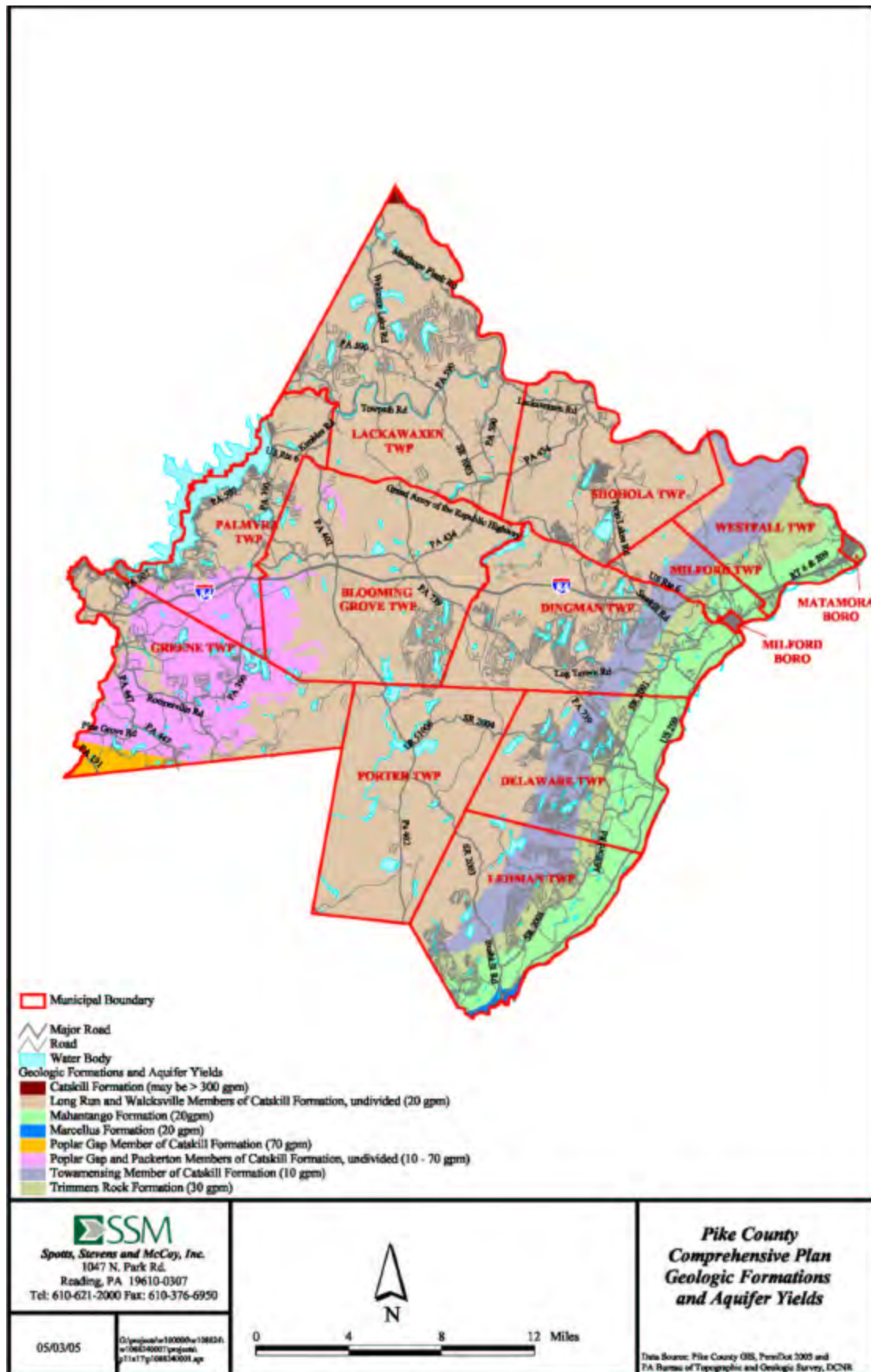
The majority of Pike County residents obtain their groundwater from wells drilled into bedrock. Solid bedrock stores and moves groundwater through minute, interconnected pore spaces. Significant quantities of groundwater also move through the cracks and fractures running throughout bedrock. This interconnected system of cracks and fractures acts as a subterranean plumbing system that residents tap into when a well is drilled into bedrock.

The last glacial period that impacted Pike County ended approximately 20,000 years ago. A sheet of ice, upwards of three thousand feet thick and covering much of Northeast Pennsylvania, began to melt as climatic changes brought increasing temperatures. As a result, large quantities of sand, gravel and rock that were embedded in this ice sheet were deposited over much of the County.

While some of this material simply dropped out directly onto the surface of the land, much was transported in vast quantities of melt waters, flowing downward across the landscape, eventually reaching the Delaware River Valley where these materials settled out, leaving behind deposits up to 500 feet deep. Groundwater supplies in these glacial deposits occupy the open spaces in the sand, rock and gravel.

The most significant deposits of glacial material occur along the eastern edge of the County, particularly in the Milford-Matamoras corridor area. Water wells in this area draw their water from groundwater stored in this glacial material.

Groundwater	The broadest definition for groundwater would be all water that resides below the surface. This water flows from subsurface into our streams, springs, and waterbodies, as well as flows through aquifers into wells.	
Protection Importance: Groundwater is the sole source of potable water supply in Pike County. Groundwater is integrally connected to surface water providing the “base flow” for streams. This base flow is extremely important to the regular stream flows and aquatic communities within them most particularly during drought periods.	Development Implications: Maintenance of both quality and quantity of groundwater reserves sufficient for providing potable water supplies for the growing population will require proper management as development occurs. Increased impervious surfaces affect the ‘recharge’ zone for groundwater supplies increasing the potential groundwater may become contaminated. Potential underground and surface water sources of contamination can directly impact groundwater quality. Increased withdrawals from groundwater aquifers can affect existing supplies and stress future provision of adequate supplies. Improper siting and construction of wells during development can impact potential for groundwater contamination.	
Protection Strategies: Identify key groundwater recharge areas and create protection zones for these critical areas. Create wellhead protection districts to protect recharge zones from harmful development or land-use. Development of programs which seek to prevent groundwater contamination before it occurs. Provide ordinance standards for water well construction including setbacks from on-lot sewage systems, stormwater treatment and infiltration and open space conservation standards. Require wetland delineations and consider buffers for wetlands or other identified primary groundwater recharge zones. Establish a groundwater monitoring program to observe any changes in aquifers levels and quality. Develop a public education and outreach program which highlights groundwater conservation, identification of potential sources of contamination, proper sewage system management and other areas.		



Hydric Soils	These are soils that are wet frequently enough to produce anaerobic (without oxygen) conditions and support unique habitats and influence the biology of the soil. Hydric soils may be an indication of the presence of a wetland.
<p>Protection Importance:</p> <p>Hydric soils provide natural groundwater recharge areas which can reduce flooding and manage stormwater runoff.</p> <p>The biologic organisms in hydric soils filter contaminants from water.</p>	<p>Development Implications:</p> <p>Hydric soils are associated with seasonally high water tables and may cause flooding in developed areas.</p> <p>These soils are unsuitable for development and on-lot sewage disposal.</p> <p>Hydric soils provide poor foundation stability if built upon.</p>
<p>Protection Strategies:</p> <p>Provide ordinance standards requiring wetland delineations by qualified professionals.</p> <p>Consider buffers for wetlands.</p>	





Steep Slopes	Steep Slopes of 15-25% have 15-25 feet of vertical change in elevation over 100 feet of horizontal distance. Very steep slopes of greater than 25% have a vertical change greater than 25 feet over 100 feet of horizontal distance. The steepest slopes are often located along ridgelines or stream banks.
<p>Protection Importance:</p> <p>Preserving natural vegetation on steep slopes not only protects the natural habitat along the slope but also helps protect adjacent areas from stormwater runoff related damage.</p> <p>Ridgelines are important scenic resources and protecting these areas from development preserves the vistas for all citizens and visitors to enjoy.</p> <p>The scenic and recreational value of preserved ridgelines increase property values and contribute to the tourism economy.</p> <p>Ridgelines and steep slopes provide important wildlife and plant habitats. Certain species of trees and plants are only capable of thriving on ridgelines. These ridgelines also serve as wintering sites for the Bald Eagle along the Delaware River.</p>	<p>Development Implications:</p> <p>These areas are prone to erosion if disturbed by development or timbering practices. In addition, changes in vegetation on steep slopes will effect the concentration time of stormwater runoff, potentially increasing flood, and storm damage to developments downslope.</p> <p>Once disturbed these areas are difficult to mitigate.</p> <p>These slopes present increased costs in development engineering and severe limitations with on-site sewage disposal and general road maintenance.</p> <p>Roadways and drives along steep slopes present many driving hazards, especially during the winter months.</p>
<p>Protection Strategies:</p> <p>Identify ridgelines and scenic views as conservation areas.</p> <p>Link zoning standards to protecting land values and local economy.</p> <p>Limit development on slopes greater than 25%.</p> <p>Require detailed engineering plans for any developments proposed on steep slopes.</p> <p>Require stormwater managements for individual building lots.</p> <p>Require deduction of steep slopes from minimum lot size.</p> <p>Make use of conservation subdivision design to focus development away from steep slopes.</p>	

Wetlands

Geologically, the County lies almost entirely within the Glaciated Low Plateau section of the Appalachian Plateaus Province. A small portion of the western part of the County lies within the Glaciated Pocono Plateau section, and the eastern border between Matamoras and Bushkill lies within the Appalachian Mountain Section of the Ridge and Valley province. One of the striking features of a glaciated landscape is the abundance of wetlands. Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The National Wetlands Inventory (NWI) maps developed by the US Department of Interior, Fish and Wildlife Service from stereoscopic analysis of high altitude aerial

photographs provide a good general reference for wetland locations in the County. The NWI wetlands are superimposed over the USGS topographic quadrangles. The aerial photographs used for the development of the NWI maps typically reflect conditions during a specific year and season and as such include a margin of error in using them for identification of all wetlands in the County. In addition, the NWI maps are at a scale such that small wetlands, which may be obscured from the aerial photograph by dense forest cover, are not included. Thus, a detailed on the ground and historical analysis, known as a wetland delineation, completed by trained professionals is the only way to confirm the existence or absence of wetlands on sites proposed for future development.

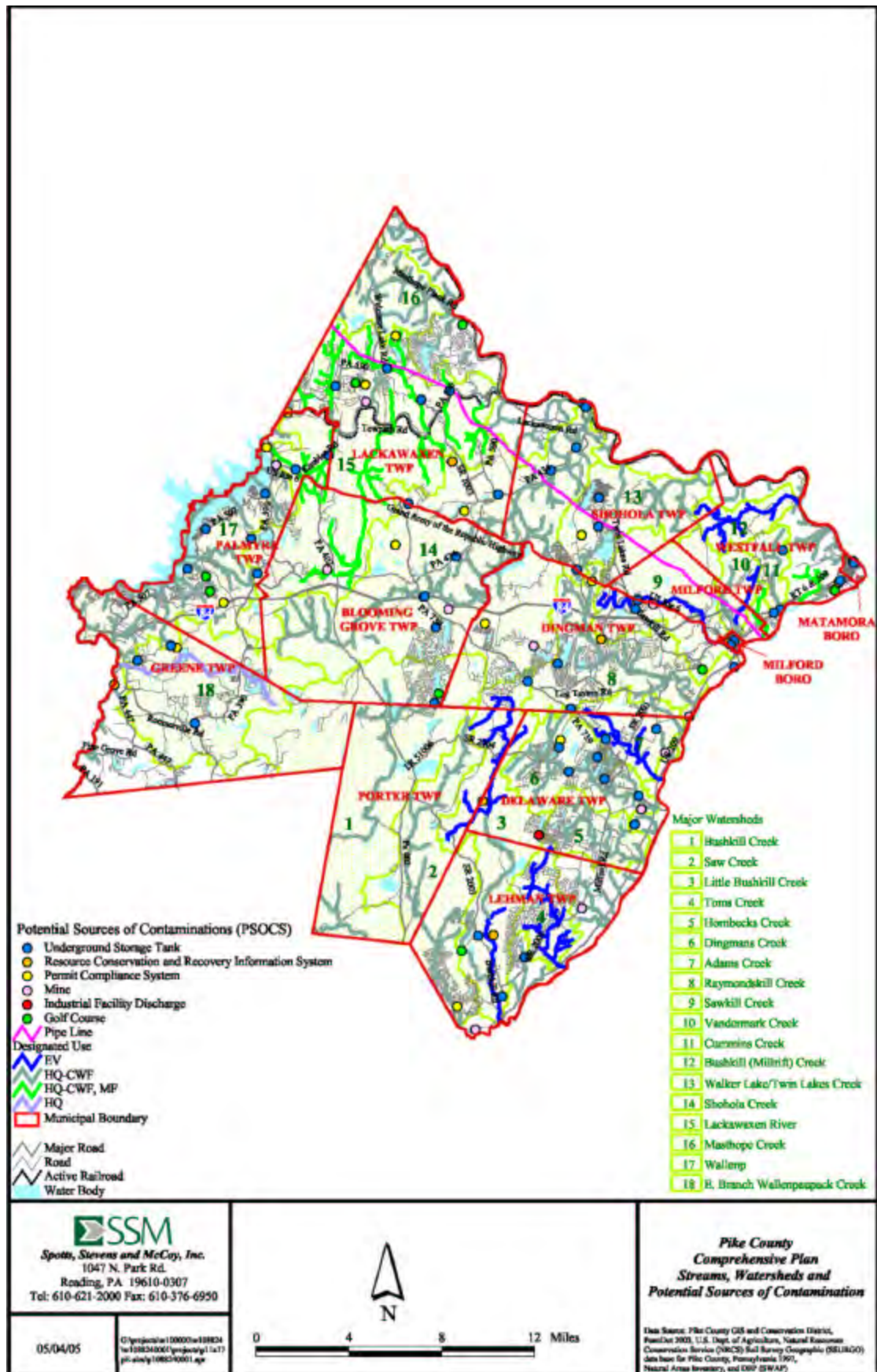
Wetlands	Wetlands are areas where the soil is generally saturated with water for part or most of the year; and has had a significant impact on soil development and the types of plant and animal communities living within the area, which are specially adapted to residing in the moist habitat.
<p>Protection Importance:</p> <p>Wetlands protect water quality by acting as a natural pollutant filter removing contaminants which may be conveyed into groundwater or other surface water if not filtered by the wetland.</p> <p>Wetlands are important groundwater recharge areas.</p> <p>Wetland areas reduce potential flooding by detaining and infiltrating stormwater.</p> <p>Many unique species of plants and animals are only capable of survival in wetland habitats.</p>	<p>Development Implications:</p> <p>Potential encroachment into, filling in or draining of wetlands during development inhibits the continued important values and functions of wetlands.</p> <p>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.</p> <p>Development adjacent to wetlands can release pollutants that impact the water quality and the groundwater recharge capacity of wetlands.</p> <p>Groundwater withdrawals can impact water levels that would otherwise sustain wetlands, particularly during dry periods</p>
<p>Protection Strategies:</p> <p>Create buffer areas adjacent to wetland areas to supplement state and federal regulations.</p> <p>Provide ordinance standards requiring wetland delineations by qualified professionals before development.</p> <p>Limit the amount of impervious surface permitted in developments adjacent to wetland areas.</p> <p>Inventory the plant and animal species in wetland habitats to monitor changes caused by development.</p>	

Watercourses

One of Pike County's most important natural features is the high quality and exceptional value water resources which are prevalent throughout the County. Natural forest habitats which serve as buffers along these watercourses are one of the primary reasons that all of the County's waterways are designated by the PA Department of Environmental Protection (DEP) as *High Quality (hq)* or *Exceptional Value (ev)*. These waterways

include an abundance and diversity of fish species, aquatic organisms and the habitats and water quality necessary to support these high quality watershed classifications. Pike County has 37 listings on the 2005 PA Fish and Boat Commission's List of Streams Supporting Wild Trout (naturally reproducing trout populations).

Watercourses	Watercourses encompass bodies of water on the move, most commonly stream and rivers. These watercourses serve as habitat for aquatic plants and animals. In addition, streams and rivers are important for the tourism and recreation economy.
<p>Protection Importance:</p> <p>High quality and exceptional value water resources serve an important role in protecting and increasing land values and in the continued development of our recreation and tourism economy.</p> <p>Protection of surface water quality directly protects groundwater water quality.</p> <p>High quality streams, rivers, lakes and other water bodies provide critical aquatic species breeding areas and habitat.</p> <p>Watercourses serve as important wildlife corridor connections and plant, bird and wildlife habitats.</p>	<p>Development Implications:</p> <p>Removal of the natural vegetated riparian buffer along streams and rivers increases potential for water contamination from surface runoff and erosion.</p> <p>Erosion and storm runoff from development can deteriorate stream banks and cause sedimentation of waterways. Sedimentation of streambeds decreases habitat for aquatic life.</p> <p>Development can impact the aesthetic and recreational value of the waterways.</p>
<p>Protection Strategies:</p> <p>Develop programs and standards to retain riparian forest buffers along high quality and exceptional value watercourses.</p> <p>To lessen the impact on scenic and environmental value, limit the types and density of development along streams and rivers.</p> <p>Encourage Conservation Subdivision Design for developments along rivers and streams.</p>	



Lakes

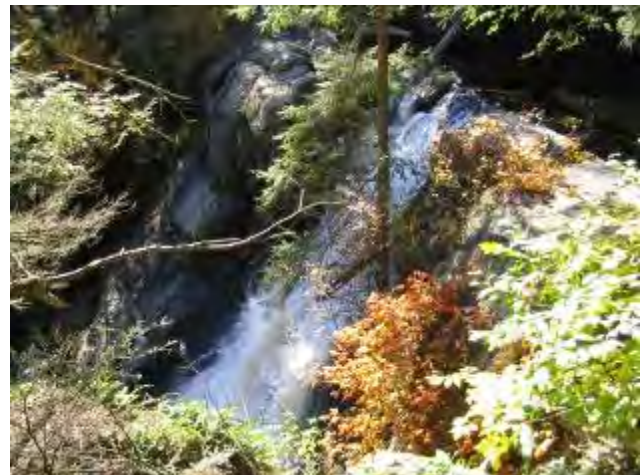
Lakes play a prominent role in the County's environment, with 103 major lakes and reservoirs, which, when combined with the rivers and streams, cover about 13,150 acres, or almost four percent of the County's area. Clean lakes are vital to the recreational character of the County, providing fishing, swimming, boating, and other water-based recreational opportunities. Several of the lakes are of significant regional importance. The 5,200 acre Lake Wallenpaupack, which forms the boundary between Pike and Wayne County is a prime tourist attraction in the Pocono Mountains region. In addition, Promised Land Lake and Lower Lake, of Promised Land State Park draw thousands of visitors each year. Shohola Lake, Lake Greeley, and Pecks Pond are other examples of important recreational lakes in the County.



Lake environments are also important natural areas. The Bruce Lake and Pine Lake Natural Areas are located in the State Forest surrounding Promised Land State Park. A number of lakes and lake habitats are listed among the County's Natural Areas Inventory Sites (See Appendix 9).

Waterfalls

Additionally, several of Pike County's streams are designated in the County Natural Areas Inventory as important waterfall and plunge pool natural communities and as high-gradient clearwater creeks that support rare plant and/or aquatic species. Waterfalls also play an important role in the recreation and tourism economy of the County. A number of waterfalls including Shohola Falls, Dingmans Falls, Raymondskill Falls,



Paupack Falls, Bushkill Falls, Fulmer Falls, and Pinchot Falls are important recreational areas for residents, and several provide major tourist attractions.

Special Protection Waters - Pennsylvania Water Use Designations

Water quality designations are established by the Commonwealth in Title 25, Chapter 93 Water Quality Standards. As mentioned earlier, all of Pike County watersheds are designated by the PA Department of Environmental Protection (DEP) as *High Quality (hq)* or *Exceptional Value (ev)*. The Water Use symbols shown on the Stream Use map have the following meanings:

Special Protection

<u>Symbol</u>	<u>Protected Use</u>
HQ	<i>High Quality Waters</i> – A stream or watershed which supports a high quality aquatic community in biological, chemical and toxicity assessment, waters designated as Class A wild trout streams by the PA Fish and Boat Commission, and/or waters which have excellent quality waters and environmental or other features that require special water quality protection.
EV	<i>Exceptional Value Waters</i> – A stream or watershed which constitutes an outstanding national, state, regional or local resource; water located in a national wildlife refuge, National Natural Landmark, National Recreation Area, State game propagation and protection area, state park natural area; state forest natural area, or federal wilderness areas; waters which are of exceptional recreational significance; waters which achieve a high score in biological testing; waters which have been characterized by the PA Fish and Boat Commission as “Wilderness Trout Streams”, and other waters of substantial recreational or ecological significance.

Aquatic Life

<u>Symbol</u>	<u>Protected Use</u>
CWF	<i>Cold Water Fishery</i> – Maintenance and/or propagation of fish species including the family Salmonidae and additional flora and fauna which are indigenous to a cold water habitat.
MF	<i>Migratory Fishery</i> – Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which ascent to flowing waters to complete their life cycle.

Special Protection Waters and Anti-degradation

Antidegradation is a concept and policy created by the US Department of the Interior in 1968 and was included in the Environmental Protection Agency’s first water quality standards regulations in 1975. The federal basis for the program is contained in the Federal Clean Water Act. States are required to adopt an antidegradation policy as an element of their state’s surface water quality standards; this policy must meet the minimum federal regulations. This requirement complements the Pennsylvania Clean Streams Law which was enacted to preserve and improve the purity of the waters of the Commonwealth for the protection of public health, animal and aquatic life and other beneficial uses.

The basic concept of antidegradation is to protect and maintain the existing water quality of High Quality (HQ) and Exceptional Value (EV) waters and to protect existing uses for all surface waters, recognizing that existing water quality and uses have inherent value worthy of protection and preservation. As a required element of the State's water quality standards, the Antidegradation program introduces levels of protection for deserving waterbodies above the basic standards.

For all surface waters, the uses of the water, including downstream uses, must be maintained and protected when an activity is proposed which may affect a surface water. These activities include point source discharges such as sewage treatment plants, regulated water withdrawals, resource extraction activities, landfills and a variety of non-point source activities such as construction, agriculture and silviculture.

Streams that are classified as High Quality (HQ) and Exceptional Value (EV) waters are waterbodies deserving of "Special Protection" under the State's Anti-degradation policy. As such, these Special Protection Waters are to be maintained at their existing quality and are afforded additional protection through requirements listed in the Rules and Regulations of the Pennsylvania Department of Environmental Protection.

PA DEP requires that a person proposing a point source discharge to Special Protection High Quality Waters must first evaluate non-discharge alternatives to the proposed discharge and utilize any non-discharge alternative which is cost-effective and environmentally sound. If it is determined that there are no cost-effective and environmentally sound non-discharge alternatives or that this alternative can only accommodate a portion of the discharge, the discharge must meet a test of non-degradation or demonstrate that the proposed degradation is socially or economically justified. It should be noted, however, that High Quality waters may be reduced from maintenance of existing quality (degraded), if necessary, to accommodate important economic or social development in the area in which the waters are located and only if certain social and economic justifications are met. In all cases, a discharge must use the Antidegradation Best Available Combination of Technologies (ABACT) to protect the special protection water quality. Antidegradation regulations apply to all surface waters of the Commonwealth, including wetlands.

SCENIC, HISTORIC and OTHER IMPORTANT RESOURCE AREAS

In addition to the important natural areas identified in the County's Natural Areas Inventory and natural features of significance to the County, there are a number of other important resource areas which for economic, cultural, or historic reasons warrant consideration of protection.

Important Bird Areas

Pike County contains areas identified by other agencies and organizations as important for both migratory and nesting bird species. The National Audubon Society has identified four major bird areas in the Pike County region. Included are:

- Upper Delaware Scenic River including the Lackawaxen River Corridor
- Shohola Waterfowl Management Area – State Gamelands #180
- Promised Land State Park – Bruce Lake Natural Area
- Kittatinny Ridge

The Lackawaxen River and the Upper Delaware River Corridors provide important winter feeding areas for Bald Eagles.

The Pennsylvania Game Commission reports that Pike County has the state's fastest growing nesting population of Bald Eagles. Pike County contains one of the three largest concentrations of Bald Eagles in Pennsylvania.

Pike County Farmland Resources

A large portion of Pike County's harvested cropland lies in the eastern corridor of the County along the Delaware River. This land owned by the US Department of Interior National Park Service is part of the Delaware Water Gap National Recreation Area. The National Park Service leases the river bottomlands for crop production and grazing activities to local farmers. Approximately 800 acres in the Recreation Area is devoted to agricultural production and grazing. Just over 30 acres of this land is leased to farmers for grazing of alpacas. The balance of this acreage is under tillage for corn and hay production. This land as part of the Federal National Recreation Area is protected from development and will remain in harvested cropland barring any changes in federal legislation prohibiting its use for agricultural purposes.

The balance of the county's agricultural land is located on private lands in the western and northern portions – western Blooming Grove, Greene, Palmyra, Lackawaxen Townships - of the County with several large pockets of agricultural land located throughout other Pike County municipalities. These agricultural lands are used largely for hayland, pasture or fodder crops associated with a few dairy, beef, llama, sheep and goat operations, special crops unique to the area such as blueberries and orchard products.

Table 8 below provides a list of the soil types described by the USDA - Natural Resource Conservation Service as “Pike County Prime Farmland” or “Farmland of Statewide Importance”.

Table 8

Pike County Prime Farmland And Farmland of Statewide Importance		
Map Symbol	Soil Description	Total Acres
5B	Suncook loamy sand, 0 to 8 percent slopes	282
14	Braceville fine sandy loam	196
15	Pope fine sandy loam	208
24A	Delaware fine sandy loam, 0 to 3 percent slopes	1,721
24B	Delaware fine sandy loam, 3 to 8 percent slopes	767
25B	Wurtsboro channery fine sandy loam, 0 to 8 percent slopes	2,226
25C	Wurtsboro channery fine sandy loam, 8 to 15 percent slopes	477
26	Philo loam	1,365
27	Barbour fine sandy loam	749
29B	Wellsboro channery loam, 0 to 8 percent slopes, stony	2,094
29C	Wellsboro channery loam, 8 to 15 percent slopes, stony	672
60B	Mardin channery silt loam, 0 to 8 percent slopes, stony	1,464
60C	Mardin channery silt loam, 8 to 15 percent slopes, stony	646
75	Unadilla silt loam	279
89B	Chenango gravelly fine sandy loam, 0 to 8 percent slopes	4,391
89C	Chenango gravelly fine sandy loam, 8 to 15 percent slopes	516
108B	Wyoming and Chenango soils, 0 to 8 percent slopes	1,694
108C	Wyoming and Chenango soils, 8 to 15 percent slopes	402
320B	Lackawanna channery loam, 3 to 8 percent slopes, stony	1,455
320C	Lackawanna channery loam, 8 to 15 percent slopes, stony	458
Total		22,062
BOLD type indicates Farmland of Statewide Importance		

Source: USDA Natural Resources Conservation Service

While Pike County’s farming community may not play a significant part in the State’s Agricultural economy, it does play a significant role in the scenic, rural character of our local communities. The small family farms which include pasture and hay and fodder lands, orchards and similar agricultural areas provide scenic open space which has a proven value to both residents and tourists.

As the County continues to grow, the Pike County agricultural community (our small farms) will be faced with serious impediments to their continued operation. Rising costs of farm operation, fluctuating farm product market prices and demand, steadily increasing property/school taxes and the continued pressure from development provide difficult hurdles for small farmers in the County who want to continue their operations and keep the “family farms” in the family. Pike County “prime agricultural soils” are areas increasingly sought after for residential development. The reduction in our small farm community corresponds directly to these impediments and the increase in the amount of residential



development in the County. The farming areas that do exist in the County will become even more fragmented.

Protection of the important agricultural areas through a County Agricultural Land Preservation Program will help to strengthen and protect our quality farmland areas in the County for the continued production of food and other agricultural products. It will also assist our small family farm landowners with the preservation and continued operation of these farms by providing additional important and viable options for them.

Scenic Resources

The Scenic Resources Map indicates scenic roads within the County and observation sites at Lake Wallenpaupack.

Scenic roadways are dependent upon open space retention, the presence of natural resources within that open space, and water resources. Scenic resources are degraded by unattractive roadside development, inappropriate signage, and removal of natural resources.

The ability to drive along scenic routes can enhance the driving experience and appreciation of natural resources for residents, but can also contribute to tourism.

To maintain scenic roadways, open space can be permanently protected. Signage should be regulated. Developers can be encouraged to incorporate natural feature and resources into an open space system within the developments and to site homes with consideration of the natural features and resources.

Adoption of zoning regulations, such as scenic road overlays, to protect scenic roads can be considered by municipalities. Within such overlay zones, greater setbacks along the roads could be required, additional landscaping and screening requirements could be established, and design standards for buildings could be instituted to minimize visual impacts of any development.

NATURAL RESOURCE PROTECTION IMPLEMENTATION

While there are many opportunities and avenues for implementing natural resource protection throughout the County, there are two basic approaches which are key - development and implementation of local land use tools and administrative planning, partnerships, and initiatives. The approach which uses land use tools and ordinances is aimed at minimizing impacts on resources from development by creating provisions in local ordinances, such as subdivision, zoning, floodplain, stormwater, well water or other such ordinances, that provide standards which when implemented minimize the impact of land use and development on natural resources and protect areas of unique natural quality. Administrative and planning actions and techniques can be used to identify resources and educate people of the importance of those resources and finding better ways of development in order to minimize impacts. Through these administrative and planning initiatives, the County and/or municipal governments may develop programs which can provide funds for conservation programs or acquisition of land or easement purchases.

Additionally, the creation of partnerships whether they be multi-municipal, county-municipal, county-state, or public-private can provide important opportunities for implementation of protection techniques.

Examples of the key approaches are provided below. Further detail is provided in Chapter 9, the Action Plan, and appendices to this Comprehensive Plan.

Land Use Tools for Natural Resource Protection

Several implementation tools exist for conserving open land and natural resources and protecting the environment. Some of the most important of these tools are listed below:

- Map of Potential Conservation Lands
- Official Map
- Subdivision and Land Development Ordinance
- Zoning Ordinance
- Floodplain Ordinance
- Stormwater Ordinance
- Water Well Construction Ordinance
- Wellhead Protection Standards

Map of Potential Conservation Lands

A Map of Potential Conservation Lands is an important tool which can assist in natural resource protection. It will be discussed further in the next chapter.

The Official Map

The Municipalities Planning Code offers a tool which can assist municipalities plan for community facilities including parks and recreation areas and open space conservation. The Official Map, which is adopted by ordinance, shows the location of areas that the municipality has identified as necessary for future public streets, recreation areas and other public grounds, or areas for open space acquisition, in fee or by easement. By showing the area on the Official Map, the municipality puts the landowner on notice that the property has been identified for future acquisition for a public facility or purpose. The municipality has one year to purchase the property upon notice by the owner of intended development and may refuse to issue a permit for any building or development on the designated parcel during that time frame.

This underutilized land use tool can be important for minimizing the cost of public facilities and open space acquisition. Pike County municipalities' could consider the adoption of an Official Map as part of its long term planning for recreation and open space. By setting aside funds for the eventual fee purchase or easement acquisition of priority open land areas, municipalities can use their resources to the best long term advantage, assuring that open land preservation is a coordinated effort rather than uncoordinated reactions to unanticipated needs.

Land Use Ordinances

Natural resource, open land, and environmental standards and regulations can be provided for in a number of separate ordinances. While this may appear problematic at first, the integration of standards in various ordinances is important because a certain ordinance may govern one type of development while another governs a different type. Municipalities may implement similar measures to improve the quality of development and limit undesired outcomes from possible future land development. 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. It will be important, however, when implementing various natural resource standards to be consistent throughout all ordinances.

The following list some important considerations which can be used in the further implementation of natural resource protection standards throughout local ordinances.

Provisions in the Zoning and Subdivision and Land Development Ordinances which would strengthen resource protection include such options as: prohibiting development on slopes greater than 25%; requiring larger lots and limiting clearance and impervious cover on slopes 15% to 25%; restricting development on floodplains and in wetlands; and limiting development to suitable uses and requiring wetland delineations by qualified professionals for development on hydric soils.



Existing Resources and Site Analysis Plans which thoroughly document the location of a large variety of site features, ranging from those deemed critical to those considered to be noteworthy can be required of developers. Erosion and Sedimentation Control Plans and Stormwater Plans for all development sites can also be required. Standards which call for the use of Best Management Practices (BMP's) on development sites can assist in natural resource protection.

Conservation Design Subdivision (Growing Greener approach) and Cluster Development can be incorporated into ordinances. The ordinances should establish Open Space and Greenway Requirements and utilize Net Out Provisions to protect sensitive areas from development. Lot Averaging can be used to provide flexibility in locating homes.

Rural Preservation and Rural Conservation Zoning Districts can be used to establish lower densities of development in rural areas. Scenic Road Overlay Zoning can protect scenic views along roads. Transfer of Development Rights (TDR's) can be used to protect environmental resources by transferring development rights from sensitive areas to designated growth areas.

Strengthening of existing floodplain ordinances should be considered to include standards which go beyond the minimum required by the state. Riparian Buffers and River and Stream Corridor Overlay Zoning can be utilized. Standards to protect natural drainage patterns and buffer areas within the immediate perimeter of important and/or sensitive watercourses, lakes and waterfalls can be established. Development of wetland margins can be restricted.

Forest stewardship and management planning using professional foresters should be required. Standards for protection of forest resources particularly those in headwaters areas and along critical stream corridors identified in the municipal planning process could be implemented. Ridgeline Protection Zoning can be used to limit development on ridgelines, mitigate visual impacts of development, and preserve forest resources on critical slopes.

Wellhead Protection Programs can be used to protect water supplies from contamination. Provisions for monitoring large groundwater withdrawals from new development can result in less impact on existing supplies. Water well construction standards can be used to protect new groundwater supply wells from pollution. Implementation of Sewage Management Programs can also assist in the long-term protection of groundwater supplies.

The strategies listed above and in the outlined tables for the specific natural features should be considered a starting point for natural resource protection opportunities in local communities and municipalities throughout the county. While one strategy may be important in one region of the county another protection option might work more

appropriately in another municipality or region. By keeping the specific goals and objectives outlined in the County and Municipal Comprehensive Plans in mind and partnering with adjoining communities, opportunities for natural resource protection can be broadened.

Administrative Means

Administrative means can be employed at the County and municipal levels, often with both technical and financial assistance of State agencies, to assist in resource protection. Joining as partners in regional municipal efforts, county/municipal initiatives, or public/private partnerships can provide important opportunities for implementation of these administrative techniques for natural resource protection.

Multi-Municipal and Municipal/County Partnerships

In recent years, the value of inter-municipal cooperation has been widely promoted to local municipal officials by many organizations and state agencies. The Pennsylvania Municipalities Planning Code provides specific authority for multi-municipal comprehensive plans and cooperative zoning. The Pennsylvania Intergovernmental Cooperation Law authorizes two or more local governments to jointly cooperate in the exercise or in the performance of their respective governmental functions, powers or responsibilities. Simply stated, a local municipality may cooperate with any other municipality to undertake any function the municipality is authorized to perform under the respective municipal code.

Local governments can work together on land use planning and management, open land preservation, resource conservation, and environmental protection. These issues certainly transcend municipal boundaries and are best addressed from an area wide perspective. The County can partner with joint municipal efforts to assist through facilitation, technical planning expertise or other assistance. Recently formed multi-municipal planning groups and local watershed associations are good examples of how issues can be addressed across municipal boundaries.

Other Partners

Watershed associations and conservancies can be major participants in resource protection. Most organizations of this type provide grass roots citizen support which can assist with education and outreach on important issues. Watershed volunteers can also provide important input on the science of water resources through monitoring programs. Watersheds can be planning and management areas for stream conservation and protection, stormwater runoff management, water supply budgeting, watershed based zoning, and integrated resource planning. Watershed planning in concert with municipal planning can provide a comprehensive approach to water resource protection.



Citizen watershed groups have been established in the County for several major watersheds including the Lackawaxen River, Bushkill Watershed, Shohola Creek Watershed, Twin and Walker Creeks Watershed, and the Raymondskill Watershed. The Lake Wallenpaupack Watershed Management District (LWWMD), established in 1979, is a multi-governmental and citizen based non-profit corporation designed to manage water quality issues within the four-county Lake Wallenpaupack watershed. Additionally, Delaware Highlands Conservancy and the Twin Lakes Conservancy are local land conservancies working within the County. Regional, state and national land trusts and conservancies can also play an important role. All of these can be key partners in the implementation of natural resource and open space, green space protection.

Municipal Environmental Advisory Councils (EAC's), which can include municipal, watershed and other citizen representation, can work to identify, help prioritize and assist with implementation and education on environmental resource protection initiatives. EAC's can be important partners in the planning and protection of resources.



Education and Outreach

An extremely important component to the success of any natural resource protection initiatives will be education and outreach. Integrated throughout all of the administrative and land use planning implementation will be the need to provide comprehensive information on natural resource issues to all of Pike County's citizenry.

Specialized Planning and BMP's

Administrative avenues for the protection of natural resources should also include the integration of Best Management Practices (BMP's) in development, earthmoving, agricultural, and stormwater management activities. Watershed Associations and conservancies can be established for watersheds where none exist. Act 167 Stormwater Management planning particularly in critical watershed areas throughout the County is an important tool in the overall approach to managing the handling of storm water in a watershed. On-site sewage disposal system management programs can mitigate system failures and protect groundwater resources. Designing the educational component of these sewage management programs as a joint initiative with citizen watershed groups can provide excellent opportunities for outreach and success of the program. Stream corridor management plans can be used to develop comprehensive planning for critical headwaters streams or other waterway corridors. Implementation of wellhead protection programs can help to protect groundwater supplies.

Role of Open Space and Greenspace Planning

Open Space Planning identifies existing open spaces, their importance, areas which should be protected, and means of protecting and acquiring those open spaces. Techniques could include donation of natural areas, purchase of open space, recreation, or natural area parcels through outright acquisition or through purchase of conservation easements from willing sellers through the use of recreation fees, tax revenue, grants,

bond issues, or any combination of these techniques. Other combinations of methods and options may also exist.

As stated in the Land Use Chapter, over a third of Pike County's land resides in public land such as state park, forest and gamelands, and federal recreation areas and parks. Much of this public land provides open space and recreational opportunities for the citizens and visitors to the County. During 2005, Pike County received a DCNR grant to enable the development of a Countywide Open Space, Greenway, and Recreation Plan. This plan will outline the importance of conservation and protection of the County's unprotected natural assets and establish guidelines for future development of recreation for the County's citizens. The role of the County Open Space Plan will be to further prioritize conservation efforts in the County and target areas for permanent protection.

The County will work closely with municipalities in this planning effort to identify and prioritize important natural areas, natural features and sensitive natural resources which are in need of protection. The basis of Open Space and Greenspace planning efforts center on the fact that:

- Open space conserves natural resources and biodiversity.
- Open space enhances ecotourism.
- Open space conserves hunting, fishing, hiking, boating and other recreational environments.
- Open space enhances the quality of life for residents. Enhanced quality of life can also attract businesses interested in the quality of life for their employees.
- Open space can contribute to the enhancement of property values.
- Open space can preserve historical and cultural landscapes, and maintain scenic road corridors.
- Open space acquisition can prevent added costs to taxpayers, such as expenditures on schools, infrastructure, and services, resulting from new development.

CHAPTER 7

GREENWAY AND TRAIL PLANNING

CHAPTER 7

GREENWAY AND TRAIL PLANNING

PIKE COUNTY'S UNIQUE NATURAL ENVIRONMENT

Pike County's abundance of natural and scenic resources is its greatest asset in not only the eyes of its citizens but also the thousands of people who vacation in the County annually. The County's rural character and proximity to major metropolitan centers has made Pike County an attractive place to have a vacation home or a permanent residence. In a the survey completed by citizens of the County prior to development of this plan, the most popular reason for relocating to Pike County was its unique natural environment. This environment encompasses vast tracts of public forest and state game lands. In addition, many large parcels are owned by private hunting and fishing clubs, creating a rich and unique environment for Pike County's citizens.

The Role of Pike County's Greenway Plan

As introduced in the Natural Resource Chapter, the County's Greenway plan will not only outline the importance of conservation but also establish guidelines for the future needs of the County to protect its rural character.

The mission statement for the *Pike County Open Space, Greenways and Recreation Plan* is as follows:

"Pike County's natural resources and rural character have been invaluable assets to the citizens of the County since its inception. Pike County's Open Space Plan will set a sustainable direction for both protecting our natural resources and enhancing the quality of life of our citizens for today and the future."

This Chapter outlines some of the suggested issues for the Greenway Plan to address for not only trailway planning but also resource conservation.

What is a Greenway?

The Pennsylvania Greenway Partnership Commission defines a greenway as follows:

"A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wide corridors that incorporate diverse natural, cultural, and scenic features. Greenways can be land- or water-based, running along stream corridors, shorelines, lakes, waterfalls, or wetlands. Some follow old railways, canals, ridgetops, or other features. They can incorporate both public and private property. Some greenways are primarily recreational corridors, while others function almost exclusively for environmental protection and are not designed for human passage. Greenways differ in their location and function, but overall, a greenway network will protect natural, cultural, and scenic resources, provide recreational benefits, enhance the natural beauty and the quality of life in neighborhoods and communities, and stimulate economic development opportunities."

Benefits of Greenways to Pike County

Establishing a greenway plan and promoting sound land use decisions are both tools to improve the management of land while protecting the rural quality of life Pike County's citizens enjoy. Many benefits arise from establishing and protecting greenspace corridors for both human and wildlife purposes.

Table 9

Benefits of Greenways

<ul style="list-style-type: none"> • <i>Provide for recreational opportunities such as walking, biking, picnicking, camping, skiing, fishing, equestrian trails, snowmobile trails, and links to recreation resources</i> • <i>Enhance the quality of life and promote revitalization in communities</i> • <i>Provide educational and interpretive opportunities</i> • <i>Maintain and create habitat and ecosystem linkages (wildlife corridors)</i> 	<ul style="list-style-type: none"> • <i>Provide riparian buffers to protect water quality</i> • <i>Enhance tourism and economic development opportunities</i> • <i>Preserve and build upon existing trail networks and connect trails of regional significance</i> • <i>Interconnect communities with natural features</i> • <i>Link communities together via trailways and paths</i> • <i>Provides pedestrian alternatives to vehicular travel</i>
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Pike County is fortunate to have two major river corridors, the Delaware and Lackawaxen Rivers. Additionally there is an abundance of wetlands, lakes, streams, and high quality groundwater resources within the County's borders. Every one of the County's major watersheds is classified as *high quality* or *exceptional value*. The County also boasts a wealth of publicly or privately owned forests and open space that contribute to the excellent water quality, rural character, and quality of life.

However, for the past three and a half decades, Pike County has remained the most rapidly growing County in Pennsylvania, and is currently listed among the top 100 most rapidly developing counties nationally. This is not surprising, given the County's natural beauty and charming character. Ironically, the escalating residential and commercial development pressures present a serious threat to the County's primary industry, Tourism, and to the very features that make Pike County a desirable place to live- the County's natural resource amenities. Most concerning is the fragmentation of open space, or 'Green Infrastructure', which in turn, adds to deforestation and the potential for pollution.

Pike County must reduce natural resource loss, and one proactive way to begin this is to complete a Countywide Open Space, Greenways, and Recreation Network Plan. Such a Plan will guide future policy decisions, including Conservation Design Development techniques, and create momentum for natural resource protection.

This Chapter will begin the discussion of creating a greenway / green infrastructure network throughout the County and will lay the groundwork for a future, dedicated Greenway Plan to be established by the County. This greenway plan will outline the importance of conservation and protection of the County's natural assets and establish guidelines for future development of recreation for the County's citizens.

TRAILWAY PLANNING

The wealth of trails on state and federal land in Pike County offers a very unique opportunity to develop connections and linkages for both wildlife and human travel. Appropriate planning for development and management of these current corridors and potential development of new networks will be outlined through the greenway plan.

The following is a list of issues that should be addressed in future dedicated Greenway Plans. Some of the main issues will include location and maintenance of greenways, involvement of community volunteer groups and organizations, municipal participation in planning and implementation, identification of grants and funding for potential greenway and trail networks, and private property rights.

- The purpose of greenways should be established early and priorities addressed for resource conservation, community recreation, water quality protection, greenbelts, natural area, and areas of scenic quality.
- Establishing preferred trail destinations and prioritizing those locations is suggested prior to major trailway planning.
- Feasibility of utilizing existing networks of paths created by creeks, rail corridors, pipeline rights-of-way, rivers, sanitary sewer easements, electric company rights-of-way, drainage easements, ridgelines, historic trails, and roadsides may be investigated for trailway planning.
- Determining desired trailway and recreation for the community, whether providing networks for hikers, walkers, bikers, horseback riders, snowmobilers, or a combination of active and passive uses should be outlined in a greenway plan.
- Trail design studies would be necessary to determine the extent to which existing pathways and sidewalks would be incorporated into the system, materials of the trails, and appropriate locations for new networks.
- Appropriate trailway management planning will be necessary for long-term sustainability of trail networks. Determine costs, including construction costs, land costs, and maintenance, the parties responsible for these costs.
- Strategies for acquisition of land used for the trail should be outlined in a greenway plan. Usages of existing or dedicated road rights-of-ways, donations, easements, leasing or purchasing are options for these strategies.
- Sources of funding for trail construction and trail design studies would have to be identified through the greenway plan and the parties who would apply for these funds. Funds from

Keystone Grants, TEA, DCNR and the USDA Land and Water Conservation Fund are possible sources.

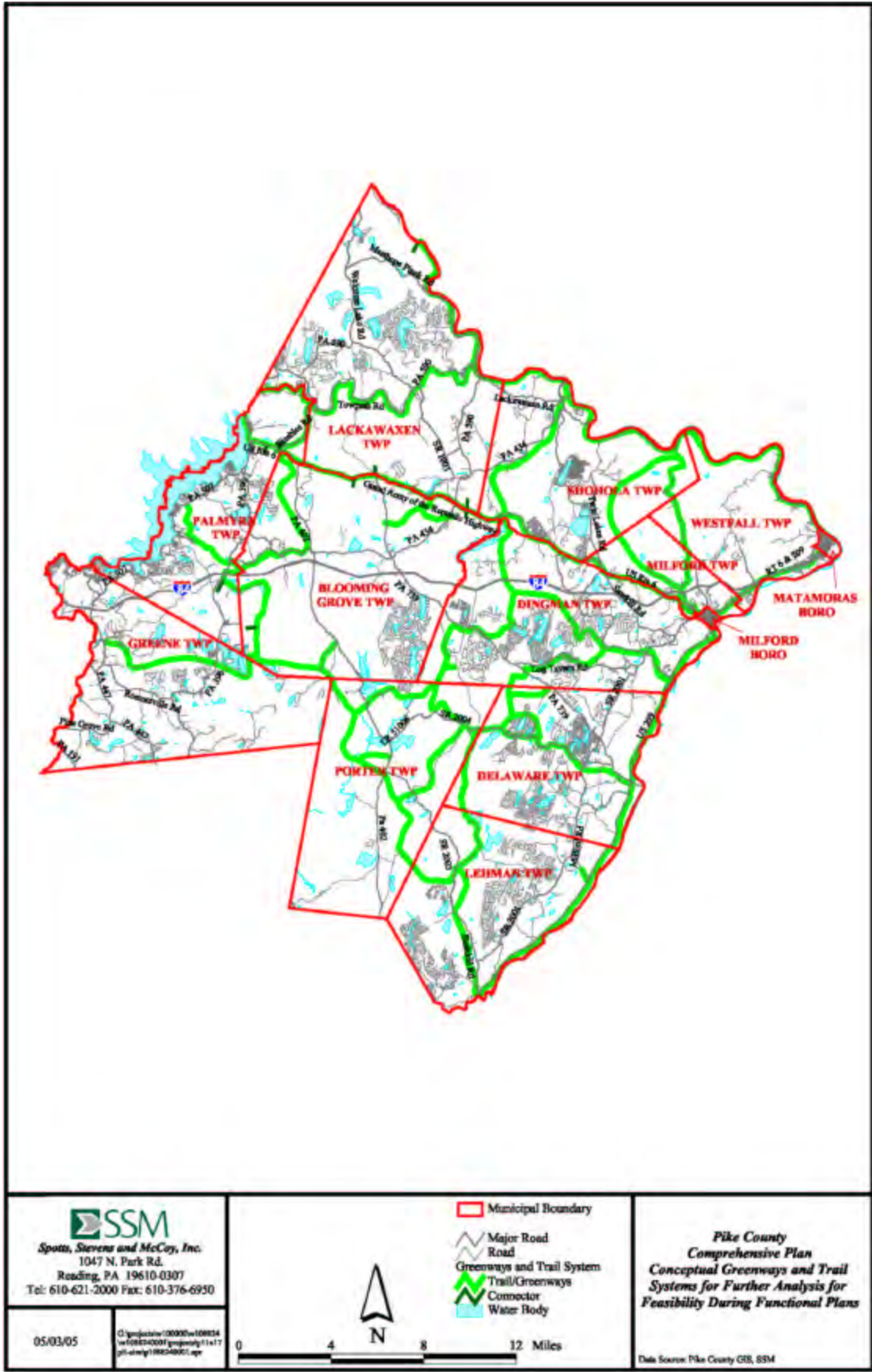
- If roadside lanes are utilized for trailways, standards for road design should be established by referencing the *Pennsylvania Statewide Bicycle and Pedestrian Master Plan*.
- The planning agency will have to determine what are the primary trail routes and secondary routes. Once the trails are prioritized, if it is determined that some trails will be within PennDOT rights-of-way, PennDOT should be approached for assistance in trail planning.
- PennDOT could be requested to pave wider shoulders where the right-of-way permits. This improvement would allow safer conditions for bicycles and pedestrian traffic.
- Roadway corridors need to be assessed for potential for bicycle and pedestrian uses. Bicycle lane width and shoulder width will vary with the average motor vehicle operating speed for a road, the average annual daily traffic volume, and the adequacy or inadequacy of sight distance along the road.
- Suggesting the integration of trails in new developments should be suggested to land developers and appropriate construction standards may be established at municipal levels.

CONCEPTUAL PIKE COUNTY GREENWAYS AND TRAIL SYSTEM

The Conceptual Greenways and Trail System map shows a conceptual system. As noted on the map, the system is for further analysis for feasibility during functional plans, such as the County-wide Open Space, Greenways, and Recreation Plan. The map is conceptual, and subject to further refinement, but is the starting point to plan a County-wide system. The effort is worthwhile given the many benefits of greenways. While the conceptual plan map focuses on major greenways, on the local level greenways and trails can be considered along creeks, as connections to existing local trails, and connections to subdivisions, recreational facilities, municipal facilities, and businesses.

The objectives of the system are to provide distribution of greenways throughout the County; connect Conceptual Growth Areas and existing centers; incorporate and connect existing and proposed major trails and trail systems; protect watercourses; and connect and access major open spaces, tourist destinations, historic sites, recreation facilities, community facilities, transportation nodes, County facilities, employment areas, and shopping areas.





ELEMENTS OF CONCEPTUAL GREENWAYS/TRAILS SYSTEM

To be further analyzed for feasibility during functional plans.

McDade Trail

The McDade Trail extends from the southern County line near Bushkill to Milford Beach all within Delaware Water Gap National Recreation Area. Beyond the Pike County line it extends through to Hialeah Picnic Area in Monroe County. The trail has been designed and is currently under construction.

The Pike greenways plan should investigate the feasibility of connections to: Mountain Laurel Center, major resorts, and Bushkill School via Little Bushkill Creek Greenway/Bushkill Road corridor; to Pocono Environmental Education Center; to Dingmans Falls, Childs Park Recreation Site, and subdivisions via Dingman's Creek Greenway/Silver Lake Road Corridor; to Raymondskill Falls, Raymondskill Falls (Cliff) Trail, and subdivisions via Raymondskill Creek Greenway/Raymondskill and Log Tavern Roads corridors.

Pinchot Greenway

The Pinchot Greenway is a proposed system which will connect Milford Beach and McDade Trail to Grey Towers National Historic Landmark and provide links to Milford Borough, Milford Township, Dingman Township, and Grey Towers with several cultural and natural resource features. It will complement and add value to on-going efforts such as the Milford Enhancement Project; the McDade Trail; the Sawkill-Vandermark Watershed Study; and the Grey Towers renovation. The Pinchot Greenway will preserve cultural features, enhance tourism and economic development opportunities, and improve the quality of life for residents.

Route 6/209 Pedestrian/Bicycle Trail (Portion of Route 6 Y/1 Bicycle Trail)

The Route 6/209 bicycle trail will make connections between Milford and Matamoras, as discussed in Congested Corridor Improvement Program.

This pedestrian/bicycle trail will provide connections between the train station and bus facilities in Port Jervis and the Airport Park Recreation Area in Matamoras, Westfall Township, Delaware Valley Schools along this Route 6 and 209 corridor, Milford and the Pinchot Greenway and McDade Trail. It would also provide connection to the Delaware River trail at Matamoras.

Delaware River Trail

The Delaware River Trail would utilize the Delaware River Greenway/Rail Corridor from Matamoras north to Masthope connecting Millrift, Shohola, Lackawaxen, and Masthope.

Possible connections to this trail would link Pond Eddy, Pike County Park, State Forest and Game Lands, Milford Experimental Forest, Pinchot Greenway, and Y/1 Trail.

Linkages via a Shohola Creek Greenway to State Game Lands, and Y/1 Trail and to the Lackawaxen River Greenway/Rail corridor could also be considered.

Lackawaxen River Scenic Greenway/Rail Corridor

A major Greenway connection along the Lackawaxen River corridor would provide opportunity for connecting the Delaware River at Lackawaxen to Hawley and via Kimbles Road to Route 6 Y/1 Trail. This corridor provides excellent opportunities for connecting the local villages with important historic, cultural, natural resource and wildlife sites which could strengthen economic and tourism related business in the region. This conceptual greenway should be an important component for further consideration in the County Greenway, Open Space and Recreation Plan.

Route 6 Y/1 Bicycle Trail, Kimbles Road

The Y/1 bicycle trail provides connections between Milford and Wilsonville and Hawley. It also connects to developments, camps, and recreation facilities, along the Route 6 corridor; to State Gamelands at Shohola Falls and Shohola Lake; to several subdivisions; to the County Business Park and the Pike County Jail Complex; to trails leading to Promised Land State Park and State Forest; to Wallenpaupack Area schools, Wilsonville recreation area, and PPL Environmental Learning Center.

Other Potential Greenway Connections and Corridors

Following are a number of other potential greenway corridors which would provide further interconnection of Pike County's Greenway System.

State Gamelands and Forest Trails – Gates Run/Egypt Creek Greenway connections to Promised Land State Park Trail System

Mill Brook Greenway/Buehler Road corridor connection to Paupack and Lake Wallenpaupack

Promised Land State Park/State Forest trail system connection to Greentown via Bridge and Wallenpaupack Creeks Greenways

Promised Land State Park/State Forest trail system to Pecks Pond, Porters Lake and Little Bushkill Greenway.

Little Bushkill Greenway to Dingman's Creek Greenway, State Forest and State Game Lands trail systems extended to subdivisions, to existing trails, to Dingman-Delaware Schools, to Dwarfs Kill Creek and Raymondskill Creek Greenways.

Delaware River Water Trail

The Delaware River Water Trail project is underway and currently involves gathering input to guide development of a Water Trail Concept Plan. Organizing partners in the project include the National Park Service, Delaware River Basin Commission, and Delaware River Greenway Partnership. Connections should be provided from the Delaware River Water Trail to the Delaware River Trail and other elements of the County Greenway system.

The North American Water Trails Organization defines a water trail as a *recreational waterway containing guided access points and day use and/or camping sites for the boating public*. A water trail provides launch ramps, parking areas, directional signage, and maps. A water trail map marks known hazards such as dams and indicates the level of difficulty (classes of rapids), as well as the location of natural, scenic and historical points of interest along a waterway.

The purpose of the Delaware River Water Trail project is to provide recreational boaters with a cohesive system of signage, river maps, a trail guide, and an interactive website. These tools will enable boaters to plan and enjoy safe, environmentally responsible river trips that eliminate or minimize impacts on the river's ecosystem and surrounding landscapes.

Table 10

Benefits of Water Trails

Benefits of Water Trails	
<ul style="list-style-type: none"> • The Water Trail promotes low-impact use of the rivers. A “leave no trace behind” ethic will reduce the potential for negative impacts to water quality and wildlife habitat. • A strong emphasis on volunteer participation will reduce project costs, provide ongoing support and maintenance for the Water Trails, and encourage resource awareness and stewardship. • The Water Trail Guide will emphasize respect for private property rights and encourage care and responsible use of public lands and facilities. 	<ul style="list-style-type: none"> • The availability of accurate river maps and clearly marked day use and/or camp sites will reduce the potential for recreational user conflicts and trespassing on private land. • Connecting people to the river for responsible recreational pursuits will contribute significantly to the local and regional ecotourism industry. • The Water Trail Guide and interactive website will include information on the river's natural and human history, low-impact camping guidelines, campgrounds, outfitters, bed & breakfasts and other information.

Lackawaxen River Water Trail

The County has another outstanding opportunity to highlight scenic, historic and natural features of the region with the development of a scenic greenway/water trail along the Lackawaxen River from Lackawaxen to Hawley. The scenic Lackawaxen River corridor is flanked on one side by the historic Delaware & Hudson Canal and the Towpath Road and the other side by the Stourbridge Line railroad. The settlements of Rowland, Glen Eyre, Bayoba, and Kimbles are located in the corridor. The River affords outstanding fishing and bald eagle watching opportunities. Proper planning for and development of selective parking areas along the corridor to allow for safe scenic and wildlife viewing opportunities and fishing access would provide an important opportunity for enhancing this scenic greenway/water trail corridor. Additionally, there is the opportunity to preserve a portion of the historic D&H Canal that was hand constructed for transporting coal and other resources to New York City and lock houses that remain today. The Lackawaxen River Water Trail could provide many features of a traditional water trail; however, camping sites and launch ramps may not be a viable option.

Planning Considerations for Water Trails

Activities which increase river use can also result in increased demand for municipal and emergency services as well as increasing conflicts between river users and private landowners along the river corridor. Local landowners, municipalities and emergency service providers should be actively engaged in planning and implementation of the Water Trail.

Open Space Planning in Pike County

As discussed throughout this Plan, Pike County is facing an unprecedented amount of growth and development. Increasing land values are making the option of selling land a very profitable and viable option for large landowners. In addition to large landowners, many of the scenic resources and ridgelines face incredible development pressure for their natural quality. These natural features and rural lands are critical for resource protection and preserving the rural quality of life Pike County citizens enjoy. Open Space planning strives to determine goals and strategies for conserving and protecting these resources while educating on more environmentally sound development practices. Through the Greenway Plan, the objectives of open space protection will be outlined and management strategies for acquisition and maintenance of these lands will be detailed.

The Comprehensive plan suggests the following concepts be addressed or evaluated in the Greenway Planning process.

- Evaluation of current municipal ordinances to determine areas where revisions may be needed for best planning practices to protect natural resources
- Educate and promote conservation subdivision practices which integrate best management strategies for protecting resources and conserve additional open space

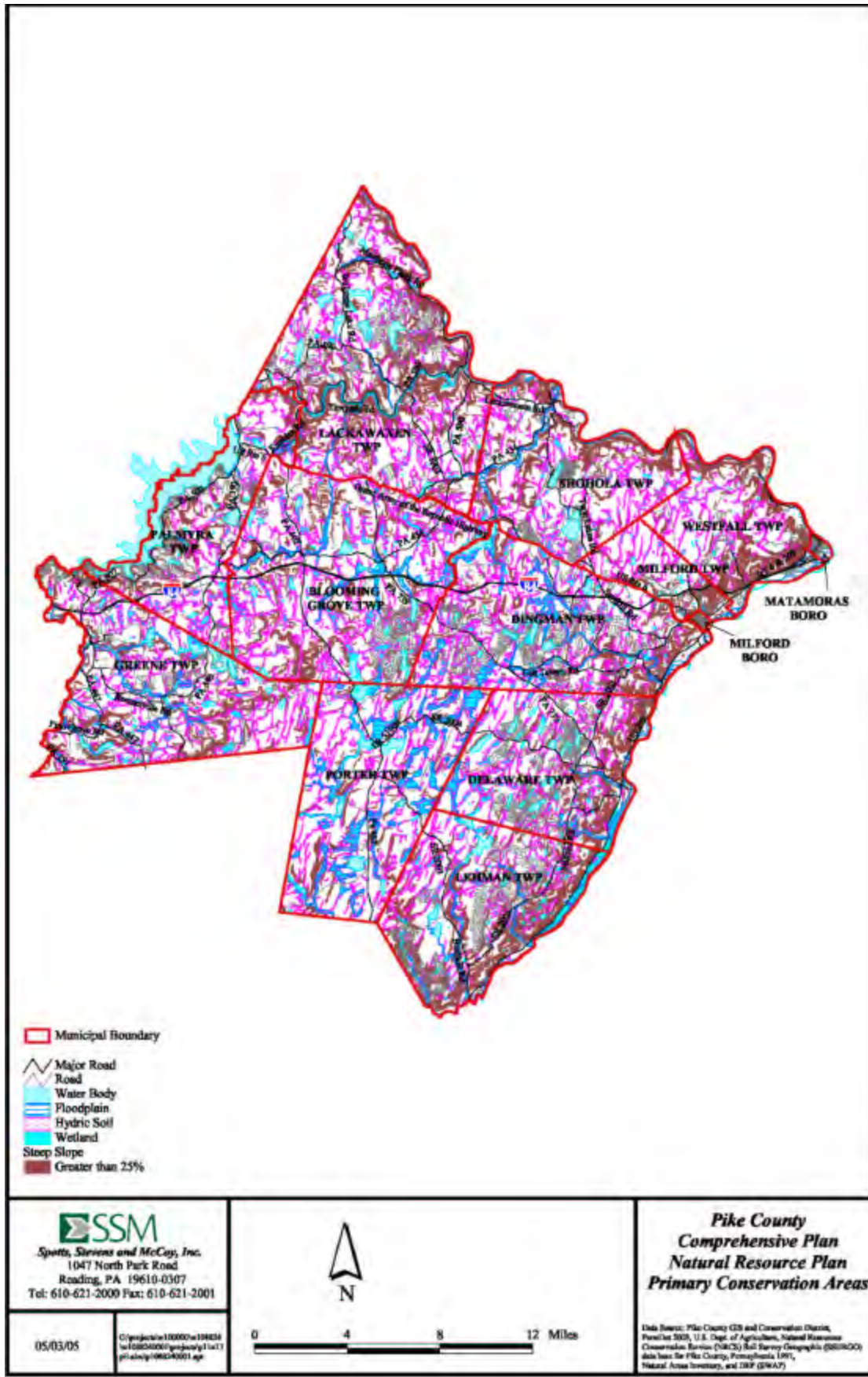
- Identification of detailed strategies for protecting primary and secondary conservation issues and areas throughout the County. Those resources which are directly related to health and safety of Pike County citizens should rank high in priority.
- Promote local resource monitoring and education to encourage citizen accountability and awareness for their natural environment

Map of Potential Conservation Lands

A Map of Potential Conservation Lands can be an important component of the County or municipal comprehensive plan and can serve as the basis for evaluation of development projects. The principal purpose of the Map is to establish an overall structure for an open space network and to demonstrate how the open space in any individual subdivision would fit into this broader framework. Such an approach would ensure that an evolving conservation network in the County or Municipality will be interconnected, and that it will encompass a substantial amount of land that would otherwise be developed. As such, a Map of Potential Conservation Lands can serve as the unifying concept map that defines the Municipality's future pattern of conservation and development. In addition, the County Open Space and Comprehensive Plans can help to guide the interconnection of open land beyond municipal boundaries.

The Map would outline areas that are recommended to be developed and areas recommended to be conserved on individual parcels of land throughout the Municipality. Ideally, nine special features are shown on a base map of existing roads and parcel ownership lines: wetlands and associated buffers; floodways and floodplains; moderate and steep slopes; groundwater resources and recharge areas; woodlands; productive farmland; significant wildlife habitat; historic, archaeological and cultural features; and scenic view-sheds from public roads. However, the identification of features should be tailored to meet local needs and conditions.

The Map typically shows three broad categories. Primary Conservation Areas are deemed to be inherently unsuitable for development due to extremely severe environmental constraints. Secondary Conservation Areas contain lands that can be developed but that are significant at some level and worthy of consideration for conservation. Existing Protected Lands form the core areas around which the Municipality's future open land network could grow. These include public lands, such as the Delaware State Forest and the Delaware Water Gap National Recreation Area, and private conservation easement lands.





NEXT STEPS

The County is undertaking a more detailed study by completing a Countywide Open Space, Greenways, and Recreation Network Plan. This functional plan will expand upon the recommendations of this Comprehensive Plan, and present an implementation strategy to develop a countywide greenway system. The plan will provide direction on:

- the protection of the high quality and exceptional value water resources in the County by providing a plan for open space, greenways and recreation which will specifically address the largely intact forested watersheds of the County
- retaining the rural character and quality of life of our communities
- the connectivity of current public land holdings within the County and strategies for preservation of open space corridors which will further enhance the County's existing greenways as well as look at regional, state-wide and Tri-state (New York and New Jersey) greenway connections
- recreational facilities needs and opportunities for our communities

More detailed localized planning should occur in municipal and joint plans, including feasibility studies and identification of demonstration and pilot projects. Given the scope of the conceptual system, a coordinating mechanism, likely at the County level, would have to be established to involve major landowners, municipalities, and federal and state agencies. The goal of this planning should be to create a greenway system that is regional in scope, with potential for inter-County connectivity.

This Chapter has identified opportunities for future greenway planning in Pike County. There are numerous natural and scenic resources in the County that can be preserved through a greenway/green infrastructure system. The Conceptual Greenways and Trail Systems Map, as well as the Elements of a Conceptual Greenway and Trail System section of this chapter identified and inventoried a potential system for the County, including specific corridors and projects.

CHAPTER 8

PRIORITY ACTIONS FOR PIKE COUNTY

SUMMARY OF THE FULL ACTION PLAN

CHAPTER 8

PRIORITY ACTIONS FOR PIKE COUNTY

PRIORITY ACTION ITEMS

Chapter 9 contains a full listing of actions that can be implemented to address the major issues facing Pike County. Priorities were determined through discussions with the Comprehensive Plan Advisory Board. It is critical that the priority actions be addressed if the vision and goals and objectives presented in Chapter 3 are to be attained and the policies and strategies discussed in Chapter 4 are to be implemented. Without the commitment to address the Priority Action Items, this Comprehensive Plan will not be a living document and will fail to accomplish the identified goals and vision.

This chapter also contains a summary listing of the action items in Chapter 9. The discussion in Chapter 9 elaborates upon how each action item would be implemented. Governmental programs which can be used to fund listed actions are described in Appendix 21.

The recommendations listed in this chapter and Chapter 9 are listed in no particular order of importance. Implementation ranges (short-term, long-term, and on-going) for these priority actions are identified at the end of this chapter.

I. Protect Natural Resources within the County (see page 9-3)

1. Prepare a County Open Space, Greenways and Recreation Network Plan
2. Continue to support the planning and open space bond fund efforts
3. Provide technical and organizational assistance to municipalities for multi-municipal open space and recreation plans
4. Continue to make GIS mapping of natural resources available to municipalities
5. Assist municipalities in preparation of Potential Conservation Lands maps
6. Assist municipalities in ordinance and plan audits to determine build-out potential and degree of resource protection
7. Encourage protection of target-identified areas in open space plans
8. Encourage an organization to assume responsibility for monitoring “protected” lands
9. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land development ordinances to protect natural resources
10. Support formation and actions of regional or municipal Environmental Advisory Councils

II. Protect the County’s Water Resources (see page 9-8)

1. Establish riparian buffers along watercourses
2. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land

- development ordinances to protect water resources
- 3. Update existing and complete new Act 167 Stormwater Management Plans and ordinances prepared pursuant to the Plans, to encourage Best Management Practices
- 4. Prepare a County-wide water resources plan

III. Protect Scenic and Historic Resources (see page 9-14)

- 1. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land development ordinances to protect scenic and historic resources and regulate signage
- 2. Support formation and actions of regional or municipal historical commissions
- 3. Encourage retention of natural buffers within developments and retention of natural and historic landscapes

IV. Manage Growth Within the County (see page 9-16)

- 1. Support development of identified growth areas with consistent governmental policies and financial incentives
- 2. Support development of identified growth areas with locations of community facilities
- 3. Support development of identified growth areas with road improvements
- 4. Support development of identified growth areas with sewer planning
- 5. Support development of identified growth areas with water supply planning
- 6. Support development of identified growth areas with ordinance provisions allowing higher densities of development when appropriate infrastructure is available
- 7. Support revitalization efforts in existing Boroughs, Villages, and Hamlets and provide technical assistance

V. Establish County-Municipal Partnerships to Manage Growth (see page 9-17)

- 1. Institute a County Planning Technical Assistance Program for municipalities
- 2. Provide data to municipalities from the County GIS system and Planning Office
- 3. Provide a toolbox to municipalities of sample land use regulations
- 4. Establish a program of workshops with municipal officials on smart growth techniques and other planning topics
- 5. Assist municipalities in the identification of available grant funding

VI. Encourage Multi-Municipal Planning to Manage Growth (see page 9-20)

- 1. Provide organizational and technical assistance
- 2. Encourage consideration of Smart Growth principles in the plans
- 3. Assist municipalities in preparation of Regional Open Space, Greenways and Recreation Plans so recreation impact fees can be charged

VII. Address Impacts of Tremendous Growth (see page 9-22)

- 1. Work with PennDOT Central Office to increase allocation of PennDOT county maintenance funding
- 2. Work to secure revisions in State funding allocation formulas, including restoring

- population adjustments to State Funding formulas
3. Review the appropriateness of using Transportation and Recreation Impact Fees

VIII. Improve Quality of Development (see page 9-23)

1. Provide technical assistance, including model ordinance provisions, to municipalities to adopt in their zoning and subdivision ordinances, addressing: interactive processes; data and analysis requirements; design and performance standards; improved requirements and standards; innovative development techniques; and corridor overlay zoning

IX. Improve the Circulation System Serving the County (see page 9-26)

1. Work with the County Road Task Force, municipalities, legislators, and PennDOT to list needed transportation improvements on the 12-year transportation program and accomplish construction of those improvements on the list
2. Provide technical assistance, including model ordinance provisions, to municipalities to adopt provisions in their zoning and subdivision and land development ordinances to manage access to arterial and collector roads and address road construction standards
3. Enhance transit service in the County and facilitate mobility of seniors
4. Implement major road corridor improvement programs
5. Plan for a system of greenways throughout the County
6. Connect transportation modes to one another

X. Provide Community Facilities and Services to County Residents (see page 9-30)

1. Determine the appropriate means to increase higher educational opportunities, and promote environmentally-based education and economic development
2. Provide technical assistance to municipalities in securing open space, recreation, and greenways planning and development grants and in increasing access to State and Federal recreation facilities and lands
3. Work to foster an increased sense of County identity and assimilate new residents into the community
4. Continue to address identified needs of seniors within the County
5. Encourage actions to address identified health care needs of County residents
6. Work with representatives of Municipal and State government and private residential community owners associations to determine the most appropriate methods of providing law enforcement service within the County
7. Organize and support efforts to better plan, organize, improve, and staff emergency services within the County
8. Designate appropriate County personnel to coordinate grant applications and work with municipalities in securing grants

XI. Encourage Additional Economic Development (see page 9-33)

1. Prepare a strategic plan for economic development in the County
2. Determine the most appropriate marketing approach for the County
3. Work to provide a variety of business environments in the County, coordinated with municipal zoning ordinances and infrastructure

4. Facilitate development or sale of the County Business Park
5. Work to provide “shovel-ready” sites for businesses in the County
6. Complete a feasibility study for a Pike County Business Incubator
7. Identify a multi-faceted approach to retaining young people within the County after completion of high school
8. Identify opportunities to participate in the Pennsylvania Economic Stimulus Package
9. Support revitalization efforts in Milford and Matamoras

XII. Retain Tourism as a Major Component of Economic Development (see page 9-37)

1. Promote sustainable ecotourism
2. Identify and support the most appropriate marketing approval for Pike County and expand tourism marketing
3. Promote Arts/Culture, Heritage, and Water-related tourism

XIII. Address efforts of Community Associations to Serve Residents (see page 9-39)

1. Establish a task force of representatives of the County, municipalities, community associations, DCED, County legislators, and builders to address what can be done to support efforts of community associations in providing services, facilities, and infrastructure to residents; how such associations should be organized and managed; how the associations can more effectively accomplish their responsibilities; how future problems can be minimized through effective review and development processes, requirements and standards for developers, and actions and contributions of developers; and how public safety concerns can be addressed within and outside private communities.
2. Identify mechanisms to assure appropriate infrastructure is in place prior to transfer of responsibilities from developers to community associations.
3. Discuss approaches to dealing with individually-owned lots within developments which regularly appear on tax sale lists.

XIV. Address Housing Needs (see page 9-40)

1. As growth and need develops in the County, annually review Wayne County’s administration of Pike’s programs to determine whether a separate Pike County housing agency, such as a Housing Authority or Community Housing Development Organization (CHDO), 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.
2. Encourage municipal zoning to allow a variety of housing types and densities at appropriate locations within the County, consistent with land use goals.
3. Use designated Recorder of Deeds fees for increasing housing choices for County residents

XV. Enhance Infrastructure Systems (see page 9-41)

1. Work with municipalities to regionally review and develop an approach to facilitate construction and/or extension of public sewer and water facilities as necessary within growth areas to serve existing and future needs and support higher densities and varieties in type of appropriate uses.

2. Continue to encourage improvement of telecommunications facilities within the County through municipal need and other functional plans.
3. Secure additional PennDOT aid in facilitating vehicular movement throughout the County during periods of impaired driving conditions.
4. Work with PennDOT and the Pike County Road Task Force to continue to recognize and identify the special transportation needs within the County because of rapid growth, typical winter conditions, and the large number of long-distance commuters.
5. Consider the creation of a County-wide Hazard Mitigation Plan, or encourage municipalities to pursue a municipal plan, to address all hazards that historically impacted or may impact the County and residents in the future.
6. Pursue funding for studies of, or additional PennDOT studies of, the major road corridors serving growth areas, to identify means of improving, managing, enhancing, and beautifying those corridors, including Route 6/209, Route 6, Route 507, Route 739, Route 390, SR 2001 (Milford Road), SR 2004 (Silver Lake Road) and Log Tavern Road.

SUMMARY OF THE FULL ACTION PLAN

A summary listing of the actions found in the Action Plan in Chapter 9 follows. For each action, a general time range for implementation, potential parties for the action, and the potential funding sources are listed. Due to the large number of actions proposed in this Comprehensive Plan, it has been determined that no specific dates for implementation of the actions will be listed. Short-term, long-term, and on-going implementation ranges were utilized.

Abbreviations and numbers given for each action are as follows:

Implementation Range

ST – Short Term

LT – Long Term

OG – On-going

Potential Party/Partners/Funding Sources

- 1 - Pike County
- 2 - Municipalities
- 3 - PennDOT (Pennsylvania Department of Transportation)
- 4 - PADCED (Pennsylvania Department of Community and Economic Development)
- 5 - PADCNR (Pennsylvania Department of Conservation and Natural Resources)
- 6 - PHMC (Pennsylvania Historic Museum Commission)
- 7 - PADEP (Pennsylvania Department of Environmental Protection)
- 8 - PA Game Commission and PA Fish & Boat Commission
- 9 - Community Associations
- 10 - Developers, Landowners
- 11 - Conservancies, Land Trusts, Watershed Associations, etc.
- 12 - Legislators, School Districts
- 13 - National Park Service
- 14 - Community Organizations
- 15 - Business community, economic development agencies, Visitors Bureau

PIKE COUNTY COMPREHENSIVE PLAN - SUMMARY OF THE FULL ACTION PLAN

I.	Protect Natural Resources	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Prepare a County Open Space, Greenways and Recreation Network Plan.	ST	1	5
2	Determine whether to establish a planning and open space bond fund pursuant to voter referendum approval.	ST	1	
3	Provide technical and organizational assistance to municipalities within the County for multi-municipal open space plans.	ST	1	4,5
4	Encourage protection of target-identified areas in the County and regional open space and recreation plans	ST	1,2	4,5,8,11
5	Develop criteria for prioritizing natural areas and water resources for protection and prioritized Natural Areas Conservation Plans	ST	1,2	5,11
6	Identify additional funding sources for open space preservation	ST	1,2	5,11
7	Establish partnerships in securing acquisition or permanent protection of open space and greenways	OG	1,2	5,11
8	Encourage forestland owners to participate in the Forest Legacy Area program	OG	1,2	5,11
9	Encourage creation of municipal or regional Environmental Advisory Councils	ST	1,2	
10	Encourage an organization to assume responsibility for monitoring “protected” lands	OG	1,2	11
11	Review with municipal officials examples of municipally-funded open space preservation programs.	ST	1,2	5,11
12	Support establishment and continuation of farm-related programs and organizations.	OG	1,2	
13	Assist municipalities in the preparation of municipal or multi-municipal Potential Conservation Lands Maps	ST	1,2	5
14	Protect the linkages and natural processes necessary to protect elements of biodiversity.	OG	1,2	4,5,11
15	Assist municipalities in “audits,” of plans and regulations to determine build-out potential and the degree of protection of resources.	ST	1,2	5
16	Appoint a liaison for deer management in the County.	ST	1	8
17	Encourage municipalities to review the appropriateness of the Transfer of Development Rights technique	ST	1,2	4,5
18	Encourage municipalities to adopt provisions in their zoning ordinances to protect natural resources. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions	ST	1,2	4,5
19	Adopt Forestry Regulations	ST	1,2	4,5
20	Identify and work to achieve additional techniques for preservation of open space forestland	OG	1,2	4,5,11
21	Identify a mechanism for monitoring sustainable forestry	ST	1,2	5,11
22	Establish a program for community education and involvement	OG	1,2	4,5,11
23	Encourage participation of community associations in resource management and protection programs.	OG	1,2	4,5,11
24	Address the loss of hemlock trees in riparian areas	OG	1,2	5,11
25	Continue to make GIS mapping of natural resources available to municipalities	ST	1,2	4,5
26	Encourage municipalities to develop and adopt an Official Map as a tool for the protection of resources and providing future public land and facilities	ST	1,2	4,5

II.	Protect Water Resources	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Manage stream corridors and establish riparian buffers	OG	1,2	5,11
2	Encourage wellhead protection and watershed planning	LT	1,2	7,11
3	Update existing and complete new Act 167 Stormwater Management Plans	LT	1,2	7,11
4	Encourage municipalities to adopt provisions in their zoning ordinances to protect water resources via model ordinance provisions and provide technical assistance to municipalities in adopting them	ST	1,2	4,5,7
5	Within each Act 167 Stormwater Management Designated Watershed, develop and implement a uniform stormwater management ordinance that is consistent with PaDEP recommendations	LT	1,2	7
6	Implement NPDES regulations	LT	2	7
7	Implement protocols to be used by all developments for verifying compliance with the Antidegradation Requirements	ST	1,2	7
8	Enact and enforce Sewage Management Ordinances	OG	2	7
9	Monitor contamination of aquifers	OG	1,2	7
10	Establish a program to monitor surface water flows over time.	OG	1,2	7
11	Evaluate the costs and benefits of maintaining older dams on streams	OG	2,9	7
12	Establish programs of water quality monitoring in streams	OG	1,2	7
13	Establish mapping of all perennial and intermittent headwater streams	ST	1,2	4,5,7
14	Coordinate policies on construction and extensions of public sewer and water facilities, consider acquisition of environmentally sound lands which could be used for land disposal of treated wastewater.	OG	1,2	7
15	Support implementation of the Milford Water Authority Wellhead Protection Plan.	OG	1,2	7
16	Plan for a system of greenways	ST	1,2	4,5
17	Establish programs for retrofitting existing stormwater systems.	OG	2,9	4
18	Evaluate retrofit opportunities for stormwater systems in established non-residential developments..	OG	2,10	
19	Adhere to the soil and erosion control requirements of PaDEP.	OG	1,2,10	7
20	Encourage developers to grant conservation easements or dedicate land to municipalities and conservation groups to protect water resources.	OG	1,2,10	11
21	Encourage the community to be aware of water resources in their watersheds and protect them.	OG	1,2	7,11
22	Encourage preparation of water budgets and modeling of impacts of water withdrawal within watersheds.	LT	1,2	7,11
23	Identify water conservation and re-use methods.	OG	1,2	7,11
24	Pursue funding for a model program for integrated resource planning.	LT	1,2	7
25	Pursue funding for a model program for watershed-based zoning.	LT	1,2	7
26	Consider forming municipal advisory committees for watersheds.	ST	1,2	7,11
27	Organize stream cleanup days within watersheds.	OG	1,2	7,11
28	Discuss with municipalities the merits of seeking a grant to establish the implications of watershed based planning and zoning.	LT	1,2	7

II.	Protect Water Resources	Implementation Range	Potential Party(s)	Partners/ Funding Sources
29	Prepare a County-wide water resource plan.	ST	1	5,7

III.	Protect Scenic and Historic Resources	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Encourage municipalities to adopt provisions in their zoning ordinances to protect scenic and historical resources and regulate signage. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions.	ST	1,2	4,5,6
2	Encourage municipalities to adopt provisions in their subdivision and land development ordinances to protect scenic and historic resources. Provide model ordinance provisions for municipal consideration and provide financial and technical assistance to municipalities in adopting such provision.	ST	1,2	4,5,6
3	Establish tree planting and landscaping programs in existing developed areas.	LT	2	3,4
4	Encourage landscaping of cleared/open areas in existing developments.	OG	2,9,10	
5	Minimize visual blight along the road corridors in the Region.	OG	2	3
6	Encourage municipalities to support the activities of individuals and groups which identify, document, evaluate and protect historical resources.	OG	1,2	6
7	Encourage municipalities to support the planning of trails to link historic sites and erect informative markers and exhibits at historic resources.	ST	1,2	5,6
8	Encourage municipalities to support the integrity of Historic Districts in the County.	OG	1,2	6
9	Encourage municipalities to support regional or municipal historical commissions.	ST	1,2	6
10	Encourage retention of natural buffers within developments and retention of natural and historic landscapes.	OG	1,2,9,10	

IV.	Manage Growth	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Achieve consistency between County policies and financial incentive policies and this Plan and the identified growth areas.	OG	1,2	3,4,5,7
2	Work with the County Road Task Force, municipalities and PennDOT to identify necessary transportation improvements in areas designated for growth.	OG	1,2	3
3	Make decisions on location of community facilities which are consistent with identified growth areas.	OG	1,2	4,5,7
4	Examine cost effective ways, including regional cooperation, to provide supportive infrastructure to growth areas.	OG	1,2	3,4,5,7
5	Work with a County Sewer and Water Task Force, municipalities, PaDEP, PENNVEST, DCED and users to develop an approach to facilitate construction and/or extension of public sewer and water facilities as necessary within growth areas.	ST	1,2	4,5,7
6	Support revitalization efforts in the Boroughs, villages and hamlets and provide technical planning assistance in revitalization.	OG	1,2	3,4
7	Pursue funding for studies of the major road corridors serving growth areas, to identify means of improving, managing, enhancing, and beautifying those corridors	OG	1,2	3,4
8	Study whether the Transfer of Development Rights concept is an appropriate technique to direct growth to growth areas.	ST	1,2	4,5
9	Pursue techniques to protect natural resources and preserve open space.	OG	1,2	4,5
10	Encourage Municipal Act 537 plans and water supply planning to promote compact, efficient, orderly, and phased development within designated growth areas.	OG	1,2	7
	Encourage municipalities to allow higher densities of development that can support public sewer and water facilities within growth areas, where and when public sewer and water facilities are made available.	ST	1,2	4,7

V.	Establish County-Municipal Partnerships to Manage Growth	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Institute a County Planning Technical Assistance Program for municipalities.	ST	1,2	4,5
2	Encourage and assist the Boroughs and Townships containing villages to apply for grants for revitalization and streetscape plans. Encourage participation in the Main Street and Elm Street programs.	ST	1,2	3,4
3	If it is the consensus to use Transportation Impact Fees (TIF's) in the County, assist multi-municipal TIF studies pursuant to multi-municipal comprehensive plans.	OG	1,2	
4	Provide data to municipalities available in the County GIS.	OG	1,2	4,5
5	Establish a regular program of workshops with municipal officials on Smart Growth techniques and other planning topics.	OG	1,2	4,5
6	Provide a toolbox to municipalities which is a compilation of sample ordinance provisions, design guidelines, development techniques, and other information.	ST	1,2	4,5
7	Explore what characteristics and elements constitute "Livable Communities" within Pike County, and work to incorporate those elements in municipal and multi-municipal planning efforts and ordinances.	ST	1,2	4,5
8	Explore what elements and characteristics constitute "Rural Character" within the County, and protect those elements through use of multi-municipal open space and comprehensive plans and municipal ordinances.	ST	1,2	4,5
9	Explore those elements which create memorable experiences for those who live, work, and visit within Pike County, and protect and enhance those elements through the use of multi-municipal open space and comprehensive plans and municipal ordinances.	ST	1,2	4,5
10	Utilize the Office of Community Planning as a repository of planning data.	OG	1	

VI.	Encourage Multi-Municipal Planning to Manage Growth	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Provide organizational and technical assistance and financial incentives in the preparation of multi-municipal comprehensive plans.	ST	1,2	4,5
2	Encourage consideration of Smart Growth principles in the plans	ST	1,2	4,5
3	Assist municipalities in the preparation of Regional Open Space and Recreation Plans so recreation impact fees can be charged.	ST	1,2	5

VII.	Address Impacts of Tremendous Growth	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Organize seminars to address development impacts.	OG	1,2	4,5
2	Work to attain a more favorable tax structure.	OG	1,2	12
3	Work to secure legislation which will authorize additional impact fees for municipalities and facilitate use of existing authorized fees.	OG	1,2	12
4	Work to secure revisions in funding allocation formulas, including restoring population adjustments to State funding formulas.	OG	1,2	12
5	Work with PennDOT Central Office to increase allocations of PennDOT county maintenance funding.	OG	1,2	3
6	Work to establish consistent policies on use of impact fees within the County.	OG	1,2	
7	Review the appropriateness of using Transportation Impact Fees.	ST	1,2	
8	Implement policies for economic development.	ST	1	4
9	Encourage municipalities to prepare Official Maps. Consider the need for preparation of a County official map.	ST	1,2	
10	Encourage municipalities to consider Capital Improvements Programming.	ST	1,2	
11	Encourage municipalities to require developers to perform impact studies.	ST	1,2	

VIII	Improve Quality of Development	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Consider predesign meetings and joint site visits between planning commissions and developers.	ST	2	
2	Require street furniture/pedestrian amenities as required improvements pursuant to streetscape plans.	OG	2	
3	Provide assistance to include adequate improvement requirements and standards, planning and architectural design standards and performance standards in municipal zoning and subdivision and land development ordinances.	ST	1,2	4,5
4	Encourage municipalities to adopt approaches in their zoning ordinances to realize enhanced developed areas	ST	1,2	4,5

IX.	Improve Circulation System	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Work with the Pike County Road Task Force, municipalities, legislators, and PennDOT to list needed transportation improvements on the 12-year transportation program and accomplish construction of those improvements on the list.	OG	1,2,3,12	3
2	Work with PennDOT to support this Comprehensive Plan.	OG	1,2	3
3	Work with PennDOT to assure adequate maintenance of roads which receive substantial volumes of truck and school bus traffic.	OG	1,2	3
4	Work with PennDOT to establish appropriate speed limits	OG	1,2	3
5	Develop access management plans in cooperation with PennDOT to address access to major roads and access design standards.	OG	1,2	3
6	Work with PennDOT to keep traffic signal timing current and optimized.	OG	1,2	3
7	Work to implement the recommendations of the Congested Corridor Improvement Project Study of Route 6/209.	ST	1,2	3,4
8	Identify additional necessary improvements to road corridors in growth areas.	OG	1,2	3,4
9	Enhance a multi-modal circulation system consisting of road, transit, pedestrian, and bicycle systems.	OG	1,2	3,4,5
10	Work to connect transportation modes to one another.	OG	1,2	3,4,5
11	Monitor the need for park and ride facilities in the County	OG	1,2	3
12	Monitor the feasibility for a County transit authority. In the interim, monitor the feasibility of establishing service from other transit entities or enhancing existing paratransit for seniors.	OG	1	3
13	Encourage landowners to cooperate with PennDOT and the municipalities in the redesign of existing strip development areas to manage access and improve streetscapes.	LT	1,2	3,10
14	Monitor the need for a Transportation Development District within the Rt6/209, Rt6, Rt739, and Rt507 Corridors.	LT	1,2	10
15	Encourage municipalities to adopt provisions in their subdivision and land development ordinances to manage access to roads. Provide model ordinance provisions and technical assistance to municipalities in adopting such provisions.	ST	1,2	
16	Encourage municipalities to adopt provisions in their subdivision and land development ordinances to require appropriate studies and improvements of developers and establish design and construction standards. Provide model ordinance provisions and provide technical assistance to municipalities	ST	1,2	
17	Require developers to recognize existing trails and to provide for new trails.	OG	1,2	10
18	Work with transportation organizations and agencies providing services to seniors.	OG	1,2	
19	Encourage municipalities to prepare municipal transportation plans, Official Maps, and capital improvement plans	ST	1,2	
20	Maintain information on traffic counts, carrying capacity, and level of service at points of interest.	OG	1,2	3
21	Monitor the need for, and work to institute appropriate traffic calming techniques in the Boroughs, villages, hamlets, and residential neighborhoods.	OG	1,2	3
22	Encourage municipalities to consider PennDOT Transportation Enhancement, Home Town Streets, and Safe Routes to School programs.	OG	1,2	3
23	Address how to balance the scenic character of County roads with improvements to accommodate increased vehicular traffic and alternative modes of travel.	OG	1,2	3
24	Establish adequate construction cross-sections for new and rebuilt roads.	ST	1,2	
25	Encourage PennDOT to better maintain roads in poor condition.	OG	1,2	3

X.	Provide Community Facilities and Services to County Residents	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Determine the appropriate means to increase higher education opportunities	LT	1	
2	Encourage higher education programs that identify with the natural resources of the County	LT	1	
3	Further explore the concept of an Eco -Science Center in the County	LT	1	
4	Expand recycling/composting opportunities	OG	1,2	4
5	Expand use of the concept of municipal cleanup days throughout the County	OG	1,2	
6	Work with municipalities to identify methods and financing sources to improve ordinance and code enforcement	ST	1,2	4
7	Continue to expand the County GIS system and expand its usage in County and municipal planning, conservation, taxing, assessment, emergency 911, and core management functions	OG	1,2	4,5
8	Consider appointment of a full-time or contractual grants coordinator	ST	1	
9	Prepare plans for expansion and renovation of County facilities as necessary and plans for appropriate space utilization	OG	1	
10	Analyze police/fire/emergency protocols to identify which organization should be contacted for each type of emergency. Analyze coverage based upon need for asset protection, response time, and population distribution	OG	1,2,14	4
11	Encourage expansion of availability of day care services within the County at appropriate locations	LT	1,2	10
12	Consider establishment of a head start pre-school program	LT	1,12	
13	Investigate opportunities to develop recreational facilities on National Park Service land and other publicly owned lands	LT	1,2	5,8,13
14	Encourage increased accessibility of State Parks, Gamelands, River Corridors, and Forests through provision of readily accessible areas for parking, trails and fishing	LT	1,2	5,8
15	Encourage location of local radio and TV sources of news within the County	LT	1	
16	Monitor the feasibility of supporting a hospital as the County grows. In the interim, encourage practitioners providing unmet needs to locate at appropriate locations	OG	1	10,15
17	Encourage volunteerism for community organizations and identify means of increasing volunteerism	OG	1,2,14	
18	Identify additional funding sources for volunteer organizations and ways of providing support to their operations	OG	1,2,14	
19	Review past experience of the Council of Governments (COG), the feasibility of reorganizing it, and the support needed to make it effective	ST	1,2	
20	Identify steps to foster an increased sense of County identity	OG	1,2,15	
21	Encourage the U.S. Postal Service to revise zip codes and addressing systems within the County	ST	1,2	
22	Develop a system for notification of public utilities of proposed developments	LT	1,2,10	
23	Discuss the need to establish a program to assist landowners who need assistance when well capacity is diminished	LT	1,2	7
24	Maintain and enhance the Pike County Public Library system	OG	1,2	
25	Continue to monitor and address the needs of residents as identified by County departments and visioning efforts	OG	1,2	4
26	Develop a health and human services plan which identifies needs, providers, priorities for programs, and funding sources	LT	1,2,14	
27	Determine what facilities are needed to best serve youth in the Open Space and Recreation Planning Process	ST	1,2,14	5
28	Coordinate efforts of volunteer fire companies and emergency medical services and determine the best approach to organize services	OG	1,2	4

X.	Provide Community Facilities and Services to County Residents	Implementation Range	Potential Party(s)	Partners/ Funding Sources
29	Work to improve Advanced Life Support planning and funding	ST	1,2,14	
30	Identify methods of encouraging volunteerism, funding training, and funding operations	OG	1,2,14	4
31	Determine the most appropriate methods of providing enhanced law enforcement service and coordinated enforcement among public and private law enforcement	OG	1,2	4
32	Facilitate access to community facilities through the transportation system	OG	1,2	3
33	Continue to provide information and assistance to residents in directing them to available services	OG	1,2,14	
34	Involve fire company, emergency services and school district personnel in review of subdivision and land development plans, where appropriate	OG	2	10
35	Require developers to provide for fire protection, addressing water supply, distribution, and storage, fire hydrants, building protection, and access of fire vehicles	OG	2	10
36	The design of developments should address emergency access and egress, including multiple access/egress points and evacuation routes and school bus stops	OG	2	10
37	Expand cooperation and dialog among fire companies, emergency services, authorities, and the School Districts on sharing of services, equipment, facilities and programs	OG	1,2,12,14	
38	Encourage involvement of new residents in community programs to foster community spirit, economic development, and community attractiveness	OG	1,2,14	
39	Encourage existing developments to address existing environmental quality problems	OG	1,2,7,9,10	
40	Identify opportunities for training for municipal officials and staff and opportunities for technological enhancements in municipal government	OG	1,2	4
41	Encourage a dialog between the school districts and municipalities regarding development activities, school facilities needs, location of school facilities, and school bus routes	OG	2,12	
42	Encourage location of school facilities within growth areas and existing centers to provide proximity to residences	OG	1,2,12	
43	Establish developer responsibilities to provide community facilities and incorporate responsibilities into comprehensive plans and land use regulations	ST	1,2	10
44	Maintain a dialog as to what should be the expected level of services to residents of the County	OG	1,2	
45	Support efforts to expand the supply, distribution, and training in use of defibrillators	OG	1,2,14	
46	Establish a mechanism for the County to provide technical assistance to municipalities in organizing and securing grants for open space, recreation, and greenways planning and development	ST	1,2	5
47	Continue development of packets for distribution to new residents	OG	1,2,14	
48	Monitor impacts of gambling in adjoining counties	OG	1,2	
49	Continue to address the needs of seniors, particularly housing and mobility	OG	1,2,14	3,4
50.	Review opportunities to enhance recycling in the County	OG	1,2	7
51	Establish a recycling transfer station at Pike County property in Blooming Grove Township	ST	1	7

XI.	Encourage Additional Economic Development	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Work to create family sustaining jobs.	OG	1,2,15	4
2	Work to sustain a diversified environmentally friendly economy which is not dependent on one business or type of business.	OG	1,2,15	4
3	Identify retail and service needs of residents.	OG	1,15	
4	Work to provide a variety of business environments, including planned business centers; vital downtowns; coordinated, managed corridors; individual sites for small businesses; and sites near identified I-84 interchanges.	OG	1,2,15	3,4
5	Analyze the skills of the County workforce, and identify and work to establish necessary mechanisms to train and educate the County workforce.	OG	1,15	
6	Facilitate access of the workforce to jobs.	OG	1,2,15	3,4
7	Identify potential business development areas and coordinate transportation and utility planning and programmed road improvements to provide adequate access and services to those locations.	ST, OG	1,2,15	3,4
8	Work to provide "shovel-ready" sites for businesses in the County and the County Business Park.	OG	1,2,15	4
9	Inventory the adequacy and accessibility of infrastructure and utilities to support business development	OG	1,2,15	3,4
10	Complete a feasibility study for a Pike County Business Incubator.	ST	1,15	
11	Continue to periodically survey the needs of existing businesses within the County and identify programs to meet those needs.	OG	1,15	
12	Work with local financial institutions to provide loan programs for local businesses.	OG	1,15	
13	Identify opportunities to participate in the recently approved Pennsylvania Economic Stimulus Package Programs	OG	1,2	4
14	Encourage retail services and public and community facilities to locate within growth areas to maximize accessibility to residential areas and the circulation system.	OG	1,2,15	
15	Encourage municipalities to zone appropriate areas for economic development	ST	1,2	
16	Encourage requirements that new development to be designed and constructed to meet environmental performance standards, eliminate adverse impacts on adjacent land uses, and minimize highway access safety hazards.	ST	1,2	3,5
17	Encourage appropriate adaptive re-use of vacant and underutilized commercial buildings and sites.	OG	1,2,10,15	4
18	Inform PCICDA of areas and buildings zoned and available for commercial and industrial development in the County.	OG	2	
19	Identify an approach to retaining young people within the County.	ST	1,2,14,15	
20	Conduct a barrier analysis to economic growth in the County.	ST	1,15	
21	Determine applicability of Transit Revitalization Investment Districts.	LT	1,2,10,15	3,4
22	Prepare a strategic plan for economic development.	ST	1,2,15	
23	Determine the most appropriate marketing approach for the County.	ST	1,15	
24	Consider development of a locally controlled micro revolving loan fund.	LT	1,2,15	
25	Support revitalization efforts in Matamoras and Milford	OG	1,2	3,4
26	Encourage expansion of housing and health care choices	OG	1,2	

XI.	Encourage Additional Economic Development	Implementation Range	Potential Party(s)	Partners/ Funding Sources
27	Appoint a task force to study role of sustainable forestry	ST	1,2,15	5
28	Continue and engage partnerships for economic development	OG	1,2,15	4
29	Determine if joint marketing of I-84 business parks would be appropriate	ST	1,15	
30	Promote peer to peer marketing	OG	1,15	
31	Maintain a business resource library	OG	1,15	
32	Encourage development of higher education facilities	OG	1	
33	Promote River community economic development.	OG	1,2,15	4,5,11,13

XII.	Retain Tourism as a Major Component of Economic Development	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Promote sustainable ecotourism within the County	OG	1,2,15	4,5
2	Promote a distinct identity for Pike County in recognition of its natural resources.	OG	1,2,15	
3	Develop programs to view wildlife and understand their habitats.	LT	1,15	5,8
4	Develop a system of guidebooks and easy to use maps for leisure users.	LT	1,15	
5	Consider the merits of promoting access to areas off I-84 through high quality gateway sites, information centers, and appropriate signage.	LT	1,15	
6	Protect identified natural, historic, recreational, cultural, archeological and architectural resources and their settings, including hunting and fishing and wildlife habitats.	OG	1,2,11	5,6,8
7	Consider the creation of a Heritage Park Region encompassing Pike County and conduct a Heritage Area feasibility study.	LT	1,2,15	5
8	Identify and support the most appropriate marketing approach for the County and expand tourism marketing.	ST	1,15	
9	Define goals for tourism, develop a marketing plan appropriate to Pike County, and target groups to be encouraged to visit, and perhaps locate, within the County.	ST	1,15	
10	Work with the Delaware Water Gap National Recreation Area and the Upper Delaware River Council to promote tourism.	LT	1,2,13	
11	Develop a series of itineraries based on a variety of interests.	LT	1,15	
12	Maintain a Pike County calendar of events.	LT	1,15	
13	Identify and map existing trails and bikeways in the County and expand upon the existing system.	ST, LT	1,2	3,5
14	As road corridors in the County are enhanced, where appropriate include necessary improvements to facilitate use of rights-of-way for walking, jogging, and biking.	OG	1,2	3,5,10
15	Investigate opportunities for rails to trails facilities along the railroad line within the northern portion of the County.	LT	1,2	3,5
16	Plan for connections to the McDade Trail to accomplish an easily accessible and usable trail along the entire length of the Delaware River.	LT	1,2	5
17	Build upon regional and state promotion efforts, including Route 6, D&H Canal, Towpath Road bicycle trail and Route 6 as a heritage route.	LT	1,2,15	3,5
18	Work to establish a uniform system of wayfinding signs to enable people to readily find attractions within the County.	LT	1,2,15	3,4,5
19	Maintain a significant presence in the I-84 Visitors Center and maintain information centers	OG	1,15	
20	Support revitalization efforts in the County's centers and corridors.	OG	1,2	3,4
21	Promote water-related tourism	OG	1,2,15	5,13
22	Support the emergence of Arts/Culture as an important element of tourism.	OG	1,2,15	
23	Define and implement the conceptual Greenways Plan.	ST	1,2	3,4,5,8,11,13
24	Support directives of the Scenic Rural Character Preservation Bond Committee to balance economic development and land preservation	OG	1,2,15	4,5,11
25	Support activities of Pike County Visitors Bureau	OG	1,2,15	

XIII.	Address Efforts of Community Associations to Serve Residents	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Establish a task force of representatives of the County, municipalities, community associations, DCED, County legislators, and builders to support efforts of community associations in providing services, facilities, and infrastructure to residents; how such associations should be organized and managed; how the associations can more effectively accomplish their responsibilities; how future problems can be minimized through effective review and development processes, requirements, and standards for developers, and actions and contributions of developers; and how public safety concerns can be addressed within and outside private communities.	ST	1,2,9,10,12	4
2	Provide a toolbox to community associations to be used as guidelines for improving infill development and requiring and retrofitting adequate infrastructure within their developments.	ST	1,2,9	
3	Work with the associations to identify methods of assuring infill development is properly reviewed, appropriate storm water management and erosion controls are implemented, and natural drainage patterns and natural resources recognized.	ST	1,2,9	
4	Identify mechanisms to assure appropriate infrastructure is in place prior to transfer of responsibilities from developers to community associations.	ST	1,2,9,10	
5	Discuss approaches to dealing with individually-owned lots within developments which regularly appear on tax sale lists. Determine whether appropriate approaches are to incorporate lots into open space, encourage proper development, incorporate them into other lots, or a combination of these and other approaches.	OG	1,2,9	
6	Discuss opportunities for retrofitting additional access, especially for emergency services, to private communities.	OG	1,2,9,14	
7	Involve community associations in discussions of deer management.	OG	1,2,8,9	

XIV.	Address Housing Needs	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Address concerns for existing residents in finding suitable affordable housing.	OG	1,2,4,14	4,10
2	Determine whether a separate Pike County Housing Agency should be created.	ST	1	
3	Work to secure participation of local banks in loan programs.	OG	1,14,15	
4	Foster programs which encourage home renovation and rehabilitation.	OG	1,2,14,15	
5	Foster programs which facilitate affordable senior and family housing.	OG	1,2,14,15	4,10
6	Encourage municipal zoning to allow a variety of housing types.	ST	1,2	
7	Use designated Recorder of Deeds fees for increasing housing choices.	OG	1	
8	Foster programs which facilitate home ownership.	OG	1,2,14,15	4,10

XV.	Enhance Infrastructure Systems	Implementation Range	Potential Party(s)	Partners/ Funding Sources
1	Coordinate public sewer and water policies with Comprehensive Plans	OG	1,2	7
2	Review alternative methods of sewage disposal to choose highest level of treatment which is practical, economically feasible, and consistent with water quality designations	OG	1,2,10	7
3	Identify and consider acquisition of environmentally sound land in growth areas for land disposal of treated wastewater	ST	1,2	7
4	Develop and implement stormwater management ordinance in each Act 167 Stormwater Management Designated Watershed	LT	1,2	7
5	Establish programs for retrofitting existing stormwater management systems	LT	1,2,9	4
6	Plan for a County-wide system of greenways.	ST	1,2	5
7	Work with the Pike County Road Task Force, municipalities and PennDOT to identify necessary transportation improvements in areas designated for growth, to place those improvements on the Twelve-year Road Program, and complete the improvements.	LT	1,2	3
8	Encourage utilization of state-approved new sewage disposal technologies where appropriate.	OG	1,2	7
9	Work with municipalities to develop an approach to facilitate construction and/or extension of public sewer and water facilities as necessary within growth areas to serve existing and future needs and support higher densities and varieties in type of appropriate uses.	ST	1,2	4,7
10	Pursue funding for studies, or additional PennDOT studies, of the major road corridors serving growth areas.	LT	1,2	3
11	Encourage electric utilities to enhance plans for reliable service.	OG	1,2	15
12	Encourage improvement of telecommunications facilities through municipal identified need.	OG	1,2	15
13	Establish a model cell tower ordinance for use by County municipalities.	ST	1,2	
14	Secure additional PennDOT aid in facilitating vehicular movement throughout the County during periods of impaired driving conditions.	OG	1,2	3
15	Pursue the creation of a County-wide Hazard Mitigation Plan to address all hazards	ST	1,2	1,2,4
16	Work with PennDOT to secure recognition of the special transportation needs and safety needs within the County.	OG	1,2	3
17	Monitor designation of responsibility for preparing emergency action plans for dams and monitoring needs for dam repairs.	OG	1,2	7

CHAPTER 9

ACTIONS TO ADDRESS MAJOR ISSUES

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THE ACTION PLAN

A vision for the County and goals and objectives have been prepared. The crucial next step is to identify actions to realize the recommendations as outlined in this plan. A program for implementation and commitment to follow that vision program is necessary.

What follows are recommended actions, organized by major issues facing Pike County. Priority actions for each issue have been identified in Chapter 8. That Chapter also contains a summary of the Actions listed in this Chapter.

Chapters 8 and 9 function on several levels. They identify actions to implement the plan and provide more detailed “how-to” information for some actions. The list of actions also serves as a resource for municipalities to review when preparing municipal comprehensive plans and updating land use regulations. Further, it is hoped that residents of the County will review the action items, become especially concerned with seeing that an action is accomplished, and become a champion of that action.

Issues in Chapter 2 and Goals and Objectives in Chapter 3 are organized according to the task forces established during the Pike County Visioning process and include: Resource Conservation, Land Use, Government and Infrastructure, Community Services, and Economic Development. Actions have been organized in a more specific manner by 15 initiatives which are crucial to addressing the issues facing Pike County over the next ten years. Organizing actions this way draws more specific attention to these initiatives and allows a more focused priority action item list.

For those who want to relate the Comprehensive Plan’s Action Plan headings to the Visioning task force alignment, the following chart can be used:

Table 11
VISIONING TASK FORCE SUBJECTS

ACTION PLAN INITIATIVES	Resource Conservation	Land Use	Government and Infrastructure	Community Services	Economic Development
	I. Protect Natural Resources	IV. Manage Growth	IX. Improve the Circulation System	XIV. Address housing needs	XI. Encourage additional economic development
	II. Protect Water Resources	V. Establish County-Municipal Partnerships	XV. Enhance infrastructure systems	XIII. Address efforts of community associations to serve residents	XII. Retain tourism as a major component of economic development
	III. Protect Scenic and Historic Resources	VI. Multi-Municipal Planning	X. Provide community facilities and services for day-to-day needs of County residents		
		VII. Address Impacts of Growth			
		VIII. Improve Quality of Development			

Within each initiative, actions may be further organized under subheadings. For instance, actions under Natural Resources, Water Resources, and Scenic and Historic Resources Protection and Actions To Improve The Quality Of Development are broken down into administrative and planning actions and municipal ordinance actions. Actions to provide community facilities and services are organized by actions to increase educational and cultural opportunities, to increase recreational opportunities, to identify steps to foster an increased sense of County identity, to improve health care and human services opportunities, to enhance the provision of emergency services, and to facilitate efficiency in provision of government services.

The recommendations listed in this Chapter 9 are listed in no particular order of importance. Implementation ranges (short-term, long-term, and on-going) for these priority actions are identified at the end of Chapter 8.

I. ACTIONS TO PROTECT NATURAL RESOURCES WITHIN THE COUNTY

Administrative and Planning Actions

- A. Prepare a County Open Space, Greenways, and Recreation Network Plan which will identify important and threatened open space areas which should form an interconnected open space system within the County; discuss methods, such as the Growing Greener approach, which can be incorporated into municipal ordinances to assist in expanding the open space system; assess open space and recreation needs for the County; and plan for a conceptual system of greenways, trails and bikeways throughout the County.
- B. Continue to support the planning and open space bond fund pursuant to the approved voter referendum. The fund could support County and municipal planning and acquisition of open spaces.
- C. Provide technical and organizational assistance to municipalities within the County for multi-municipal open space and recreation plans.
- D. Encourage protection of target identified areas in the County and regional open space and recreation plans through acquisition of conservation easements, fee simple purchase, donation, and dedication through the development review process. Support efforts of Delaware Highlands Conservancy, The Nature Conservancy, Pocono Heritage Land Trust, Wildlands Conservancy, Natural Lands Trust and other agencies to preserve tracts of environmental significance.

Develop criteria for prioritizing natural areas and water resources for protection and develop prioritized Natural Areas Conservation Plans.

Identify additional funding sources, such as DCNR Community Conservation Partnership Funds, Growing Greener funds, Transportation Enhancement Act (TEA-21), Community Development Block Grants, DCED, foundations, private fund raising, and gifts, bequests, and donations.

Establish partnerships with private land owners; public utilities; agencies such as the State Game Commission, National Park Service, State Forest Service; and other non-governmental groups such as owners of resorts, camps, and hunting and fishing clubs in securing acquisition or permanent protection of open space and greenways, establishing right-of-first refusal for properties which are offered for sale, or establishing easements or rights-of-way for use.

- E. Encourage forestland owners to participate in the Forest Legacy Area program, designed to acquire conservation easements on important and threatened forestland.
- F. Encourage creation of municipal or regional Environmental Advisory Councils to work with governing bodies to preserve key tracts of open space, protect environmental resources in the County, and implement regional open space and recreation plans.

Act 148 of 1973 authorizes any municipality or group of municipalities to establish, by ordinance, an Environmental Advisory Council to advise the local planning commission, park and recreation board, and elected officials on matters dealing with the protection, conservation, management, promotion, and use of natural resources located within the municipality's territorial limits.

Act 148 empowers Environmental Advisory Councils to:

- Identify environmental problems and recommend plans and programs to the appropriate municipal agencies for the promotion and conservation of natural resources and for the protection and improvement of the quality of the environment within its municipal boundaries;

- Promote a community environmental program;
- Keep an index of all open space, publicly and privately owned, including flood prone areas, swamps, and other unique natural areas, for the purpose of obtaining information on the proper use of such areas;
- Make recommendations for the possible use of open land areas; and
- Advise the appropriate local government agencies, including, but not limited to, the planning commission and park and recreation board or, if none, the elected governing body, on the acquisition of property, both real and personal.

G. Encourage an organization to assume responsibility for monitoring “protected” lands to encourage their continued protection.

H. Review with municipal officials examples of municipally-funded open space preservation programs, such as using an earned income tax or bond issue to fund land acquisition or purchase of development rights.

I. Support continuation of agriculture-related programs and organizations.

J. Assist municipalities in the preparation of municipal or multi-municipal Potential Conservation Lands Maps, identifying conservation priorities in each municipality. These maps can be used to determine key parcels to be preserved and serve as a guide for developers as to what lands in their tracts should be retained as open space.

Protect the linkages and natural processes necessary to protect and ensure the continued existence of both terrestrial and aquatic elements of biodiversity.

K. Assist municipalities in “audits,” or reviews, of plans and regulations regarding implications for future build-out and the degree of protection of natural, scenic, and historic resources.

L. Appoint a liaison to the State Game Commission to discuss deer management in the County.

M. Encourage municipalities to review the appropriateness of the Transfer of Development Rights technique for use in promoting infill in the existing settlements in the County and in designated growth areas. In the case of joint zoning ordinances, development rights may be transferable within a Region. Otherwise, the technique may be used within municipal boundaries.

Discuss the mechanics of transferring development rights from areas intended for rural conservation to allow increased intensity of development in areas designated for economic or residential development.

N. Identify and work to achieve additional techniques for conservation of open space forestland, including tax or other financial incentives.

O. Identify a mechanism for monitoring sustainable forestry which addresses protection of water resources, provision of recreational opportunities, and maintenance of wildlife.

P. Establish a program for community education and involvement in the need for, and methods of, preserving an open space system and managing growth within the County.

- Q. Encourage participation of community associations in resource management and protection programs.
- R. Address the loss of Hemlock trees within riparian zones.
- S. Continue to make GIS mapping of natural resources available to municipalities.

Municipal Ordinance Actions

- T. Encourage municipalities to adopt provisions in their zoning ordinances to protect natural resources. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions. Examples of provisions which can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.
 - 1. Adopt Natural Resource Protection Standards and/or Net-Out Provisions protecting resources such as:
 - a. Floodplains
 - b. Wetlands
 - c. Wetland Margins (buffers)
 - d. >25% slope
 - e. 15-25% slope
 - f. Watercourses
 - g. Waterbodies
 - h. Lake and pond shores
 - 2. Adopt Steep Slope Protection Provisions, such as:
 - a. Control and limit development on steep slopes
 - Require larger lot sizes and impose stricter impervious restriction for steep slopes 15-25%
 - Prohibit or severely restrict development on slopes >25%
 - 3. Adopt Tree and Woodland Protection, Management and Planting Provisions, such as:
 - a. Limit clearance for development in both subdivisions and land developments
 - b. Require tree protection and replacement during development
 - c. Require use of native species in landscaping
 - d. Establish limited clearance buffer zones around the perimeter of new developments
 - 4. Adopt Outdoor Lighting Standards to control light pollution and protect the night sky, such as:
 - a. Establish illumination levels which are adequate but not excessive
 - b. Require impacts on surrounding streets and properties to be mitigated
 - c. Require full-cutoff fixtures to be used
 - d. Control glare
 - 5. Adopt Forestry Regulations, after consultation with experts in the field, such as:
 - a. Require accepted silvicultural practices
 - b. Require forestry management plan
 - c. Require stormwater and erosion and sedimentation control
 - d. Require properly constructed internal roads
 - e. Require protection of public roads
 - f. Require reforestation
 - g. Require protection during steep slope forestry

6. Through municipal zoning, allow farmers to supplement income through home businesses, home occupations and farm related businesses; establish appropriate controls on intensive agricultural operations and sludge (biosolids); and permit appropriate recreational activities, such as hayrides, corn mazes, and festivals.
7. Adopt Ridgeline Protection Regulations which address issues such as:
 - a. Establishing areas to remain undisturbed
 - b. Restoration planting requirements
 - c. Siting of structures
 - d. Lighting
 - e. Standards for blending with the natural surroundings
 - f. Minimization of clearance of natural vegetation
 - g. Minimization of impervious surfaces
 - h. Screening
 - i. Use of underground utilities
 - j. Method of development

8. Use Conservation Zoning (Growing Greener Concept of Natural Lands Trust) in the Townships:

Determine whether Conservation Development should be the default and/or encouraged method of development, with density disincentives given to other methods of development which result in less open space and protection of resources. Determine if density bonuses should be established for using Conservation Development. The typical Conservation Zoning process is:

- a. Net out natural resources
 - b. Establish maximum overall density
 - c. Establish minimum substantial open space requirement
 - d. Establish alternative methods of development
 - e. Require important natural features and resources, such as scenic vistas, historic sites, agriculture, steep slopes, wetlands, and woodland, to be contained in open space
 - f. Provide visual and physical access to open space areas
9. Use lot averaging, as appropriate in the Townships, which provides:
 - a. A maximum overall density
 - b. Flexibility in lot size, with a minimum established
 - c. Natural features and resources are contained in larger lots so houses can be sited away from them

U. Encourage municipalities to adopt provisions in their subdivision and land development ordinances to protect natural resources. Provide model ordinance provisions for municipal consideration and provide financial and technical assistance to municipalities in adopting such provisions. Examples of provisions which can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.

1. Expand plan data requirements to include a specific listing of environmental, scenic, historic and cultural resources.
2. Require developers to identify the resources within their tracts, analyze the impacts of the development and mitigate those impacts.

Require environmental assessment studies, hydrogeological studies, scenic, historic and cultural resources impact studies; plans for preservation of environmental, historic and cultural resources; and analysis of the site's ability to support the proposed use and intensity of use.

3. Require developers to identify natural, historic, scenic, architectural and cultural resources in their tracts and incorporate them into the open space system. Require management plans for open space as well as mechanisms assuring the continuation as open space.

In review of Subdivision and Land Development Plans, requirements for setting aside open space can be used to preserve Conservation Corridors and provide for greenways identified in open space and recreation plans. Greenway Design Principles in open space plans could be incorporated within the Ordinance.

Requirements for setting aside open space can also be used to protect designated undeveloped areas and identified natural areas pursuant to open space and recreation plans.

4. Establish development guidelines for development in important recharge areas, including limits on impervious cover and standards for on-site sewage disposal.
5. Require protection of vegetation during site work.
6. Limit clearance on approved, but not developed, lots. Potential techniques include tree clearance limits, deed restrictions, net-out provisions, and identification of permissible clearance areas during the development process.
7. Adopt appropriate refinements to implement the Growing Greener Conservation Development Concept if included in the Zoning Ordinance.

If the Conservation concept is used, the design procedure is:

- Identify conservation areas
- Locate house sites
- Align streets and trails
- Draw lot lines

II. ACTIONS TO PROTECT THE COUNTY'S WATER RESOURCES

Administrative and Planning Actions

- A. Support efforts of the Pike County Conservation District, watershed associations, and other agencies to manage stream corridors through cooperative efforts with landowners to establish riparian buffers, utilize best management practices for stormwater management and agriculture, and promote stream bank improvements, restoration, and stabilization. Cooperate in securing easements along the streams.
- B. Encourage wellhead protection and watershed planning under the Growing Greener initiative and other programs in order to protect community water supplies and water resources. Support the formation of new watershed associations.
- C. Update existing and complete new Act 167 Stormwater Management Plans as necessary, including preparation of plans for the Shohola, Delaware and Bushkill Watersheds.
- D. Implement required Phase II PA National Pollution Discharge Elimination System (NPDES) regulations for stormwater related non-point source pollution from existing developments.
- E. Implement protocols to be used by all developments for verifying compliance with the Antidegradation Requirements of the Pa. Code for Exceptional Value (EV) and High Quality (HQ) Streams.
- F. Enact and enforce Sewage Management Ordinances and State mandates to manage (including monitoring and maintaining) on-lot sewage disposal facilities and assure the best available technology is used. Implement systems of system inspections.
- G. Measure depth and contaminants in aquifers through well monitoring.
- H. Establish a program to monitor surface water flows over time.
- I. Evaluate the costs and benefits of maintaining older dams on streams, including benefits as cultural, historic, and recreational resources.
- J. Establish programs of water quality monitoring in streams to establish benchmarks against which to measure antidegradation protections.
- K. Establish mapping of all perennial and intermittent headwater streams so they can be included in municipal protection.
- L. Pursuant to the State's Source Water Assessment Program (SWAP), source water areas of public water systems have been identified, potential pollution sources identified, and vulnerability of water supply to pollution sources assessed. The program provides a tool for water suppliers, municipalities, and the public to develop methods and programs which reduce or eliminate the contamination of water used for drinking water supplies. Support implementation of the Milford Water Authority Wellhead Protection Plan.
- M. It should be noted that lawful activities such as extraction of minerals impact water supply sources and that such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities. Commercial agricultural production impacts water supply sources, and Best Management Practices should be applied to mitigate the impact on water supply sources.
- N. Adhere to the soil and erosion control requirements of PaDEP.

- O. Encourage developers to grant conservation easements or dedicate land to municipalities and conservation groups to protect water resources. Developers should be required to establish riparian forest buffers. Conservation development should be encouraged where development occurs, in order to protect the watersheds of watercourses and water supplies, vulnerable steep slopes, and woodlands. The density of development should be established through analysis of the natural, scenic, historic features, and resources at each site, and, steep slopes, floodplains, woodlands, and wetlands protected.

Where residential developments, businesses, or other uses propose to utilize ground water or surface water supplies in substantial amounts, hydrologic studies should be required; and, the party causing the extraction should be required to demonstrate that there will be no adverse effects on the water supplies of other entities in the area.

- P. Public education programs of watershed associations should encourage the community to be aware of water resources in their watersheds and to exercise good “housekeeping” and stewardship practices to help protect them. Trees should be retained, grading and direction of water consistent with approved stormwater management plans; and recharge of water encouraged.

Landscape management programs can be formulated to encourage residents to reduce nutrients and pesticides reaching streams and ground water. A regular program of household hazardous waste collection and public education programs should be maintained.

Develop watershed curricula for schools.

Establish nature centers in watersheds.

Educate recreational users of water resources regarding appropriate actions to protect water resources.

Public access and usage should be consistent with the need to protect water supplies.

- Q. Consider forming municipal advisory committees for watersheds to participate in regional planning and land acquisition activities within watersheds.
- R. Organize stream cleanup days within watersheds.
- S. Municipalities and community water system operators should note that the County Water Resource Plan includes:
1. Emergency Response Plan Requirements
 2. Model Wellhead Protection Overlay Zone
 3. Model Water Well Ordinance
 4. Sample Ordinance Regulating Individual Water Supply and Sewage Disposal Sites
 5. Sample Township On-Lot and Community Sewage Disposal System Ordinance
- T. Discuss with municipalities involved in regional planning efforts the merits of seeking a grant to establish the implications of watershed based planning and zoning, which involves redistributing future growth and development to those areas which would have the least impact on water quality.
- U. Encourage preparation of water budgets and modeling of impacts of water withdrawal within watersheds in the County during watershed planning. The premise of a water budget is that a volume of water is in motion flowing through the subsurface and surface of a watershed. Water is being added to the system

through groundwater recharge from precipitation events. Water is also constantly leaving the system by stream discharge, water withdrawals (pumping), and evapotranspiration. An accounting exercise of the inflows, outflows, and changes in storage within a subbasin is called water budget. Cumulative ground water management targets can be established.

Post development conditions within watersheds should sustain:

- ground water recharge and subbasin ground water balances,
- stream baseflows,
- stable stream channel conditions,
- the flood carrying capacity of the receiving streams and their floodplains, and
- the water quality conditions necessary to meet at least state water quality standards, support natural aquatic species and their habitats, and protect sources of public drinking water supplies.

V. Identify water conservation and water re-use methods for implementation in the County.

W. Pursue funding for a model program for integrated resources planning. (See Appendix 10)

X. Prepare a County-wide water resources plan.

Municipal Ordinance Actions

Y. Encourage municipalities to adopt provisions in their zoning ordinances to protect water resources. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions. Examples of provisions which can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.

1. Adopt Wellhead Protection Provisions for Community Water Supplies:
 - a. Regulate/Restrict potential contaminating uses
 - b. Regulate/Restrict potential contaminating substances
 - c. Establish performance standards for uses in overlay zones near water supplies
 - d. Establish design standards for uses in overlay zones near water supplies
 - e. Establish operating requirements for uses in overlay zones near water supplies
 - f. Establish review process for uses in overlay zones near water supplies
2. Adopt provisions for Wetland, Wetland Buffer, Wet Areas, Lake, Water Body, and Hydric Soil Protection:
 - a. Restrict development in wetlands
 - b. Establish consistent wetland, wet area, lake, and water body buffer (margin) requirements
 - c. Require wetland delineation in hydric soil areas
3. Adopt Floodplain Protection Provisions:
 - a. Severely restrict development in floodplains to compatible open space uses
4. Establish River and Stream Corridor Overlay Zoning and require Riparian Buffers:
 - a. Restrict development and impervious surfaces
 - b. Require riparian (vegetative) buffers to moderate water temperatures, protect wildlife habitats, control sedimentation, and reduce pollution

Riparian buffers are particularly important to the County because of the number of watercourses in the County. A riparian buffer is an area of vegetation that is maintained along the shore of a water body to protect stream water quality and stabilize stream channels and banks.

Buffers provide the following benefits:

- filter runoff – Rain that runs off the land can be slowed and infiltrated in the buffer, settling out sediment, nutrients and pesticides (nonpoint source pollution) before they reach streams.
- take up nutrients – Fertilizers and other pollutants that originate on the upslope land are taken up by tree roots. Nutrients are stored in leaves, limbs and roots instead of reaching the stream. Through a process called “denitrification,” bacteria in the forest floor convert nitrate to nitrogen gas, which is released into the air.
- provide shade – The leaf canopy’s shade keeps the water cool, allowing it to retain more dissolved oxygen, and encouraging growth of plants and aquatic insects that provide food for fish.
- contribute leaf food – Leaves that fall into the stream are trapped on fallen trees and rocks where they provide food and habitat for organisms critical to the aquatic food chain.
- provide habitat – Streams that travel through woodlands provide more habitat for fish and wildlife. Woody debris provides cover for fish while stabilizing stream bottoms.
- provides migration corridors for wildlife.
- safeguard water supplies by protecting groundwater recharge areas.
- provide flood control.
- provide stormwater management potential – natural vegetation provides a basis for innovative stormwater management systems. Stormwater flows from retention basins can be directed to, and allowed to flow through, buffers to reduce nutrient and sediment loads.
- improve water and air quality.
- stimulate economic opportunities such as by providing valuable open space which may increase land values and, therefore, the tax base.
- provide some federal tax incentives to landowners (depending on a landowner’s financial situation) willing and able to place some of their lands under conservation easement.
- reduce grounds maintenance.
- provide recreational opportunities, and associated economic benefits for recreation-related businesses.
- provide educational and research opportunities for local schools and colleges.
- provide windbreak, shade and visual buffer.

c. Require greenways and trails consistent with Regional Open Space and Recreation Plans

5. Adopt Surface Water and Groundwater Protection Provisions:

- a. Protect delineated aquifers and headwaters through design standards, construction guidelines, use restrictions, and impervious limits.

Z. Pursue funding for a model program for watershed-based zoning.

Watershed-based zoning involves directing future growth and development to those areas that would have the least impact on river, stream, or lake water quality. Zoning districts would have varying overall impervious cover limit, with an overall goal to reduce impervious cover in the watershed. The U.S. EPA identifies the following steps in *Protecting Water Resources with Smart Growth*:

1. Conduct a comprehensive stream inventory.
2. Measure current levels of impervious cover.
3. Verify impervious cover/stream quality relationships.

4. Project future levels of impervious cover.
5. Classify subwatersheds based on stream management “templates” and current impervious cover.
6. Modify master plans/zoning to correspond to subwatershed impervious cover targets and other management strategies identified in subwatershed management templates.
7. Incorporate management priorities from larger watershed management units such as river basins or larger watersheds.
8. Adopt specific watershed protection strategies for each subwatershed.
9. Conduct long-term monitoring to periodically assess watershed status.

Table 12

PROTECTING WATER SUPPLIES			
Stream Corridor Protection	Aquifer Protection	Groundwater Resource Protection Provisions	Hydrogeologic Impact Analyses
<ul style="list-style-type: none"> • Restrict development and impervious surfaces • Require riparian vegetative buffers • Encourage use of best management practices • Encourage stream habitat improvement • Encourage conservation easements/donations/dedications • Protect wetlands and wetland margins • Require floodplain and wetland studies where not identified • Restore stream banks and crossings • Greenway development 	<ul style="list-style-type: none"> • Review development plans to prevent groundwater pollution • Limit impervious surfaces • Establish performance standards for commercial and industrial uses • Protect aquifers through controlling uses and potential polluting activities • Utilize appropriate sewage disposal and water supply techniques, with appropriate standards and management • Protect headwaters and groundwater recharge areas • Best Management Practices 	<ul style="list-style-type: none"> • Wellhead Protection • Increase watershed awareness • Regulation/restriction of potential contaminating uses • Performance standards • Design standards • Operating requirements • Review process 	<ul style="list-style-type: none"> • Proposed supply locations • Geologic conditions, recharge rate, degree of renovation • Aquifer characteristics; groundwater movement, use, yield, quality, quantity, well interference • Test well results and impacts • Plan to protect groundwater system underlying and adjacent to the site: prevention, remediation, emergency management • Monitoring of groundwater quality and quantity

III. ACTIONS TO PROTECT SCENIC AND HISTORIC RESOURCES

Administrative and Planning Actions

- A. Establish tree planting and landscaping programs in existing developed areas.
- B. Encourage landscaping of cleared/open areas in existing developments.
- C. Minimize visual blight along the road corridors in the County to enhance the business climate and tourism. Work with municipalities and PennDOT to identify illegal and/or non-compliant signage and driveways and enforce applicable regulations. Establish responsibility in each municipality for addressing this issue.
- D. Encourage municipalities to support the activities of individuals and groups which identify, document, evaluate and protect historical resources and increase public awareness of the County's history and historic resources.
- E. Encourage municipalities to support the planning of trails to link historic sites and erect informative markers and exhibits at historic resources.
- F. Encourage municipalities to support the integrity of Historic Districts in the County.
- G. Encourage municipalities to support regional or municipal historical commissions where not existing, to be actively involved in historic preservation. The commission(s) would be instrumental in administration of any historic resource overlay zoning which is adopted. The commission(s) would also:
 - 1. Identify, evaluate, mark and foster awareness of historic resources
 - 2. Investigate participation in Certified Local Government Program
 - 3. Inform and involve the public
 - 4. Encourage retention, restoration, enhancement and appropriate adaptive re-use of historic resources and discourage removal of historic structures
 - 5. Conceive programs, events and interpretive signage and exhibits which emphasize the history of the County
 - 6. Evaluate the potential for historic districts and support their creation if warranted. If created, support the adoption of voluntary or mandatory Design Guidelines and Sign Controls for the Historic District(s).
- H. Encourage retention of natural buffers within developments and retention of natural and historic landscapes.

Municipal Ordinance Actions

- I. Encourage municipalities to adopt provisions in their zoning ordinances to protect scenic and historical resources. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions. Examples of provisions which can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.
 - 1. Consider the merits of Scenic Road Overlay Zoning:
 - a. Require greater setbacks from scenic roads
 - b. Require additional landscaping, trees and screening on site
 - c. Establish standards for siting buildings and building height
 - d. Require retention of existing desirable vegetation when it will not conflict with road safety concerns
 - e. Impose sign limitations

- f. Require access management
 2. Review Sign Regulations:
 - a. Regulate billboards
 - b. Adopt consistent and appropriate signage standards along road corridors in the County
 - c. Encourage appropriate signage in existing Boroughs, villages, and hamlets with consideration of materials, colors, lighting, location, purpose, lettering, and construction
 3. Require landscaping and buffering within commercial and industrial developments
 4. Consider adoption of Historic Resource Overlay Zoning for historic resources deemed important by the municipalities. Such zoning could:
 - a. Identify, list, and map historic resources
 - b. Require developers to do analyses:
 - Nature of historic resources on and near property
 - Impact of proposals on historic resources
 - Mitigation measures
 - c. Encourage adaptive reuse of historic buildings
 - d. Discourage removal of historic structures
 - e. Utilize use, coverage, density, intensity and yard bonuses for architectural treatments, building design, amenities, and open spaces/buffers compatible with existing resources, appropriate reuse of existing resources and donation of façade easements
 - f. Encourage architecture, materials, and development patterns characteristic of the area
 - g. Discourage uses likely to result in demolition of historic resources and uses inappropriate in historic areas
 5. Consider adoption of Demolition by Neglect Provisions:
 - a. Require property owners to protect and maintain important historic properties so that they are not demolished by vandalism or the elements, such as requiring unoccupied structures to be sealed and/or secured by fencing
- J. Encourage municipalities to adopt provisions in their subdivision and land development ordinances to protect scenic and historic resources. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provision. Examples of provisions that can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.
1. Establish development guidelines for development near scenic roads and vistas and historic resources.
 2. Require tree plantings along streets, including use of native species, in both major and minor developments and both residential and non-residential developments.

IV. ACTIONS TO MANAGE GROWTH WITHIN THE COUNTY

- A. Achieve consistency between County policies and financial incentive policies and this Plan and the identified growth areas.
- B. Consider the location of community facilities which are consistent with identified growth areas.
- C. Examine cost effective ways, including regional cooperation, to provide supportive infrastructure to growth areas.
- D. Support revitalization efforts in the Boroughs, villages and hamlets in the County and provide technical planning assistance in revitalization and Main Street efforts.
- E. Study whether the Transfer of Development Rights concept is, or could be in the future, an appropriate technique to direct growth to designated growth areas.
- F. Pursue techniques identified in this Plan to protect natural resources and preserve open space.
- G. Encourage Municipal Act 537 plans and water supply planning to be coordinated with this plan and municipal and multi-municipal plans, to promote compact, efficient, orderly, and phased development within designated growth areas.
- H. Encourage municipalities to allow higher densities of development that can support public sewer and water facilities within growth areas, where and when public sewer and water facilities are made available. Consider densities in the range of five dwelling units per acre in town center environments.

V. ACTIONS TO ESTABLISH COUNTY-MUNICIPAL PARTNERSHIPS TO ADDRESS GROWTH, PRESERVATION, AND DEVELOPMENT ISSUES

Administrative and Planning Actions

- A. Institute a County Planning Technical Assistance Program for municipalities. Elements for discussion for inclusion in the program include:
 - 1. Resources to support regional comprehensive plans
 - 2. Resources to support regional open space and recreation plans
 - 3. Providing technical assistance through the County Planning Staff
 - 4. Resources to support zoning ordinance updates to implement regional comprehensive plans
 - 5. Resources to support subdivision and land development ordinance updates to implement regional comprehensive plans
 - 6. Resources to support Conservation Development reviews of ordinances
 - 7. Resources to support Conservation Development Ordinances
 - 8. Providing model zoning ordinance provisions
 - 9. Providing model subdivision and land development provisions
 - 10. Providing model resource protection and stormwater management ordinances
 - 11. Identification of grant opportunities and assistance in preparing grant applications
- B. Encourage and assist the Boroughs and Townships containing villages to apply for grants for revitalization and streetscape plans, addressing such issues as landscaping, signage, street furniture, lighting, parking locations and design standards, enhancing the sense of community identity through providing public spaces, enhancing gateways to the communities, and incorporating natural features such as stream corridors into the streetscapes where feasible. Help coordinate such efforts with PADCED and PennDOT. Encourage participation in the Main Street, Elm Street, Home Town Streets, and Safe Routes to School programs.
- C. Consider the merits of Transportation Impact Fees (TIF's) in the County, and multi-municipal TIF studies pursuant to multi-municipal comprehensive plans. This will enable a comprehensive approach to road improvements, which is a major concern of municipal officials, in recognition that: (1) traffic from one municipality often goes through another in the County (2) major road corridors pass through several municipalities, and sometimes form the boundary of municipalities (3) costs of TIF studies often discourage municipalities from preparing them (4) TIF studies can provide substantial return on investment (5) developers should participate in the process of managing transportation impacts of developments.
- D. Provide municipalities with data available in the County GIS (Geographic Information System).
- E. Utilize the Office of Community Planning as a repository of data on community planning.
- F. Periodically have community planning staff conduct workshops for municipal officials on planning topics.

Municipal Ordinance Actions

- G. Establish a regular program of workshops with municipal officials on Smart Growth techniques.

Review real-life examples of techniques such as Conservation Development, Traditional Neighborhood Development, Planned Residential Development, and forms of "Cluster Development" to aid municipal officials in choosing what to encourage in their municipalities.

Address the issue of whether density incentives should be used to encourage such techniques and density disincentives provided for using more commonly used development techniques such as dividing entire parcels into one and two acre lots.

Address increased utilization of incentive-based zoning and overlay zoning in municipal ordinances.

- H. Provide a toolbox to municipalities which is a compilation of sample ordinance provisions, design guidelines, development techniques, and other information useful in managing growth which can serve as guidelines for updating municipal land use regulations and review procedures and initiating community enhancement programs.
- I. Explore what characteristics and elements constitute “Livable Communities” within Pike County, and work to incorporate those elements in municipal and multi-municipal planning efforts and ordinances. Work with developers to see that those elements are incorporated into the plans which they prepare.

Defining these elements includes addressing what are the defining characteristics and architecture of existing communities in Pike County, what make them special and unique, what elements create a sense of place for Pike County residents, and how Pike County can remain different from every other place in America. To say that there is a sense of place is to say that there is a location which is distinctive, to which people attach meaning, where there is a sense of a physically defined area, and where past and future experiences can be shared with other people.

Examples of elements of livable communities to address include:

1. Methods of controlling the safety and esthetic impacts of automobiles. Ways of doing this include providing residents a choice of mobility, such as using bicycles and walking; use of alleys; providing sidewalks and/or walking paths; incorporating traffic calming techniques; and reducing curb cuts through sidewalks.
 2. Provision for interconnected, multi-purpose streets. This allows use of streets for vehicular travel, parking, and walking on safe, protected walkways. Alternative routes to destinations are provided and traffic dispersed. Street trees are provided. Collector streets are placed at the periphery of neighborhoods.
 3. Provision for community gathering places and settings for public, market, or institutional uses, such as greens and squares.
 4. Provision for lot increments to allow a variety of lot sizes.
 5. Consideration of traditional setback and lot size to dwelling footprint ratios which allow greater utilization of developed land.
 6. Provision for mixed uses and range of housing opportunities in terms of type, cost, and type of household targeted. Appropriate uses might include convenience and neighborhood service businesses and civic and community functions.
 7. Physical and visual access to and incorporation of natural resources.
 8. Provision of useful open space which is safe, comfortable, and linked to other uses.
 9. Incorporation of prominent buildings such as schools, civic buildings, and places of worship which serve as community activity and cultural centers.
 10. Architectural elements and appearance which complement the existing built environment.
 11. Preservation of important character-defining historic, architectural, and landscape features. New development should fit into its environment rather than destroy and/or redefine it.
 12. Connections between private living spaces and public spaces, such as porches and pathways.
- J. Explore what elements and characteristics constitute “Rural Character” within the County, and protect those elements through use of multi-municipal open space and comprehensive plans and municipal ordinances. These elements include such features as:
 1. Forestland
 2. Water resources
 3. Agricultural land

4. Ridgelines
5. Hamlets
6. Scenic roads and views
7. Existing open spaces
8. Existing recreational areas
9. Historic and characteristic buildings

K. Explore those elements which create memorable experiences for those who live, work, and visit within Pike County, and protect and enhance those elements through the use of multi-municipal open space and comprehensive plans and municipal ordinances.

VI. ACTIONS TO ENCOURAGE MULTIMUNICIPAL COMPREHENSIVE PLANNING TO MANAGE GROWTH IN THE COUNTY

Administrative and Planning Actions

- A. Provide organizational and technical assistance in the preparation of multi-municipal comprehensive plans.

Municipal Planning Actions

- B. Encourage multi-municipal plans to consider the following planning approaches:
1. Direct development to designated and future growth areas consistent with growth areas identified in the County Comprehensive Plan.
 2. Provide for the accommodation of housing in different dwelling types and at appropriate densities for households from all economic and demographic groups within the Region.
 3. Where deemed appropriate by the municipalities, provide for mixed use development in order to enhance the vitality and usage of developed areas, reduce vehicular trips, facilitate multi-modal access for those who are less mobile, and provide nuclei of public facilities and activity centers near residences.

For example, mixed use could occur within existing centers to reflect existing development patterns, such as the case of the Boroughs, villages and hamlets; within new developments, such as commercial parks, planned residential developments, and new town centers; to provide for commercial facilities providing convenience and/or day to day needs within large residential developments; within buildings, such as residences above commercial uses within the Boroughs, villages, and new commercial development; and in major corridors such as Route 6/209, Route 739, and Route 507.

4. Provide for a balance of residential and non-residential land uses within Regions to meet the needs of existing and future residents.
5. Provide for consistent and compatible land use planning and zoning along municipal boundaries.
6. Maintain the rural character of those areas which still have that character.
7. Allocate land uses over the entire Region in an appropriate manner, rather than on a municipal basis.
8. Emphasize open space conservation during residential development.
9. Promote infill and revitalization within existing centers and nearby areas in conformity with the general character of the existing centers.
10. Minimize the conflict between non-residential and residential uses and attain compatibility between present and future land uses.
11. Identify appropriate future character for designated commercial and industrial areas.
12. Encourage development with pedestrian scale.
13. Encourage attractive streetscapes.
14. Respect and protect existing living environments in the community.

15. Require well-designed developments in scale and character of the setting.
16. Maintain connections to natural features and corridors and scenic vistas.
17. Discourage development in areas subject to natural and infrastructure constraints.
18. Identify and plan for primary development areas where there is available or planned infrastructure capacity.
19. Tie the type and intensity of development to the adequate provisions of transportation, water, sewerage, drainage, parks and recreation, and community facilities by developers.
20. Work to establish consistent policies on use of impact fees within the County's municipalities.
 1. Assist municipalities in the preparation of Regional Open Space and Recreation Plans so recreation impact fees can be changed in lieu of required dedication.
 2. Review the appropriateness of using Transportation Impact Fees with municipalities, the process to go through, costs involved, and the opportunity to undertake joint transportation impact fees across municipal boundaries pursuant to multi-municipal comprehensive plans.
21. Identify areas which should be protected from development or receive only very low density development because of natural constraints or assets, and/or lack of supporting facilities and services.
22. Identify significant natural resource lands and stream corridors for perpetual open space conservation.
23. Achieve a balance between the need for economic growth and the need for environmental conservation and preservation.
24. Conduct municipal level analyses of developable vacant land and housing capacity.
25. Encourage location of community facilities within growth areas.
26. Examine methods of building flexibility into parking requirements, such as shared parking facilities and reserve parking requirements, to minimize impervious surfaces.

VII. ACTIONS TO ADDRESS IMPACTS OF TREMENDOUS GROWTH

A. Organize seminars where representatives from municipalities within and outside the County can share their experiences in implementing techniques to address development impacts, such as use of impact fees; negotiated contributions and improvements; negotiated design enhancements; and ordinance standards for on-site improvements and design enhancement.

B. Work together as a County, municipalities, school districts and state legislators, to attain a more favorable tax structure and examine alternatives to reliance on property taxes to fund education.

Work together to secure legislation that will authorize additional impact fees for municipalities and facilitate use of existing authorized fees.

Work together to secure revisions in funding allocation formulas and programs to address the impacts of growth in the rapidly growing regions of Pennsylvania, including restoring population adjustments to state funding formulas.

Work with PennDOT Central Office to increase allocations of PennDOT county maintenance funding to address increased vehicle volumes in rapidly growing areas.

C. Work to establish consistent policies on use of impact fees within the County.

1. Assist municipalities in the preparation of Regional Open Space and Recreation Plans so recreation impact fees can be changed in lieu of required dedication.
2. Review the appropriateness of using Transportation Impact Fees with municipalities, the process to go through, costs involved, and the opportunity to undertake joint transportation impact fees across municipal boundaries pursuant to multi-municipal comprehensive plans.

D. Implement policies for economic development.

E. Encourage municipalities to prepare Official Maps, designating proposed public facilities, streets, and trails. Consider the need for preparation of a County official map after preparation of County-wide functional plans.

F. Encourage municipalities to consider Capital Improvements Programming, and assist in identifying funding sources for improvements.

G. Encourage municipalities to require developers to perform impact studies, including fiscal impact studies, prior to zoning changes and approval of development plans.

VIII. ACTIONS TO IMPROVE THE QUALITY OF DEVELOPMENT

Municipal Ordinance Actions

- A. Encourage municipalities to consider provisions in Subdivision and Land Development Ordinances requiring predesign meetings and joint site visits between planning commissions and developers prior to preparation and submission of subdivision and land development plans. These up-front discussions with developers will allow discussions regarding municipal expectations as to design quality, architecture, landscaping, signage, and required improvements/contributions.
- B. When municipalities have adopted streetscape plans, recommend requiring street furniture/pedestrian amenities as required improvements pursuant to those plans.
- C. Assist municipalities in assuring adequate improvement requirements and standards, design standards and performance standards are included in zoning and subdivision and land development ordinances. Provide model ordinance provisions for municipal consideration and provide technical and financial assistance in adopting such provisions.
- D. Encourage municipalities to adopt approaches in their zoning ordinances to obtain enhanced developed areas. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions. Examples of approaches which can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.
 1. Require buffers and/or performance and design standards where there will be potentially conflicting uses.
 2. Require impact statements (environmental, traffic, services, fiscal, etc.) with requested zoning amendments necessitating a zoning district change, to address the impacts of the requested amendment.
 3. Give emphasis to density bonuses for development served by public sewer and public water when they are available or planned.
 4. Require sufficiently large lots when on-lot sewage disposal will be used.
 5. In some zoning districts, such as neighborhood commercial and village zoning districts, consider if limits on building size will be appropriate to maintain existing character.
 6. In zoning districts for existing centers, consider emphasis on encouraging architecture consistent with existing community and/or architectural character.
Consideration should be given to meeting with architects in the County to see if it is possible to achieve a consensus on an architecture or architectures which are considered characteristic of Pike County.
 7. In some or all Commercial districts, typical “big box” architecture could be discouraged through architectural treatments of building facades.
 8. Consider corridor overlay zoning along major commercial roads, such as Route 6/209, Route 6, Route 739, and Route 507 to enhance the appearance of these corridors, enhance safety and traffic movements, and maintain economic viability. Such overlay zoning would address:
 - a. Coordinate landscaping, signage, lighting, street furniture, paving materials, design of site improvements, and building façade appearance throughout the road corridors
 - b. Increase pedestrian and vehicular connections to adjoining properties and within properties
 - c. Increase size and quantity of landscape material
 - d. Integrate historic resources into development
 - e. Provide site amenities
 - f. Renovate building facades
 - g. Minimize curb cuts and unrestricted access
 - h. Provide more attractive signage
 - i. Locate parking to the rear and side of buildings where appropriate and feasible

- j. Integrate architecture, landscaping and screening
 - k. Encourage pedestrian oriented design (e.g., sidewalks and benches)
 - l. Encourage pedestrian oriented spaces
 - m. Screen loading areas, outdoor storage and dumpsters
 - n. At the time it would be appropriate, provide safe bus stops with shelters, with pedestrian connections to buildings
9. Encourage areas for economic development to be developed as coordinated, attractive commercial and business areas and discourage additional strip commercial development.
10. Monitor the appropriateness of allowing Transit-Oriented Development (TOD) near future transit hubs and stations. TOD typically provides for a mixture of higher density residential development with commercial and office development.
11. Consider Traditional Neighborhood Development (Neotraditional Development), Village Extension, and Village Design within and near the Boroughs, Villages, and Hamlets. These methods promote the following concepts:
- a. Creation of a sense of community
 - b. Pedestrian oriented design
 - c. Central community facilities
 - d. Public spaces
 - e. Shallow setbacks
 - f. Street trees
 - g. Alleys where appropriate
 - h. Compact development
 - i. Interconnected streets, closer to a grid pattern
 - j. Historic development patterns of towns
12. Identify provisions to protect the character of the Boroughs, villages, and hamlets and have streets, buildings, and public spaces integrated to create a sense of place with pedestrian scale. Consideration can be given to promoting or adopting the following as standards:
- a. Allow only appropriate uses in scale, and compatible with, existing appropriate uses. Discourage uses which would transform the character of the area.
 - b. Utilize coverage, density, intensity, and yard bonuses for architectural treatments, building design, amenities, street furniture, open spaces and parking designs consistent with the character of the area.
 - c. Require pedestrian amenities as required improvements of land developers.
 - d. Construct parking areas to the rear and side of buildings and establish standards for design, buffering and landscaping of new parking facilities.
 - e. Require signage appropriate to the community.
 - f. Establish appropriate standards for driveway design and access to streets to provide for appropriate access management.
 - g. Minimize use of drive-through facilities.
 - h. Encourage new development to be compatible with, and integrated into, existing attractive streetscapes when appropriate, with consideration of:
 - Maintaining appropriate siting patterns including setbacks on lots
 - Respecting the massing (volume created by sections of the building) within the neighborhood
 - Using materials of similar appearance and texture to those on existing attractive buildings
 - Using similar architectural details as other buildings in the neighborhood

- Maintaining the scale and proportion of buildings near new structures. Scale deals with the relationship of each building to other buildings in the area; and, proportion deals with the relationship of the height to the width of a building and with the relationship of each part to the whole
 - Use of similar roof shapes
 - Maintaining similar footprints of buildings and rooflines (matching façade masses with existing buildings)
 - Using similar building heights
 - Having store fronts of commercial buildings compatible with existing buildings
13. In the Boroughs, villages, and hamlets, regulate conversions of buildings, addressing:
- Locations where permitted
 - How use is treated procedurally
 - What type of building can be converted
 - Density of converted units
 - Lot size for converted building
 - Impervious surface/open space requirements
 - Units per structure allowed
 - Structure size requirements
 - Dwelling unit size minimum
 - Neighborhood compatibility standards
 - Parking requirements to assure adequacy
 - Screening of parking and common areas
 - Structural revisions limits on buildings

IX. ACTIONS TO IMPROVE THE CIRCULATION SYSTEM

Administrative and Planning Actions

- A. Work with the Pike County Road Task Force, municipalities, Legislators, and PennDOT to list needed transportation improvements on the 12-year transportation program and accomplish construction of those improvements on the list. Work with PennDOT to support this Comprehensive Plan.

Improvements already programmed include:

- Reconstruction of Route 209 through the Delaware Water Gap National Recreation Area from Milford to Bushkill
- Bicycle PA Route Y/1 Corridor Improvements
- Milford Streetscape Improvements
- Route 434 Relocation
- Route 590 Curve at Woodloch Pines Safety Improvement
- Route 739 Curve Highway Restoration
- Route 6/209 Improvements
- Continued State Route 2001 Improvements
- I-84 Improvements
- Route 402 Bridge over I-84 Restoration
- S.R. 1005 Shohola Bridge Restoration
- S.R. 1011 Pond Eddy Crossing Bridge Replacement
- S.R. 2006 Log Tavern Road Bridge Replacement
- Route 434 Balliard Creek Bridge (Greeley) Replacement
- S.R. 2007 Mink Pond Road Bridge Replacement
- S.R. 4003 Rattlesnake Creek Bridge Replacement
- Aumuller Bridge No. 24 Replacement
- Matamoras Streetscape enhancements

Additional potential improvements include:

- Additional acceleration and deceleration lanes and intersection geometry at intersections along major road corridors, such as Route 6, to facilitate turning movements and traffic flow
- Facilitating turning movements at the Broad Street-Harford Street intersection in Milford
- Enhancements to the Route 739 and 507 corridors
- Provision of closed loop traffic signalization systems
- Origin-destination study of drivers in the Milford area
- Widening of Route 6/209

- B. Work with PennDOT to assure adequate maintenance of roads which receive substantial volumes of truck and school bus traffic in addition to automobile traffic.
- C. Work with PennDOT to establish appropriate speed limits, reducing them as necessary, in existing developed areas.
- D. Develop access management plans in cooperation with PennDOT to address access to major roads and access design standards. Encourage cooperative efforts of landowners to manage and share access.
- E. Work with PennDOT to keep traffic signal timing current and optimized.
- F. Work to accomplish implementation of the recommendations of the Congested Corridor Improvement Project Study of Route 6/209.

- G. Identify additional necessary improvements to road corridors in growth areas, including Route 6/209, Route 6, Route 739, Route 507, Route 2001, Route 390, Bushkill Road, Log Tavern Road, and Silver Lake Road; to protect and increase road capacities and address signage, access and retention of open space.
- H. Enhance a multi-modal circulation system consisting of road, transit, pedestrian, and bicycle systems.
1. Encourage plans for greenways and riparian buffers along the streams pursuant to Regional Open Space and Recreation and Greenways Plans.
 2. Encourage pedestrian pathway improvement programs to enhance walkability in centers, such as completion of gaps in and extensions of the systems to provide improved access to schools, day-to-day shopping facilities, community facilities, future transit facilities, and employment opportunities. ADA requirements should be complied with. Pedestrian crossings at street intersections can be facilitated through consideration of crosswalks, stop signs, limitation of cartway radii, discouraging curb cuts over sidewalks, and use of pedestrian buttons and pedestrian cycles at signalized intersections. PennDOT involvement for safety at State roads will be important. Pedestrian circulation can be enhanced through amenities such as benches; maintenance and improvement of existing pathways; and adequate buffering and setbacks from roads.
- Encourage provision of pedestrian circulation systems within private communities.
3. Work to connect transportation modes to one another.
 - a. As the County continues to grow, monitor the need for park and ride facilities in the County, such as the Route 739 park and ride. Consider whether informal park and ride sites should be formalized. Consider working with community associations and developers to have park and ride facilities constructed at entrances to developments along major roads, or reservation made for such facilities where connections could eventually be made to a transit system.
 - b. As the County continues to grow, monitor the feasibility for a County transit authority. In the interim, monitor the feasibility of expanding upon the system serving seniors in the County through the Pike County Area Agency on Aging or establishing service from other transit entities. Monitor needs, ranging from limited circulator systems to more substantial fixed-route systems with full-size vehicles. Work with schools, community organizations, business and other groups interested in increasing the mobility of the elderly, physically impaired, employees and those without auto, and providing an alternative to automobile use. Initial potential service areas could be from Milford to Matamoras and Port Jervis, with connections to interstate rail and bus facilities; to the County Business Park and Administration Center; and a loop of growth areas including Routes 6, 434, 739, and SR 2001.

As access to multi-modal hubs is increased, monitor the needs for additional park and ride facilities at those hubs. Encourage mixed use activity centers near auto/bus/bike/pedestrian hubs and park/bike/walk and ride facilities when appropriate and physically feasible, where patrons can accomplish more than one task.

Monitor the feasibility of creating Transit Revitalization Investment Districts (TRID's) pursuant to authorization in the Municipalities Planning Code.
- I. Encourage landowners to cooperate with PennDOT and the municipalities in the redesign of existing strip development areas to manage access and improve streetscapes.

- J. Monitor the need for Transportation Development Districts within the Route 6/209, Route 6, Route 739, and Route 507 Corridors.

The Transportation Partnership Act (Act 47 of 1985, as amended) allows municipalities to create Transportation Development Districts to assist in the financing of transportation facilities and services. Roads, railroads, and public transit are eligible. If municipalities propose a district, property owners who represent more than a 50 percent of the assessed valuation within a proposed district must be in favor of the district. The creation of the Transportation Development District allows municipalities to impose assessments upon benefited properties within that District to construct transportation improvements.

- K. Continue to work with transportation organizations and agencies providing services to seniors to facilitate their mobility by determining desired destinations and means of providing access to those destinations.
- L. Encourage municipalities to prepare municipal transportation plans, Official Maps, and capital improvement plans as resources permit, and provide assistance for multi-municipal transportation planning efforts within multi-municipal comprehensive plans.

As part of those plans, continue monitoring efforts in the County, maintain information on traffic counts, carrying capacity, and level of service at points of interest.

- M. Monitor the need for, and work to institute, appropriate traffic calming techniques in the Boroughs, villages, hamlets, and residential neighborhoods where excessive traffic volumes and/or speeds affect quality of life. Traffic calming techniques are discussed in Appendix 11.
- N. Encourage municipalities to consider PennDOT Transportation Enhancement, Home Town Streets, and Safe Routes to School programs.
- O. Work with PennDOT and Milford and Matamoras-area municipalities to address traffic congestion within the Boroughs during peak hour periods and seasonal variations.
- P. Address how to balance the scenic character of County roads with future improvements to accommodate increased vehicular traffic including alternative modes of travel.
- Q. Establish adequate construction cross-sections for new and rebuilt roads that will stand up under construction and delivery equipment loads.
- R. Encourage PennDOT to better maintain roads in poor weather conditions.
- S. As growth continues in the County, review with PennDOT and municipalities the need for new and/or improved access points to I84.

Municipal Ordinance Actions

- T. Encourage municipalities to adopt provisions in their zoning ordinances and subdivision and land development ordinances to manage access to roads. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions. Examples of provisions which can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.

1. Establish access location standards
2. Establish access point separation requirements
3. Require access to streets of lower functional classification
4. Require internal road systems
5. Require coordinated/shared ingress and egress
6. Require interconnection of properties – access, parking, loading
7. Establish separations from intersections
8. Require coordinated traffic movements
9. Require acceleration and deceleration lanes where appropriate
10. Require left and right turn lanes where appropriate
11. Establish design standards for intersections, driveways, internal circulation, and parking lot design
12. Minimize entrances to roads
13. Prohibit inappropriate turning movements
14. Require signalization of high volume driveways

While particularly crucial along the Route 6/209, Route 6, Route 739, and Route 507 corridors, access should be managed along all roads within the Region.

- U. Encourage municipalities to adopt provisions in their subdivision and land development ordinances to require appropriate studies and improvements of developers. Provide model ordinance provisions for municipal consideration and provide technical assistance to municipalities in adopting such provisions. Examples of provisions that can be adopted follow. Each municipality would have to review current regulations and the appropriateness of additional regulations.

1. Establish appropriate road design standards for each functional classification of road. Safe, buffered, and sufficiently set back bike and pedestrian lanes can be included in the cross-sections with consideration of the Pennsylvania Statewide Bicycle and Pedestrian Master Plan and Guide for the Development of Bicycle Facilities by American Association of State Highway and Transportation Officials (AASHTO). Bike and pedestrian lanes can be required on those roads determined to be appropriate by the municipality.
2. Require traffic impact studies for proposed developments. Such studies would require analysis of existing circulation conditions, the impact of proposed development and resulting circulation conditions and the need for traffic improvements to adequately support the development.
3. Establish appropriate standards for driveway design and access to streets for access management. Coordinate with zoning ordinance design standards and access management provisions. Plans should be reviewed for access management concerns.
4. Require developers to recognize existing trails and to provide for new trails. Standards for trails can be included in the Ordinances. Sufficient rights-of-way and easements can be required during the review process. Require developers to provide pedestrian paths and sidewalks.
5. Secure appropriate ultimate rights-of-way along roads.
6. Require necessary roadway improvements along the frontage of developments

X. ACTIONS TO PROVIDE COMMUNITY FACILITIES AND SERVICES

A. Increase educational and cultural opportunities.

1. Determine the appropriate means to increase higher education opportunities within the County at various milestones of County growth – whether through a branch of an existing community college or eventual creation of a new College.
2. Encourage higher education programs which identify with the natural resources of the County, are a community resource, and an element in economic development. Examples would include a community college with a relationship with the Yale School of Forestry or similar school or with an environmentally-based curriculum.
Further explore the concept of an Eco-Science Center in the County.
3. Work with Pike County Child Care Information Services to review needs of day care services within the County at appropriate locations, and encourage municipalities to consider permitting such facilities at or near employment centers.
Consider establishment of a head start pre-school program.
4. Encourage and support the enhancement of the Pike County Public Library system with the development of a strong main library and vibrant local branches.
5. Encourage location of local radio and TV sources of news within the County.
6. Encourage a dialog between the school districts and municipalities regarding development activities, school facilities needs, location of school facilities, and school bus routes. Encourage cooperation with the school districts to assure availability of school district facilities to the County's residents.
Encourage location of school facilities within growth areas and existing centers to provide proximity to residences, facilitate access, and enhance opportunities to function as community activity centers.

B. Increase recreational opportunities.

1. Investigate opportunities for municipalities to develop recreational facilities on National Park Service land and other publicly owned lands.
2. Encourage increased accessibility of State Parks, Gamelands, and Forests through provision of readily accessible areas for parking and trails.
3. Establish a mechanism for the County to provide technical assistance to municipalities in organizing and securing grants for open space, recreation, and greenways planning and development of facilities pursuant to those plans.
4. Assist municipalities in determining what facilities are needed to best serve youth within the County in their Open Space and Recreation Planning processes.
5. Establish developer responsibilities to provide community facilities and incorporate responsibilities into comprehensive plans and land use regulations.

C. Identify steps to foster an increased sense of County identity.

1. Services now provided outside the County, services shared with other entities, or services provided by organizations from outside the County, should be annually analyzed to determine if services should be provided by an in-County agency.
2. Encourage the U.S. Postal Service to revise zip codes and addressing systems within the County so people living within Pike County have zip codes and place addresses which are inclusive of Pike County.

3. Maintain a dialog in the County as to what should be the expected level of services to residents of the County, with consideration of the existing character of the County, maintaining County identity, affordability, and what can, is and should be provided outside the County.
4. Continue development of packets for distribution to new residents, realtors, and developers within the County to inform them of issues facing the County, resources within the County, goals for the future of the County, and how they can help maintain the quality of life in Pike County which brought people to the County.
5. Monitor the impacts of gambling in adjoining counties on Pike County.
6. Encourage municipalities and community associations to promote involvement of new residents in community programs and bring together citizens, the business community, and the school district to plan and organize community-wide activities, events, and programs to foster community spirit, economic development, and community attractiveness.

D. Improve health care and human services opportunities for County residents.

1. Periodically monitor the feasibility of supporting a hospital within the County as the County grows. In the interim, encourage practitioners providing additional or expanded services meeting unmet needs to locate at appropriate locations within the County. In particular, a centrally located facility which provides coordinated access to specialty outpatient services and urgent care may represent an unmet need which could possibly be met through a centrally located shared site which maximizes individual health systems resources.
2. Continue to monitor the needs of residents as identified by County departments and visioning efforts and address those needs. Develop a human services plan which identifies needs, providers, priorities for programs, and funding sources.
3. Encourage volunteerism for community organizations and identify means of increasing volunteerism.
4. Identify additional funding sources for volunteer organizations and ways of providing support to their operations.
5. Continue to provide information and assistance to residents in directing them to available services.
6. Continue to address the needs of seniors within the County, particularly housing needs and mobility needs.

E. Enhance the provision of emergency services within the County.

1. Analyze police/fire/emergency protocols within the County to identify which organization should be contacted for each type of emergency.
Analyze coverage based upon need for asset protection, response time, and population distribution.
2. Continue efforts to coordinate efforts of volunteer fire companies and emergency medical services and determine the best approach to organize and provide fire and emergency services within the County.
3. Work to improve Advanced Life Support planning and funding within the County.
Identify methods of encouraging volunteerism, funding training, and funding operations.
4. Continue to determine the most appropriate methods of providing enhanced law enforcement service within the County and coordinated enforcement among public and private law enforcement organizations through discussions of representatives of State, County, and municipal government and private owners associations.
5. Involve fire company, emergency services and school district personnel in review of subdivision and land development plans, where appropriate.
As developments are built, require the developer to provide for fire protection, addressing water supply, distribution, and storage, fire hydrants, building protection, and access of fire vehicles.

The design of developments should address emergency access and egress, including multiple access/egress points and evacuation routes. Bridges and roads should have adequate design and construction for emergency vehicles.

6. Support efforts to expand the supply, distribution, and training in use of defibrillators in the County, as well as awareness of their locations.
7. Support the continued need for appropriate training facilities for the County's emergency services volunteers.

F. Facilitate efficiency in provision of government services.

1. Optimize and improve the abilities of the County in obtaining grants to offset rising costs of needed services, studies, infrastructure, equipment, etc.
2. Prepare a master facility plan for new and/or expansion and renovation of County facilities as necessary for providing projected County services for appropriate space utilization.
3. Continue to expand the County GIS system and expand its usage in planning, conservation, taxing, assessment, emergency 911, and core management functions.
4. Review past experience of the Council of Governments (COG), the feasibility of reorganizing it, and the support needed to make it effective.
5. Review recycling/composting opportunities in the County.
6. Expand use of the concept of municipal cleanup days throughout the County.
7. Work with municipalities to identify methods and financing sources to improve ordinance and code enforcement.
8. Stress the needs and importance of the PUC or other appropriate agency to develop a system of public notification of changes to public utilities and services.
9. Discuss with PaDEP and other state agencies the need to establish a program to assist landowners who need assistance when well capacity is diminished.
10. Facilitate access to community facilities through the transportation system.
11. Continue and expand cooperation and dialog among the Townships and the Boroughs and community entities such as the fire companies, emergency services, authorities, and the School Districts on provision and sharing of services, equipment, facilities and programs on a regional basis; comprehensive planning; recreation planning; utility planning; transportation planning; implementation of this plan; code enforcement; emergency services planning; and police protection.
12. Encourage existing developments to address existing environmental quality problems.
13. Identify opportunities for training for municipal officials and staff and opportunities for technological enhancements in municipal government. Identify means in which DCED can provide assistance.
14. Review current recycling practices in the County and determine how recycling can be enhanced.
15. Establish a recycling transfer station along Route 739 on County property, or other viable location, to save costs incurred when transporting municipal recycling center loads to landfills outside the County.

XI. ACTIONS TO ENCOURAGE ADDITIONAL ECONOMIC DEVELOPMENT

- A. Prepare a strategic plan for economic development within the County.
Determine the most appropriate marketing approach for the County.
Work to create family sustaining jobs in the County through mechanisms identified below.
- B. Work to sustain a diversified environmentally friendly economy which is not dependent on one business or type of business. Promote business development of environmentally responsible and focused companies.
Identify retail and service needs of residents and encourage location of these businesses in the County.
Work to provide a variety of business environments within the County, including planned business centers; vital downtowns; coordinated, managed corridors; individual sites for small businesses; rental flex space; multiple-tenant buildings; sites near identified I-84 interchanges; and home-based businesses, appropriately located in accordance with municipal zoning ordinances.
- C. Analyze the skills of the County workforce, and identify and work to establish necessary mechanisms to train and educate the County workforce.
- D. Facilitate access of the workforce to jobs within the County.

Identify potential business development areas within the County and coordinate transportation and utility planning and programmed road improvements to provide adequate access and services to those locations.
- E. Work to provide “shovel-ready” sites for businesses in the County and facilitate the development of sites in the County Business Park.
- F. Inventory the adequacy and accessibility of infrastructure and utilities to support business development and work to meet identified needs. Major elements include sewer, water, roads, natural gas, electricity, broadband, and wireless.
- G. Complete a feasibility study for a Pike County Business Incubator.
- H. Continue to periodically survey the needs of existing businesses within the County with regard to employee training, financing, recruitment, and marketing, and identify programs to meet those needs.

Maintain a dialog with businesses in the community to determine their needs and concerns in order to retain existing businesses and assure their experience in the County is positive.
- I. Work with local financial institutions to provide loan programs for local businesses.

Consider development of a locally controlled micro revolving loan fund.
- J. Identify opportunities to participate in the recently approved Pennsylvania Economic Stimulus Package Programs. The Package includes:
 - . Business in our Sites
 - . Building PA
 - . New Pennsylvania Venture Guarantee Program
 - . New Pennsylvania Venture Capital Investment Program
 - . First Industries Fund
 - . Core Industries
 - . Second Stage Loan Program
 - . TIF Guarantee Program
 - . Infrastructure and Facilities Improvement Program

- . Keystone Innovation Zones
- . Section 108 Loan Pool
- . Elm Street
- . Penn Works

The most recent elements of the package are:

- Business in Our Sites will offer flexible loans and grants for local municipalities and their economic development partners to create future business growth and attract opportunities through the acquisition and preparation of key sites for development. The program would provide communities with grants and loans of up to \$250,000 to pay for the reclamation of industrial land.
- Building PA will provide funding for the development of real estate assets within the Commonwealth. Funds will be loaned to private investors and foundations looking to match funds to facilitate projects within the Commonwealth.
- New PA Venture Guarantee Program will allow the Commonwealth to more actively partner with the investment community by structuring a program that provides guarantees to venture capital companies interested in Pennsylvania businesses. These guarantees will provide increased capital for Pennsylvania businesses to grow and create jobs.
- New PA Venture Capital Investment Program will provide capital to Pennsylvania-focused venture capital companies that agree to match those funds and make investments in Pennsylvania businesses.
- First Industries Fund. First Industries will provide grants, low-interest loan financing and loan guarantees for agriculture and tourism.
- 2nd Stage Loan Program will provide guarantees for bank loans to second stage manufacturers and technology companies for working capital and other financing needs. Targeted toward manufacturing, advanced technology and biotechnology, these funds will support growth in these sectors.
- Tax Increment Financing (TIF) Guarantee Program. Through TIF, communities can borrow funds for projects that will develop blighted areas and then repay those borrowed monies through the new tax revenues that will be generated as a result of the development. A combination of technical assistance and loan guarantee assistance is proposed to encourage small communities to utilize this program.
- Infrastructure & Facilities Improvement Program is a multi-year grant program that will provide grants to certain issuers of debt in order to assist with the payment of debt service.
- Penn Works will help fund grants and loans for sewer and water projects to spur economic development. *The Pennsylvania Department of Community and Economic Development is the primary contact for most of these programs.*

- K. Encourage retail services and public and community facilities to locate within growth areas to maximize accessibility to residential areas and the circulation system.
- L. Encourage municipalities to zone appropriate areas for economic development pursuant to multi-municipal Future Land Use Plans and identified targeted business types.

Encourage requirements that new development to be designed and constructed to meet environmental performance standards, eliminate adverse impacts on adjacent land uses, and minimize highway access safety hazards.

Particular areas to consider include:

- Portions of the Route 6/209 infill/growth corridor between Matamoras and Milford.
- Portions of the growth areas designated along Route 6 west of Milford.
- Growth area along Route 390 north of I-84.
- Growth area at intersection of Route 6 and Route 402.
- Portions of the Route 507 infill/growth corridor.
- Portions of the SR 2001 –Bushkill Road growth area.
- Portions of the growth area along Route 739 south of Lords Valley.

- M. Encourage appropriate adaptive re-use of vacant and underutilized commercial buildings and sites owned and/or identified by PIDCO.

Inform Pike IDA of areas and buildings zoned and available for commercial and industrial development in the County.
- N. Identify an approach to retaining young people within the County after completion of high school, including providing education, training, job, housing, and social and recreational opportunities.

Encourage expansion of housing and health care choices to provide a continuum of opportunities throughout a person's lifetime, including active retirement communities with graduated nursing care.
- O. Conduct a barrier analysis to economic growth within the County.
- P. If Transit Revitalization Investment Districts (TRID's) are established in the County in the future, determine to what extent they will be used to promote economic development.
- Q. Support revitalization efforts in Matamoras and Milford.
- R. Study to what extent sustainable forestry and wood products businesses should be or should not be a focus of economic development in the County, in the context of expressed concerns of County residents in past surveys.
- S. Continue and engage partnerships for economic development, including marketing. Partners include SBDC at Scranton, NEPA, Penns Northeast, and Small Business Administration (SBA).

Determine if joint marketing of I-84 business parks (Pike, Wayne and Orange Counties) would be appropriate.

Promote peer to peer marketing, such as current residents to businesses they work for, hunting and fishing club members to businesses they work for, existing businesses to businesses, and realtors and bankers to others in their professions.
- T. Maintain a Business Resource Library.
- U. Encourage further development and expansion of higher educational facilities in the County and use as an economic and community development tool. Determine the roles of Northampton Community College and the Yale School of Forestry.
- V. Build upon Delaware Water Trail development and the existing river trip industry to enhance landings and support facilities at the communities along the Delaware River; relate and tie those landings to other destinations and attractions within the communities; and use this as an economic development tool for the communities.

XII. ACTIONS TO RETAIN TOURISM AS A MAJOR COMPONENT OF ECONOMIC DEVELOPMENT

A. Promote sustainable ecotourism within the County

1. Inventory natural, historic, cultural, archeological, recreational, and architectural resources, including boating, hunting and fishing environments and wildlife habitats
2. Promote recognition of Pike County's natural resources.
3. Develop programs to view wildlife and understand their habitats.
4. Develop a system of guidebooks and easy to use maps for leisure users that describe natural, recreational and cultural features along specific routes.
5. Consider the merits of promoting access to areas off I84 through high quality gateway sites, information centers, and appropriate signage.
6. Support directives of the Scenic Rural Character Preservation Bond Committee to balance Economic Development and Land Preservation.
7. Pike County's tourism industry is dependent on its scenic ridge lines and as a home of conservation thought (Grey Towers) and Environmental Education (PEEC).
8. Review suggestions from various groups to assess the quality and quantity of off-season travelers to the County.
9. Protect identified natural, historic, recreational, cultural, landscape, archeological and architectural resources and their settings, including hunting and fishing environments and wildlife habitats.
10. Appropriate use of Hotel Tax Revenues to support and retain tourism as Pike County's major component of economic development.

B. Consider the creation of a Heritage Park Region encompassing Pike County and conduct a Heritage Area feasibility study.

Clearly identify the cultural heritage which gives the County and other potential included areas regional distinctiveness, protect that heritage, and limit inappropriate intrusions into the natural and built environment.

C. Identify and support the most appropriate marketing approach for the County, and expand tourism marketing.

Define goals for tourism within the County, develop a marketing plan appropriate to Pike County, and target groups to be encourage to visit, and perhaps locate, within the County.

Work with the Delaware Water Gap National Recreation Area and the Upper Delaware Council to promote tourism.

Develop a series of itineraries based on a variety of interests.

Maintain a Pike County calendar of events.

D. Identify and map existing trails and bikeways in the County and expand upon the existing system.

As road corridors in the County are enhanced, where appropriate include necessary improvements to facilitate use of rights-of-way for walking, jogging, and biking.

Investigate opportunities for rails to trails facilities along the railroad line within the northern portion of the County.

Work to promote the Lackawaxen River Corridor/Greenway from Hawley to Lackawaxen, consisting of the Lackawaxen River, Towpath Road, and Stourbridge Line Railroad.

Further refine and implement the Conceptual Greenways plan prepared as part of this Plan with the Pike County Open Space, Greenways, and Recreation Plan and other related plans

Plan for connections to the McDade Trail to accomplish an easily accessible and usable trail along the entire length of the Delaware River within the County. Plan for connections of the trail system into settlements such as Milford, Matamoras, Mill Rift, Shohola, and Lackawaxen.

Build upon regional and state promotion efforts, such as the Pennsylvania Route 6 Association campaign, "Take the High Road!", including the state bicycle route over its entire length.

- E. Work to establish a uniform system of wayfinding signs to enable people to readily find attractions within the County.
- F. Maintain a significant presence in the I-84 Visitors Center and maintain information centers at least at the western and eastern gateways to the County.
- G. Support revitalization efforts in the County's centers and corridors.
- H. Promote water-related tourism, including:
 - provide additional public access to waterways;
 - create a linked water trail system;
 - increase the scope and frequency of stream and river trash collection;
 - maintain or improve recreational water quality and avoid impacts from recreational use;
 - improve the connections of communities to their waterways.
- I. Continue to support the emergence of Arts/Culture as an important element of tourism in Pike County.

XIII. ACTIONS TO ADDRESS EFFORTS OF COMMUNITY ASSOCIATIONS TO SERVE RESIDENTS

- A. Facilitate discussions to address what can be done to support efforts of private residential community associations in providing services, facilities, and infrastructure to residents; how such associations could be organized and managed; how the associations can more effectively accomplish their responsibilities; how future problems can be minimized through effective review and development processes, requirements, and standards for developers, and actions and contributions of developers; and how public safety concerns can be addressed within and outside private communities.
- B. Provide a toolbox to community associations to be used as guidelines for improving infill development and requiring and retrofitting adequate infrastructure within their developments.

Work with the Associations to identify methods of assuring infill development is properly reviewed, appropriate storm water management and erosion controls are implemented, and natural drainage patterns and natural resources recognized.

Identify mechanisms to assure appropriate infrastructure is in place prior to transfer of responsibilities from developers to community associations.

- C. Discuss approaches to dealing with individually-owned lots within developments which regularly appear on tax sale lists. Determine whether appropriate approaches are to incorporate lots into open space, encourage proper development, incorporate them into other lots, or a combination of these and other approaches.
- D. Discuss opportunities for retrofitting additional access, especially for emergency services, to private communities.
- E. The Pennsylvania State Game Commission should involve community associations in discussions on deer management.

XIV. ACTIONS TO ADDRESS HOUSING NEEDS OF COUNTY RESIDENTS

- A. Study and address concerns of individuals living and working or retired in Pike County are having increased difficulty finding suitable housing as housing costs rise within the County.
- B. As growth and need develops in the County, annually review Wayne County's administration of Pike's programs to determine whether a separate Pike County housing agency a separate Pike County Housing agency, such as a Housing Authority or Community Housing Development Organization (CHDO), 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.
- C. Work to secure participation of local banks in loan programs.
- D. Foster programs which encourage home renovation and rehabilitation.
- E. Foster programs which facilitate affordable senior and family housing.
- F. Encourage municipal zoning to allow a variety of housing types and densities at appropriate locations within the County, consistent with land use goals.
- G. Consider the use of designated Recorder of Deeds fees for increasing housing choices or programs for County residents.
- H. Foster programs which facilitate home ownership.

XV. ACTIONS TO ENHANCE THE INFRASTRUCTURE SYSTEMS TO SUPPORT RESOURCE PRESERVATION, GROWTH MANAGEMENT, APPROPRIATE ECONOMIC DEVELOPMENT, AND QUALITY OF LIFE ENHANCEMENT

Administrative and Planning Actions

- A. Coordinate municipal policies and plans on construction and extensions of public sewer and water facilities with this plan to assure consistency.
Alternative methods should be reviewed, and the highest levels of sewage treatment which are practical and economically feasible should be implemented, and consistent with the water quality designation of affected streams.
Within growth areas, identify, and consider acquisition of, appropriate lands which could be used for disposal of treated wastewater.
- B. Consider the establishment of programs for retrofitting existing stormwater collection, conveyance, and management systems.
- C. Evaluate retrofit opportunities for stormwater systems in established non-residential developments, facilities, and buildings.
- D. Plan for a system of greenways throughout the County.
- E. Work with the Pike County Road Task Force, municipalities and PennDOT to identify necessary transportation improvements in areas designated for growth, to place those improvements on the Twelve-year Road Program, and complete the improvements.
- F. Encourage utilization of state-approved new sewage disposal technologies within the County where appropriate.
- G. Work with municipalities to develop an approach to facilitate construction and/or extension of public sewer and water facilities as necessary within growth areas to serve existing and future needs and support higher densities and varieties in type of appropriate uses.
Work with PaDEP to explore the most appropriate methods to provide for sewage collection and treatment within growth areas and the County's watersheds.
Encourage the municipalities and authorities involved in the Milford to Matamoras corridor to work with PaDEP in arriving at the most appropriate method to expand public sewer and water service throughout the corridor.
Investigate options for financing extensions or development of public sewer and water systems. Identify opportunities to link utility system construction with economic development initiatives to increase funding options.
A Sewer and Water Task Force could review the recommendations of the Pike County Small Water Regionalization Study and Pike County Water Resources Plan (Water Supply Plan and Wellhead Protection Program). A Task Force could address issues such as expansion, interconnection and regionalization of systems and the role that municipal and private water systems should play in the County.
- H. Pursue funding for studies of, or additional PennDOT studies of, the major road corridors serving growth areas, to identify means of improving, managing, enhancing, and beautifying those corridors, including Route 6/209, Route 6, Route 507, Route 739, Route 390, SR 2001 (Milford Road), SR 2004 (Silver Lake Road) and Log Tavern Road.
- I. Encourage electric utilities to enhance plans for reliable service within the County.

- J. Continue to encourage improvement of telecommunications facilities within the County. While facilitating telecommunications needs of municipal officials and residents, this will also support business development, telecommuting, and emergency services.
Establish a model cell tower ordinance for use by County municipalities.
- K. Secure additional PennDOT aid in facilitating vehicular movement throughout the County during periods of impaired driving conditions.
Work with PennDOT to secure recognition of the special transportation needs within the County because of rapid growth, typical winter conditions, and the large number of long-distance commuters.
- L. Monitor designation of responsibility for preparing emergency action plans for dams in the County, which need them, and monitoring needs for dam repairs.
- M. Consider the creation of a County-wide Hazard Mitigation Plan, or encourage municipalities to pursue a municipal plan, to address all hazards that historically impacted or may impact the County and residents in the future.

Municipal Ordinance Actions

- N. Within each Act 167 Stormwater Management Designated Watershed, develop and implement a uniform stormwater management ordinance that is consistent with PaDEP recommendations for the control of peak flow and the reduction of pollutants. Implement municipal ordinances which not only address stormwater flows and flooding related problems, but also address non-point source pollutant loading and manage total suspended solids.
Coordinate use of stormwater management ordinances and zoning and subdivision and land development ordinances to address conservation design subdivisions.
 - 1. Minimize the volume of stormwater runoff generated and control peak flows.
 - 2. Protect surface and groundwater quality and reduce sediments, nutrients, and chemicals.
 - 3. Protect existing recharge and require stormwater recharge through infiltration of rainfall and stormwater.
 - 4. Minimize land disturbance and review municipal requirements for impervious surfaces.
 - 5. Minimize tree removal.
 - 6. Minimize impervious surfaces such as roads and parking areas.
 - 7. Protect and utilize natural drainage systems using alternatives to storm sewer systems where feasible, such as swales, wetlands, and buffers.
 - 8. Protect and supplement vegetated stream buffers.
 - 9. Protect the stability of receiving stream channels.
 - 10. Protect adjacent lands from increased discharges and new direct stormwater discharges.
 - 11. Require and assure continued effective facility and maintenance operation plans.
 - 12. Maintain the flood carrying capacity of receiving streams and their floodplains.
 - 13. Educate homeowners regarding the need to maintain stormwater management systems, prevent pollution through good housekeeping practices, and not engage in improper discharges to systems.
 - 14. Use additional Best Management Practices.

CHAPTER 10

REGIONAL INFLUENCES AND INTER-COUNTY RELATIONSHIPS

RELATIONSHIP OF PLAN COMPONENTS

CHAPTER 10

REGIONAL INFLUENCES AND INTER-COUNTY RELATIONSHIPS

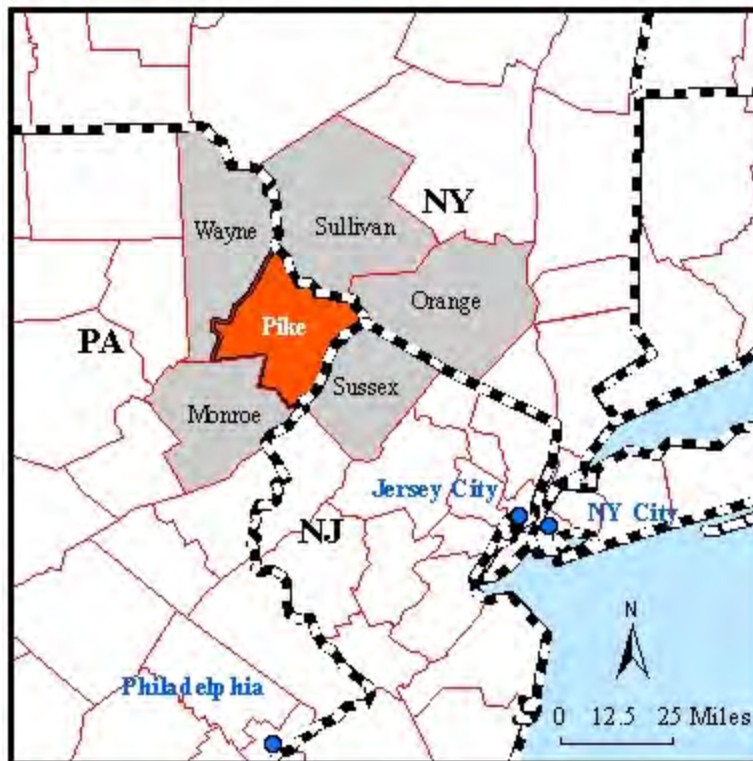
RELATIONSHIP OF PLAN COMPONENTS

REGIONAL SIGNIFICANCE

Although the jurisdiction of Pike County Government ends at the County line, development activities in the surrounding communities can affect the daily lives of Pike County's residents. The previous chapters of this Comprehensive Plan have analyzed land use and development trends within Pike County. A regional analysis of the development patterns and adjacent land uses in the surrounding counties can help address future land use planning in Pike County.

The purpose of this chapter is to compare Pike County's existing and proposed development to that of the adjoining counties, as well as to consider regional planning objectives and trends. Contiguous counties that surround Pike County include: Wayne (PA); Monroe (PA); Sussex (NJ); Orange (NY); and Sullivan (NY).

Table 13
REGIONAL LOCATION



Regional trends affecting surrounding counties have influenced Pike County's development patterns. Relative proximity to the New York, New Jersey Metropolitan area has increased pressures for residential development and the resulting commercial

uses in Pike County. Pike County's development pattern has been strongly influenced by its access to a regional transportation network, especially Interstate 84, US Routes 6 and 209 and US Route 206, New Jersey Route 15, and I-80. Interstate 84 and 80 provide an acceptable commute and access to employment centers in New York and New Jersey, and has accelerated growth in the County as more people are discovering the County's natural beauty and relatively economical cost of living. Portions of eastern Pike County continue to develop as bedroom communities for workers in the New York Metropolitan Area. Non-residential growth along the US Route 6/209 Corridor between Milford and Matamoras Boroughs can be attributed to the influx of new residents.

Despite the increased growth pressures throughout the region, Pike County shares the same basic development philosophy with the surrounding counties. Planning objectives that are shared by the entire region include:

- Direct new growth to appropriate areas, preferably where development and infrastructure currently exist;
- Preserve the natural resources and features that make the region such a charming and attractive place to live;
- Attract economic development to diversify the tax base;
- Expand recreational and tourism opportunities.

REGIONAL POPULATION TRENDS

Historical population trends are useful when planning for future growth in a region, and are a main component in any Comprehensive Plan. Chapter 16 and Appendix 16 of this Plan provide a detailed analysis of Pike County's demographics. This section will focus on population trends among the surrounding counties.

The following table shows the population trends for all adjacent counties from 1980-2000, and indicates the rate of growth for each ten-year period. The figure below graphically illustrates the percentage rate of growth for each county between 1980-1990 and 1990-2000.

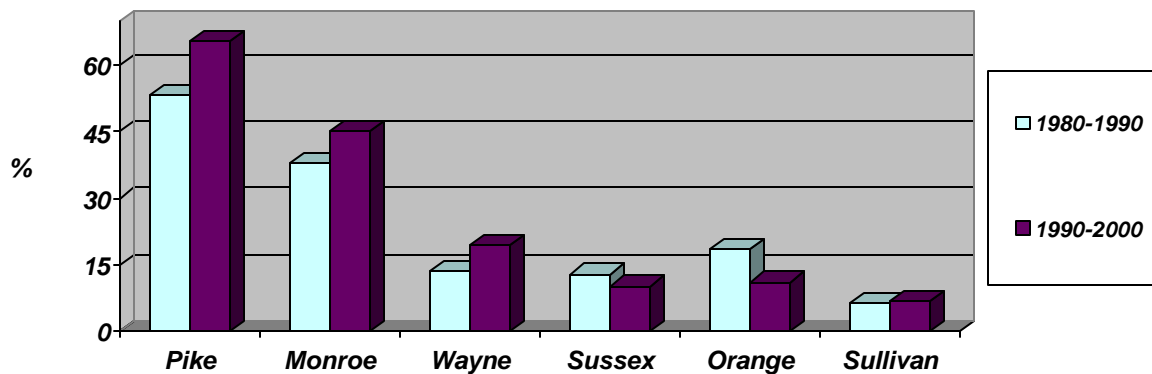
Table 14
REGIONAL POPULATION TRENDS: 1980-2000

COUNTY	1980	1990	2000
Pike	18,271	27,966 (53.1%)	46,302 (65.5%)
Monroe	69,409	95,709 (37.9%)	138,687 (44.9%)
Wayne	35,237	39,944 (13.4%)	47,722 (19.5%)
Sussex (NJ)	116,119	130,943 (12.8%)	144,166 (10.1%)
Orange (NY)	259,603	307,647 (18.5%)	341,367 (11%)
Sullivan (NY)	65,155	69,277 (6.3%)	73,966 (6.8%)

SOURCE: US Census Bureau

As a whole, the Pennsylvania counties, particularly Pike and Monroe, grew at a much higher percentage rate than the other surrounding counties. Pike County grew at a 53.1% rate between 1980 and 1990, and increased to a 65.5% rate between 1990 and 2000. Monroe County grew 37.9% and 44.9% between 1980-1990 and 1990-2000 respectively. The fastest growing county outside of Pennsylvania is Orange County, New York, which grew at ten-year rates of 18.5% from 1980-1990 and 11% from 1990-2000. It is interesting to note that while all three Pennsylvania Counties' growth rates increased each ten year interval, the out of state counties' growth rates slowed or remained relatively steady over the same time period.

Table 15
GROWTH PERCENTAGE FOR SURROUNDING COUNTIES



Adjacent Land Uses

It is necessary to review the land use policies and objectives of all counties that are contiguous to Pike County in order to determine if any conflicts exist. The following is a brief discussion of existing land uses along the County borders as well as relevant future planning, land use goals, and objectives for each of the counties that border Pike County.

Wayne County, Pennsylvania

Wayne County encompasses 763 square miles and forms the majority of the western border of Pike County, a large portion of which bisects Lake Wallenpaupack. The major industries of the County include farming, lumbering, and tourism. The existing land uses along the border with Pike County are mostly rural in nature, with pockets of development around the Lake as well as around the Borough of Hawley. Wayne and Pike Counties share major transportation facilities in Interstate 84 and US Route 6, however, Wayne County does not share residential development pressures as intense as Pike County's. There appears to be no conflicts of land uses along the border.

Future land use planning in Wayne County is undertaken by the County Planning Department. Two of the main planning issues faced by the County, as identified in the Planning Department's *Agricultural Land Study* include:

- the loss of agricultural land;
- sprawl patterns of development.

The results of this study identify base data for the County's existing agricultural land, and present a set of strategies to identify the prime areas for preservation.

Monroe County, Pennsylvania

Monroe County encompasses 603 square miles, and forms the southern border to Pike County. Monroe County has a rapidly diversifying economy with tourism, distribution, manufacturing and service industries on the rise. The existing land uses along the border of Pike County and Monroe County consist of mostly agricultural, forested, and rural areas, with areas of residential and commercial development along the US Route 209 and PA Route 611 Corridors. The main transportation routes between Pike and Monroe Counties include US Route 209, and PA Routes 611, 447, and 390. There appears to be no conflicts of land use along the border.

Planning in Monroe County is the responsibility of the County Planning Commission Staff, which recently completed a comprehensive plan entitled *Monroe 2020*.

The goals from *Monroe 2020*, which can be considered consistent with those of Pike County, include:

- Preserve and enhance the most environmentally valuable natural features, including:
 - o water resources (quality and quantity)
 - o prime agricultural land
 - o critical wetlands and wildlife areas
 - o unique scenic views
- Establish more efficient, compact patterns of land use while maintaining and upgrading the County's visual character;
- Diversify the County's economy and support and upgrade the tourism industry;
- Attract new enterprises that support jobs with good pay, contribute to the tax base, and balance the burden homeowners and businesses now bear for financing public facilities and services;
- Create more gathering places for community activities;
- Locate new development on sites served by existing infrastructure or capable of being served by economically feasible extensions of existing or alternate systems;
- Expand recreational opportunities and sites to accommodate and serve more local resident participation;
- Create greenways and trails for safe pedestrian and bicycle travel both on and off existing roadways;
- Encourage multi-jurisdictional planning and zoning activity (aided by the County) and intergovernmental cooperative agreements to form the basis of plan implementation.

Sussex County, New Jersey

Sussex County encompasses approximately 510 square miles and, along with the Delaware River, forms the eastern border of Pike County from Bushkill to Matamoras. Sussex County remains relatively rural in nature, despite its relative proximity to the New York metropolitan area to which most of the County's residents commute to work. Recreation is a major industry in the County, as is farming and service industries. Forested and publicly owned lands account for a large part of the County's land. The existing land uses along the border with Pike County consists almost exclusively by the federally-owned Delaware Water Gap National Recreational Area. There are only two bridges that provide access between the counties: New Jersey Route 206 that connects to US Route 209 just south of Milford, and New Jersey Route 521 which connects to PA Route 739 near Dingmans Ferry. Due to the presence of the river, the National Park, as well as only two bridges, there are no conflicts in land uses between the two counties.

Planning in Sussex County is the responsibility of the County Division of Planning. The *Strategic Growth Study* designates the lands along the Delaware River as a 'Parklands and Wildlife Management Area Landscape'. These Landscapes account for greater than one-third of the County, and are home to pristine natural and open space areas that should see minimal disturbance. The Plan's recommendations for this area are:

- Provide opportunities for eco-tourism;
- Provide greenway connectors between growth centers and open space where alternative methods of transportation can be safely used;
- Provide protection of environmentally critical areas such as steep slopes, aquifer recharge areas, surface water bodies, and wildlife habitat;
- Provide low impact recreational opportunities.

Orange County, New York

Orange County contains the smallest mutual border with Pike County of all surrounding counties, following the Delaware River from Interstate 84 near Port Jervis to the Sullivan County line near Mongaup, NY. Orange County contains approximately 816 square miles, and is by far the most populated county adjacent to Pike. The major industries of Orange County include farming, service industries, and tourism. The County is bordered to the east by the Hudson River, and is less than 50 miles away from Manhattan.

The existing land uses along the border are separated by the Delaware River, with the only connections between counties being US Route 6 from Matamoras, and Interstate 84. Residential and Commercial development exist in Matamoras Borough and the City of Port Jervis, but due to the Delaware River, they do not abut. The remainder of the border between counties is rural, with no other bridges for access.

Planning in Orange County is done by the Orange County Department of Planning. The Orange County Comprehensive Plan was adopted in 2003, and designates Port Jervis as a 'countywide center-priority growth area' as well as a 'transportation hub'. The

remainder of the border with Pike County is designated as ‘rural’. These designations are described below:

Priority Growth Area - include cities, villages and hamlets where public infrastructure such as central water and sewer and high capacity roads exist, or could be efficiently expanded to accommodate for future growth. Higher density residential as well as civic, commercial, and industrial development is preferred in these areas.

Rural Areas - include everywhere outside of Priority Growth Areas. In these areas the Plan supports a mix of agriculture, forest, and other natural areas along with lower intensity residential and commercial uses. In Rural Areas, public infrastructure improvements are less of a priority, except when addressing public health and safety or in meeting limited neighborhood needs.

Sullivan County, New York

Sullivan County forms the northeast border of Pike County, following the Delaware River from Mongaup to the northern tip of the County. It contains 970 square miles, and has a relatively small population of just under 74,000. The County is located at the southern end of the Catskills, and the major industries include retail, tourism/service industries (hotels, restaurants, etc.), and agriculture.

The existing land uses along the Pike/Sullivan border are generally rural, including areas of State Game Lands, with some residential areas around Barryville, NY and Shohola in Pike County. There are only two bridges connecting the two counties, one on Flagstone Road which connects to NY Route 41, and the other being PA Route 434 which becomes NY Route 55 in Barryville. There are no major conflicts in land use along the border at this time, however, the New York Legislature is considering whether to approve the development of up to five gambling casinos in the County which could change this, especially with the potential for increased thru traffic on PA Route 434.

In 2000, 162 Pike County residents worked in Sullivan County, and portions of Pike County have been identified in the “labor-shed” for Sullivan County. The northern half of Pike County is within a 60 minute commute of the center of Sullivan County, the intersection of State Route 42 at State Highway 17W.

Sullivan County’s planning is done by the County Division of Planning and Community Development, which recently updated the Comprehensive Plan entitled *Sullivan 2020*. This Plan is critical to the County, due to the expectations of rapid future growth over the next ten to twenty years. The development trends indicate that the more intense future development will be in the eastern portion of Sullivan County, while the western side,

including the border with Pike County, will remain as green space. Excerpts from the Plan state the following future objectives:

- Provide a broad based economy marketing identity that reaches beyond the County borders;
- Provide a balance between preserving the agricultural economy while allowing growth and development in rural areas using innovative design techniques including promoting cluster development;
- Promote clean industries in the County that diversify the economic base;
- Provide sustainable development that is compatible with the natural environment;
- Expand infrastructure including natural gas, power, telecommunications, and widened roads;
- Encourage eco-tourism and recreational uses and provide public access to recreational and natural resources;
- Provide housing for all income levels, including housing and sustainable living for the elderly;
- Provide cohesive planning and consolidated services;
- Update zoning, provide increased code enforcement and greater education, training and outreach at the local level;
- Contain rapid growth.

REGIONAL PLANNING IMPLICATIONS

The growth trends of Pike County and the five surrounding counties indicate that the region as a whole is at a crossroads and in need of careful planning for the future. The combination of attractive unspoiled landscapes, the accessibility to a three state region, relatively affordable housing, and a high quality of life will continue to make the Pike County region a leader in growth and development into the future. Pike County will face many challenges due to this growth, including providing a balance of new residential and business development opportunities, while at the same time preserving the natural and unspoiled landscapes that attract this very development. Regional factors that will impact the future of Pike County include the following:

Tourism - Tourism is one of the chief industries of every county in the region. The natural beauty of the area's mountains, lakes, and rivers make the region a popular destination for hikers, skiers, boaters, and fishermen. The popularity of the Pocono and Catskill Mountains, Delaware Water Gap, and the Hudson River Valley attractions, as well as a rich local heritage, will continue to apply development pressure to the region. The possible introduction of casino gambling to Sullivan County, NY and Monroe County may increase this pressure, especially from a traffic standpoint.

Accessibility - Interstate 84 bisects the region and provides linkage to a three state transportation system including the New York Thruway (Interstate 87) to the east, and Interstate 81 to the west. The New York Thruway provides access to the New York metropolitan area and Albany, while Interstate 81 provides access to the Scranton, Wilkes-Barre, and Binghamton areas. The improvements to Interstate 86 (formerly New York Route 17) will further increase the region's accessibility to New York City.

Population trends - Every county in the region has experienced increased population over the last 20 years. Pike County has seen the most dramatic increase, growing at a 65% rate since 1990. Should this trend continue, the region might become an increasingly residential area or bedroom community for commuters to the New York/New Jersey employment centers.

Impacts of Casinos in Sullivan County – *Planning for the Future: Analyzing the Potential Economic Impacts of Class III Casino Hotels on Sullivan County, NY* was prepared for the County Legislature in 2004. The report indicates the opening of three major casino hotels would create 12,000 direct jobs and 6,000 indirect and induced jobs, with 60 percent of the new employees living within Sullivan County. The Casinos would draw 8.5 million visitors to the area (currently 1 million tourism visitors come to the County). It was estimated that 1.48 million visitors would stay overnight.

RELATIONSHIP OF PLAN COMPONENTS

Conceptual Growth Areas indicate where growth is recommended to be concentrated. The availability of sanitary sewer and water facilities plays an extremely important role in the shaping of development patterns, including location and density. It is necessary to coordinate growth areas and utility planning so that growth reflects the availability of public sewer and water facilities and public sewer and water facilities are not planned for areas not intended for intensive development. Growth areas have been designated where public sewer and water will be investigated or are available. Sewage discharges and standards should be consistent with the highest stream fishery standards classification for receiving streams.

Through designation of Primary and Secondary Conservation Areas, important natural areas are identified for possible future protection. It is also important that community facilities, including recreation and open space, are available to serve the residents of the County. Regional and Municipal Open Space and Recreation Plans could identify existing recreational facilities, proposed recreational facilities, and potential areas for recreational facilities.

Future public facilities should be sited to be consistent with the objectives for land use, such as maintaining open space and natural areas, and be consistent with Conceptual Growth Areas.

Municipal and Regional Future Land Use Plans can encourage economic vitality by providing areas for commercial and industrial development within Growth Areas. Preservation of residential areas can provide support for local businesses and provide a work force. Providing for recreation and open space and preservation of community resources contributes to the quality of life in the area and can encourage additional investment and support.

It is necessary to maintain a circulation system which can accommodate generated traffic volumes and serve desired economic development. Road system improvements can aid businesses and also serve to alleviate concerns elsewhere in the system. In turn, future development should not adversely affect the circulation system. Impacts of new development should be identified and mitigated.

Land use decisions are influenced by the existing circulation system, while at the same time those land use decisions affect circulation systems and the functions which the system components are expected to perform. Existing residential areas should be protected as much as possible from the impacts of through traffic, which can be accomplished by proposed improvements to the circulation system. Major economic development areas are located in the major road corridors. When development occurs, access management techniques can enhance the mobility, safety, and efficiency of road corridors.

Table 16
INTERRELATIONSHIPS OF PLAN COMPONENTS

	Land Use and Housing	Sewer and Water	Community Facilities	Transportation	Natural Environment	Economic Development
Land Use and Housing	<ul style="list-style-type: none"> Support existing centers Provide housing opportunities for all 	<ul style="list-style-type: none"> Policies coordinated with land use goals to direct development to growth areas 	<ul style="list-style-type: none"> Make available to serve area residents 	<ul style="list-style-type: none"> Must consider impacts of growth on the system Accommodate volumes at acceptable levels of service Existing residential areas should not have excessive volumes and speed 	<ul style="list-style-type: none"> Provide open space system through their protection 	<ul style="list-style-type: none"> Impacts on residential areas should be mitigated Provide jobs and services for residents
Sewer and Water	<ul style="list-style-type: none"> Growth should occur where have adequate facilities 	<ul style="list-style-type: none"> Consider existing facilities and plans, appropriate discharge standards and methods 	<ul style="list-style-type: none"> Locate with consideration of ability to serve, consistent with land use goals 	<ul style="list-style-type: none"> Should be coordinated in support of growth areas 	<ul style="list-style-type: none"> Water Supply sources should be protected and pollution prevented 	<ul style="list-style-type: none"> Should not overburden systems or deplete water supplies
Community Facilities	<ul style="list-style-type: none"> Include facilities to service residents and growth areas 	<ul style="list-style-type: none"> Major facilities should be adequately served 	<ul style="list-style-type: none"> Consider existing facilities and plans, potential cooperative efforts 	<ul style="list-style-type: none"> Should adequately service facilities in the region Consider linkages of community facilities 	<ul style="list-style-type: none"> Can provide recreational opportunities 	<ul style="list-style-type: none"> Can provide a tax base to support provision of facilities
Transportation	<ul style="list-style-type: none"> Growth should occur where have adequate system Maintain functional operation and safety when growth occurs 	<ul style="list-style-type: none"> Should be coordinated in support of growth areas 	<ul style="list-style-type: none"> Locate major facilities where can be adequately serviced Concerns for school transportation system Consider impacts on system from growth 	<ul style="list-style-type: none"> Consider existing facilities and plans, coordinate with PennDOT Plan improvements to the system 	<ul style="list-style-type: none"> Can provide scenic roads and vistas 	<ul style="list-style-type: none"> Access management and necessary road improvements must be considered
Natural Environment	<ul style="list-style-type: none"> Development should occur where land is suitable and resources will not be harmed 	<ul style="list-style-type: none"> Should not extend to areas where irreparably harm important resources 	<ul style="list-style-type: none"> Can incorporate natural features 	<ul style="list-style-type: none"> Can facilitate access to resources Design system with consideration of existing environment and resources 	<ul style="list-style-type: none"> Existing natural resources should be protected, enhanced and interpreted 	<ul style="list-style-type: none"> Protect the natural environment
Economic Development	<ul style="list-style-type: none"> Identify appropriate land uses for sensitive areas Protect water resources Provide for commercial, industrial, business uses Neighborhoods provide workforce and market 	<ul style="list-style-type: none"> Can support development at appropriate locations 	<ul style="list-style-type: none"> Contribute to quality of life and the attractiveness of the area 	<ul style="list-style-type: none"> Can support economic development Enhance regional public transportation system Address system deficiencies to improve business climate 	<ul style="list-style-type: none"> Contribute to quality of life and attractiveness of area to businesses 	<ul style="list-style-type: none"> Support existing business centers

RELATIONSHIP TO STATE INITIATIVES

This Plan stressed partnerships between Pike County and its municipalities, but as we have seen in Chapters 8 and 9, Pennsylvania Departments and Commissions will also be important partners in implementation of the Plan. Principles and policies stated in this Plan are consistent with Commonwealth principles and policies and the County looks forward to working closely with state agencies.

Recently, the Governor's Economic Development Cabinet announced a set of principles and criteria that will be used by state agencies to guide investment and support local growth and economic development across the Commonwealth. The principles are based on the precept that a higher quality of life is key to foster new business development and it is important to conserve our exceptional natural resources. Twenty-three state agencies and programs were involved in preparing the principles.

The ten principles are:

1. **Redevelop first** – Support revitalization of Pennsylvania's many cities and towns and give funding preference to reuse and redevelopment of "brownfield" and previously developed sites in urban, suburban, and rural communities.
2. **Provide efficient infrastructure** – Fix it first: use and improve existing infrastructure. Make highway and public transportation investments that use context sensitive design to improve existing developed areas and attract residents and visitors to these places. Require private and public expansions of service to be consistent with approved comprehensive plans and consistent implementing ordinances.
3. **Concentrate development** – Support infill and "greenfield" development that is compact, conserves land, and is integrated with existing or planned transportation, water and sewer services, and schools. Foster creation of well-designed developments and neighborhoods that offer healthy lifestyle opportunities for Pennsylvania residents.
4. **Increase job opportunities** – Retain and attract a diverse, educated workforce through the quality of economic opportunity and quality of life offered in Pennsylvania's varied communities. Integrate educational and job training opportunities for workers of all ages with the workforce needs of businesses. Invest in businesses that offer good paying, high quality jobs, and that are located near existing or planned water and sewer infrastructure, housing, existing workforce, and transportation access (highway or transit).
5. **Foster sustainable businesses** – Strengthen natural resource based businesses that use sustainable practices in energy production and use, agriculture, forestry, fisheries, recreation and tourism. Increase our supply of renewable energy. Reduce consumption of water, energy and materials to reduce foreign energy dependence and address climate change.
6. **Restore and enhance the environment** – Maintain and expand land, air and water protection and conservation programs. Conserve and restore environmentally sensitive lands and natural areas for ecological health, biodiversity and wildlife habitat.

7. **Enhance recreational and heritage resources** – Maintain and improve recreational and heritage assets and infrastructure throughout the commonwealth, including parks and forests, greenways and trails, heritage parks, historic sites and resources, fishing and boating areas and game lands offering recreational and cultural opportunities to Pennsylvanians and visitors.
8. **Expand housing opportunities** – Support the construction and rehabilitation of housing of all types to meet the needs of people of all incomes and abilities. Support local projects that are based on a comprehensive vision or plan, have significant potential impact (e.g., increased tax base, private investment), and demonstration local capacity, technical ability and leadership to implement the project.
9. **Plan regionally, implement locally** – Support multi-municipal, county and local government planning and implementation that has broad public input and support and is consistent with these principles. Provide education, training, technical assistance, and funding for such planning and for transportation, infrastructure, economic development, housing, mixed use and conservation projects that implement such plans.
10. **Be fair** – Support equitable sharing of the benefits and burdens of development. Provide technical and strategic support for inclusive community planning to ensure social, economic, and environmental goals are met.

CHAPTER 11

COUNTY-MUNICIPAL PARTNERSHIPS MULTI-MUNICIPAL PLANNING PROGRAM

CHAPTER 11

COUNTY-MUNICIPAL PARTNERSHIPS

MULTI-MUNICIPAL PLANNING PROGRAM

PARTNERSHIPS

Healthy, attractive, and well-planned communities do not just occur naturally. They are created through the vision and perseverance of local governments who are responsible for guiding growth, preserving natural resources, and delivering public services.

As development increases, so does the cost of the provision of services associated with that development. Counties and municipalities are burdened with these increased costs and find it difficult to provide the same level of public services to their growing populations.

Pike County and its thirteen municipalities can work together to identify methods of planning for delivering services more efficiently to the taxpayers. Good ideas that may help to accomplish this are sometimes not realized for several reasons. It could be a lack of immediate funding to start a program, lack of staff time, or lack of a common vision or coordination between municipal officials. There are many ways in which Pike County and its municipalities can work together, including coordinating resources, information, and County staff assistance. Before any cooperative initiatives can be accomplished, the issues must be identified. The best way for a group of municipalities to identify these issues is through the multi-municipal comprehensive planning process.

IDENTIFICATION OF ISSUES

Many issues that local municipal officials face on a day-to-day basis are actually regional in nature. Land use planning issues such as the provision of appropriate infrastructure, natural resource preservation, stormwater management, and transportation generally do not respect municipal boundaries. In fact, many times neighboring municipalities are facing the same issues, and do not realize it due to lack of communication between officials. Recent changes to the Municipalities Planning Code encourage municipalities to cooperate, specifically through multi-municipal planning.

In Part 4 of this plan, Priority Initiatives, it identifies major issues for Pike County to address. One of the main issues stated is the following:

“Establish County-Municipal partnerships to address growth, preservation, and development issues.”

Furthermore, the identified Priority Actions recommend instituting a ***County Planning Technical Assistance Program*** to accomplish this goal, and lists a series of potential

programs that the County could initiate and coordinate for municipalities. This chapter will focus on the establishment of a Multi-Municipal Planning Program that can be coordinated and administered by the County.

MULTI-MUNICIPAL PLANNING

The new provisions of the Pennsylvania Municipalities Planning Code (MPC) authorize counties and municipalities, either contiguous or within the same school district, to use intergovernmental cooperative agreements as a way to work together to develop multi-municipal comprehensive plans and implement them through consistent ordinances and actions. The following objectives are excerpts from Appendix 4, and describe some of the many benefits of intergovernmental cooperation and multi-municipal planning.

MPC and Multi-Municipal Planning Objectives:

Intergovernmental cooperation is encouraged in order to accomplish the following objectives:

- To provide for development that is compatible with surrounding land uses and that will complement existing land development with a balance of commercial, industrial and residential uses.
- To protect and maintain the separate identity of Pennsylvania's communities and to prevent the unnecessary conversion of valuable and limited agricultural land.
- To encourage cooperation and coordinated planning among adjoining municipalities so that each municipality accommodates its share of the growth burden and does not induce unnecessary or premature development of rural lands.
- To minimize disruption of the economy and environment of existing communities.
- To complement the economic and transportation needs of the region and this Commonwealth.
- To provide for the continuation of historic community patterns.
- To provide for coordinated highways, public services and development.
- To ensure that new public water and wastewater treatment systems are constructed in areas that will result in the efficient utilization of existing systems, prior to the development and construction of new systems.
- To ensure that new or major extension of existing public water and wastewater treatment systems are constructed only in those areas within which anticipated growth and development can adequately be sustained within the financial and environmental resources of the area.
- To identify those areas where growth and development will occur so that a full range of public infrastructure services including sewer, water, highways, police and fire protection, public

schools, parks, open space and other services can be adequately planned and provided as needed to accommodate the growth that occurs.

- To encourage innovations in residential, commercial and industrial development to meet growing population demands by an increased variety in type, design and layout of structures and by the conservation and more efficient use of open space ancillary to such structures.
- To facilitate the development of affordable and other types of housing in numbers consistent with the need for such housing as shown by existing and projected population and employment data for the region.

Benefits of Multi-Municipal Planning

- Provides a regional planning approach and allocation of land uses
 - Where
 - How much to accommodate population projections
 - Patterns of development
- Establishes growth areas and future growth areas regionally
 - Coordination with infrastructure
 - Opportunities for infill
- Provides coordinated planning along the common boundaries of the municipalities
- Supports existing centers rather than weaken them
- Coordinates road corridor planning, standards, and management
- Provides for linkages between municipalities
- Eliminates the duplication of efforts between neighboring municipalities
- The Plan and implementing ordinances are considered by state agencies in permitting decisions
- Addresses review of “developments of regional impact”
- Identifies opportunities for future joint efforts
- Promotes common land use designations and definitions
- Establishes goals for economic character over the entire Region
- Provides support for municipalities in zoning challenges - Land uses can be spread across the entire planning area so municipalities within multi-municipal plans do not need to provide every use within their individual municipality.
- Enables Transportation Impact Fees across municipal boundaries
- Enables Transfer of Development Rights across municipal boundaries
- Enables priority consideration in state funding programs

- Provides opportunity to learn from neighbors' shared experiences
- Enhances the Region's attractiveness to quality development
- Enables developing a "specific plan" for an area designated for non-residential development, preparing regulations for that area, and streamlining the approval process.

PIKE COUNTY MULTI-MUNICIPAL PLANNING PROGRAM

Multi-municipal planning is not mandated - counties and municipalities must decide on their own if they wish to participate. The governing body of the municipality must make a decision on whether it is in their best interest to participate in a multi-municipal planning effort, and if so, commit to developing and implementing the plan. The role of the County is to make the process easier on municipal officials. This might include: acting as a clearinghouse for identification of potential municipal partners; funding sources; and administration of the contract and planning process. Some basic steps for getting a program started include:

- Seek Municipal endorsement of County Plan;
- Define potential multi-municipal planning regions;
- Identify and secure funding;
- Provide administration and technical assistance;
- Provide implementation assistance.

Seeking Municipal Endorsement of the Pike County Plan

The Municipalities Planning Code (MPC) states that a multi-municipal plan must include a statement indicating that the existing and proposed development is generally consistent with the County Comprehensive Plan. This requirement makes it critical to receive municipal 'buy in' to the County Plan. The County Plan provides advisory guidelines to promote general consistency between municipal and county plans. These guidelines promote uniformity with respect to local planning and zoning terminology, as well as descriptions of common types of municipal land use regulations. Once municipal officials are comfortable with the guidelines and recommendations of the County Plan, they will be more inclined to participate in a multi-municipal comprehensive planning program.

Defining Planning Areas

There are many possible ways to decide how to put together a multi-municipal plan. The MPC allows flexibility for counties and municipalities to develop plans based on regional issues, political boundaries, or just a willingness to cooperate. The multi-municipal planning area can be as little as two municipalities or could be developed at a much larger regional scale. Recent amendments to the MPC allow non-contiguous municipalities to plan together, provided they are within the same school district. This new provision allows even greater flexibility when defining planning areas. Multi-municipal planning

within school district boundaries is a sensible option because the participating municipalities already share the same tax base. Obviously, multi-municipal planning areas can only be successful with willing participants. The County should initially target the municipalities that have worked together in the past. Examples of what a planning area may include:

- Entire School District
- Portion of School District
- Region of contiguous municipalities in Pike County;
- Region of non-contiguous municipalities, within the same school district;
- Region of contiguous municipalities in multiple counties and/or school districts.

The planning area can also be based around common issues such as:

- A natural area based region, such as a watershed;
- A group based upon a major transportation corridor;
- A combination of municipalities interested in preservation of natural areas (such as rural Townships) grouped with municipalities willing to incur future growth.

In the end, deciding on a planning area will mean identifying compatible municipalities so that the multi-municipal plan will serve the needs of all participants. It is advantageous to target contiguous municipalities within the same school district that can accommodate a wide range of land uses and densities, so that all uses can be provided for across the entire planning area.

Identify and Secure Funding

A County administered multi-municipal planning program, if it is to be successful, needs a reliable source of funding. A program in which the County manages and distributes the funding is important for two reasons. First, and especially with respect to municipalities with less financial resources, the funds can help ensure that a quality plan is prepared and implemented. Second, the funds can be used as an incentive to ensure that the local multi-municipal plans prepared through the County Program are consistent with the Pike County Comprehensive Plan.

The County may utilize the approved Scenic & Rural Character Bond funding to provide a partial match for state funding. The Pennsylvania Department of Community and Economic Development (DCED) provide a vast resource for a variety of funding and grant programs for planning activities. By far, the most popular source of funding for multi-municipal plans is DCED's Land Use Planning and Technical Assistance Program (LUPTAP). LUPTAP provides grants for comprehensive plans, and has indicated that priority for planning grants will be given to counties acting on behalf of multi-municipal planning regions. LUPTAP guidelines are provided below:

The LUPTAP Grant program provides grant funds for the preparation of community comprehensive plans and the ordinances to implement them. It promotes cooperation between municipalities in making sound land use decisions that follow or adhere to the

Governor's Executive Order on Land Use. **Priority is given to any county government acting on behalf of its municipalities, any group of two or more municipalities, or a body authorized to act on behalf of two or more municipalities.** An eligible use is the preparing and updating of comprehensive community development plans, policies, and implementing mechanisms such as zoning ordinances, subdivision regulations, and functional plans (ex. downtown revitalization, water resource plans, land development regulations). Applicants are to provide a minimum of 50% match consisting of cash or in-kind services. In-kind services can include technical assistance, information gathering, and attendance at steering committee meetings. There are currently no minimum or maximum amounts.

LUPTAP is not the only source of funding for multi-municipal planning program. Some counties utilize Community Development Block Grant (CDBG) funding. The CDBG program provides grant and technical assistance to aid municipalities in community and economic development efforts. DCNR has also assisted municipalities in the preparation of comprehensive plans. The Action Plan provides a comprehensive list of additional funding sources for the County and municipalities.

Administration of the Program/Technical Assistance

Once a funding mechanism is in place, the next step for the County is to prepare to administer the program if desired by the municipalities. The County must decide its level of participation in the preparation of the multi-municipal plans including existing information and GIS to be completed in house by County planning staff. It must be identified what work is to be performed by a qualified planning consultant and what will be accomplished by the municipalities. If the utilization of a consultant is desired, the County may develop a Request for Proposals (RFP) document that includes a scope of work for the multi-municipal plan. This RFP and scope of work will be sent to prospective consultants after a group of municipalities have agreed to complete a plan. The scope of work should contain at a minimum, an outline for the proposed plan including all sections required by Section 301 of the MPC, as well as any optional sections that the County/municipalities wish to include.

Once a planning area is defined and a scope of work is ready, the participating municipalities must appoint representatives to a multi-municipal plan steering committee. This committee should include at least two representatives from each municipality. The potential representatives may include planning commission members, supervisors or council members, or citizens. Regardless of who is appointed to this committee, it is critical that the representatives keep the governing body informed during the planning process, so that when it comes time for adoption procedures, the governing body is comfortable with the plan. The County will assist the steering committee through the consultant selection process, and will then enter into a contract with the chosen consultant to complete the multi-municipal plan.

To summarize, administration of a multi-municipal planning program includes the following tasks:

- Drafting the Request for Proposal and Scope of Work;
- Assisting in procurement of a qualified consultant;
- Administration and handling of the contract with consultant;
- Assigning a County staff person to the steering committee for technical assistance;
- Assistance during adoption procedures;
- Review and payment of invoices on behalf of municipalities.

Implementation

Implementing multi-municipal comprehensive plans will require a number of actions by the participating municipal governing bodies including:

- Developing intergovernmental cooperative agreements to amend zoning ordinances to be consistent with the Plan;
- Developing intergovernmental cooperative agreements to amend subdivision/land development ordinances consistent with the Plan;
- Monitoring and updating other municipal plans and ordinances (open space; Act 537 Plans, etc.).
- Monitoring local actions over time to ensure consistency;
- Adopting capital budgets that are consistent with the Plan;
- Employing or having access to a professional planning staff that can carry out the functions listed above in the section on background.

Preparing multi-municipal plans also provides officials the opportunity to use additional planning tools such as Transfer of Development Rights (TDR's), Specific Plans, and Joint Zoning.

Legal Advantages

Preparation of multi-municipal plans offers municipal officials many legal advantages regarding future zoning decisions. Previously, Pennsylvania courts have upheld landowner challenges of zoning ordinances being 'exclusionary' due to lack of enough land for a particular land use. The amendments to the MPC allows a group of municipalities within a multi-municipal plan to allocate (through zoning) all required uses over the entire planning area, therefore distributing land uses in a more logical pattern.

Municipalities do not have to adopt joint zoning ordinances to receive this protection, as they did under prior law. A municipality within a multi-municipal plan may adopt and regulate its own zoning ordinance. Provided this ordinance is generally consistent with the multi-municipal plan, a court may support the local ordinance in a challenge, as long as all uses, including a fair share of regional housing growth, is provided for over the entire planning area.

It is important to note, that even with the legal support for individual zoning ordinances, a joint zoning ordinance provides the strongest protection against validity challenges. The drawback to joint zoning ordinances is they require a significant degree of cooperation,

and may not be manageable for planning areas that consist of more than three municipalities.

Obstacles

Regardless of how well intentioned a County multi-municipal planning program is, and no matter how well a multi-municipal comprehensive plan may be written, there may be disagreements and controversy. Issues and concerns can be defused at the beginning of the process by having an educational or informational meeting for municipal officials where the benefits of multi-municipal planning are presented. Some of the recurrent issues that can undermine the planning process include:

- Perceived loss of individual municipal authority for decision making;
- Perceived recipient of the 'burden' land uses (industrial, higher density residential, etc.);
- Fear of regionalization and loss of municipal autonomy;
- Tax base inequality, particularly in plans that include municipalities from two or more school districts;
- Lack of understanding of the purpose of comprehensive plans

The earlier that some of these potential stumbling blocks to multi-municipal planning are identified, the more likely it will be for Pike County's townships and boroughs to produce a plan that all participating municipalities can be comfortable with, and more importantly, adopt and implement.

CHAPTER 12

HISTORICAL RESOURCES

CHAPTER 12 HISTORICAL RESOURCES

When one thinks of Pike County, one often thinks of the natural beauty and resources and the tourists who come to enjoy those resources, but Pike County also has a rich history.

Early inhabitants of now Pike County lands include the Lenni-Lenape Tribe. The Lenape settled in this region due to the sustenance that the Delaware River and surrounding dense forestland provided. In the 1600's, the first European settlers arrived and Colonization was born. All of Northern Pennsylvania was claimed by Connecticut sparking the Pennamite Wars, but in 1781, the Continental Congress brought an end to the dispute.

PIKE COUNTY FORMATION

Pennsylvania, in the early 1700's only contained 3 counties: Philadelphia, Chester and Bucks. Pike County's lands were part of Bucks County. In 1752, Northampton County was formed from a portion of Bucks County. Pike was officially formed on March 26, 1814; named for Colonel Zebulon Montgomery Pike.

PIKE COUNTY MUNICIPAL FORMATION



Blooming Grove – Created December 17, 1850 from parts of Lackawaxen and Palmyra Townships. A visitor passing through about the time of the American Revolution discovered there an abandoned farm with a grove of large apple trees in bloom. They had obviously been planted many years before.

Delaware Township – The oldest of Pike County's Townships, Delaware was in existence before 1766 as part of Northampton County. It was named because it bordered the Delaware River and originally extended west to the Luzerne County line.

Dingman Township – Created April 17, 1832 from Upper Smithfield Township. Named for Daniel Westbrook Dingman, a member of the Pennsylvania Legislature and a County Judge for 26 years. His grandfather, Andrew Dingman first came to the area about 1735 and started the Dingman Ferry.

Greene Township – Created April 24, 1839 from Palmyra Township. Named for the popular Revolutionary War General Nathaniel Greene, who fought at Boston, Long Island, Trenton, and Brandywine.

Lackawaxen Township – Was named for the river that bore the Indian name meaning “Swift Waters”. It was one of the original townships of Wayne County in 1798.

Lehman Township – Created August 19, 1829 from Delaware Township. Listed on tax rolls for Upper Smithfield Township in 1815 was Joseph Leighmen, paying 55 cents on 442 acres. In 1824 his name was spelled Leaman and by 1832 was Lehman.

Matamoras Borough – Incorporated as a borough on January 18, 1905 and 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.

Milford Borough – The Borough was founded in 1796 after a Philadelphia Circuit Judge named John Biddis Sr. laid out the street grid. The borough, originally part of Milford Township, was later incorporated as a borough on December 25, 1874. Biddis envisioned it becoming a milling center, hence the town name.

Milford Township – Created April 17, 1832 from Upper Smithfield Township, was similarly named as the Borough due to the efforts and vision of Biddis.

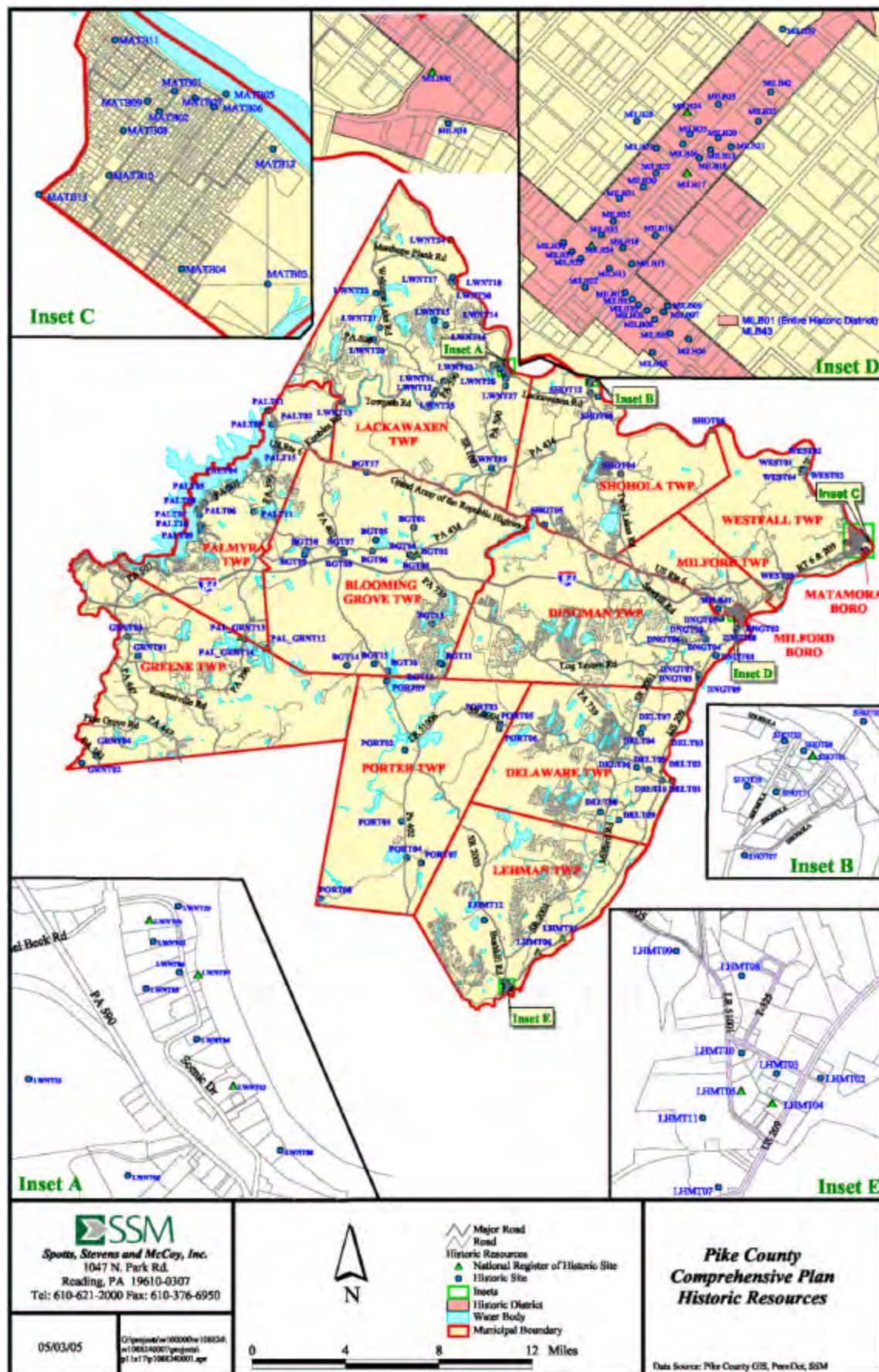
Palmyra Township – Originally much larger, was formed in 1798 as a part of Wayne County. Like Bethany, Canaan, Promised Land and Lebanon, it was named because of its Biblical Connection. The ancient town of Palmyra (or Tadmor) today is in Syria.



Porter Township – Created December 16, 1851 from parts of Delaware and Lehman Townships. Named in honor of the Hon. James Madison Porter who built the first house there at Porterville by Porters Lake in 1849.

Shohola Township – Created September 25, 1852 from parts of Lackawaxen, Westfall and Milford Townships. Bears the name given by Indians to the Creek. The Indian word has been translated three differing ways: weak or slow waters; union of the waters; or, goose rest/duck's landing.

Westfall Township – Created January 31, 1839 from Milford Township. Simon Westfall (or Westfael) first settled there before 1743. His son Simeon built the stone house in Matamoras. Two descendants, Cornelius and Jacob, served as Justices of the Peace.





Appendix 13 contains the historical background of Pike County from the Historic Resources Study, Pike County, PA, prepared for the County by Cultural Heritage Research Services, Inc. in 1997.

The historical background presents a condensed history of the County and general discussion of the resources associated with themes identified in the Historic Resources Study. The following is an outline of some of the themes presented in the Study.

THEMES IN PIKE COUNTY HISTORY

Initial Native American Settlement

- Reliance on Delaware River for transport and sustenance
- Development of trails network that formed basis of future road network
- Farming of Delaware River valley
- Hunting, Fishing and Trapping

Pioneer Settlement

- Along Delaware River in scattered farm complexes connected by trails
- Beginning development of roads
- Timbering
- Milling
- Ferries across Delaware River
- Dingmans Choice Turnpike (now Route 739)
- Beginnings of Milford as a village

Establishment of Communities

- Construction of 3 turnpikes to Milford area
- Delaware and Hudson Canal in Lackawaxen Township spurred the coal, bluestone, lumber and wood products industry and predominately fed the New York City market. Remnants of the canal path, the Towpath, lock tender's houses, canal villages, and Roebling's Delaware Aqueduct remain.
- Development of villages to support canal, such as Lackawaxen, Kimbles and Rowland
- Bluestone industry along Delaware River in northeast, helped by railroad
- New York and Erie railroad spurred development of villages in northern Pike County such as Millrift, Pond Eddy, Parkers Glen, Shohola, Lackawaxen, and Masthope.
- Development of linear villages along new roads, turnpikes, or crossroads, such as Blooming Grove and Lord's Valley.
- Development of boarding houses and hotels along Delaware and Lackawaxen River, eventually more widespread development of hotels and boarding houses, private clubs such as the Blooming Grove Hunting and Fishing Club, and resorts. Development of Shohola as a major tourist destination because of the railroad and Shohola Glen Resort. Location of inns in villages along stagecoach and carriage routes, such as Bushkill, Dingman's Ferry, and Milford.

Impact of Automobile

- Development of recreation locations away from railroads and turnpikes, especially strip development along Route 209, Route 507, Route 739, and Route 6.
- Self contained resorts, motels, golf courses, roadside entertainment.
- Hotels and resorts losing popularity to second homes and cabins.
- Organization of state parks (Promised Land), recreational areas (on Lake Wallenpaupack) and tourist attractions (such as Bushkill Falls), campgrounds, hunting and fishing areas.
- Permanent homes for commuting population fostered by I-84 and other road improvements.
- Major Subdivisions for second-home/vacation communities
- Development as a bedroom community
- Foliage tourism
- Settlement of retirees



The Historical Resources Map locates historical resources within the County. The complete listing of those historical resources is provided in Appendix 13. The following list prepared by the Pennsylvania Historical Museum Commission (PHMC) includes National Register listed and eligible properties. The list includes national historic landmarks, listed and eligible historic districts, and listed and eligible historic sites.

A listing of the historical markers approved for Pike County is also provided in Appendix 13. The list of markers is interesting because it provides an overview of the development and history of Pike County and identifies some of its famous residents, such as Charles S. Peirce, Gifford Pinchot, Horrace Greeley, and Zane Grey.



Table 17

NATIONAL REGISTER LISTED/ELIGIBLE PROPERTIES***Pennsylvania Historical Museum Commission/Bureau for Historic Preservation***

<i>Municipality</i>	<i>Historic Name</i>	<i>Address</i>	<i>Status</i>
Blooming Grove Twp	Lord House	Junction L.R. 51019 & Rte. 739	Listed
Delaware Township	Aspinall, Jane Klaer, Sprout Electric Generator B	T-358	Eligible
Delaware Township	Crane, Margaret T. & Edward Garner, House	East side of Rte. 739, Near U.S. 209	Eligible
Delaware Township	Dingmans Falls Complex & Access Road	Mollineaux Rd.	Eligible
Delaware Township	Dingman's Ferry Dutch Reformed Church	U.S. 209 Near Dingman's Ferry	Listed
Delaware Township	Dingman's Ferry River House	L.R. 950 at Delaware River in Dingman's Ferry	Eligible
Delaware Township	Emery House	T-318	Eligible
Delaware Township	Sproul Caretaker's House & Stable	Township Rd. 358	Eligible
Delaware Township	Zimmerman, Marie, Farm	Off U.S. 209	Listed
Dingman Township	Callahan House	U.S. Rte. 209	Listed
Dingman Township	Cliff Park Inn	155 Cliff Park Rd.	Eligible
Dingman Township	Kline, Alonzo, Property	South side S.R. 2001 West of Milford Boro Line	Eligible
Dingman Township	Minisink Archeological Site		Listed
Dingman Township	Pinchot, Gifford, House	W. End of Milford	NHL
Dingman Township	Wells Property	South side S.R. 2001 at SW Intersection SR 2011	Eligible
Lackawaxen Township	D&H Canal Company Office	Scenic Dr. Northwest Side	Listed
Lackawaxen Township	Delaware & Hudson Canal National Historic Land	Various in Pennsylvania & New York States	NHL
Lackawaxen Township	Delaware Aqueduct		Listed
Lackawaxen Township	Grey, Zane, House	Roebing Rd.	Listed
Lackawaxen Township	Mason, David, House	L.R. 51018	Eligible
Lehman Township	Brodhead-Heller Farm ("Wheat Plains")	U.S. 209	Listed
Lehman Township	Costello House	Township Rd. 305	Eligible
Lehman Township	Nyce Farm	U.S. 209, 7 mile North of Bushkill	Listed
Lehman Township	Peters House	Junction U.S. 209 & L.R. 51001 in Bushkill	Listed
Lehman Township	Turn Store & Tinsmith Shop	Junction U.S. 209 & T-301 in Bushkill	Listed
Lehman Township	Utility House – I.L.G.W.U.	Southeast of Sandyville	Eligible
Matamoras Borough	Matamoras Elementary School	603 H Ave.	Eligible
Matamoras Borough	Westfael, Simon, House (Fort Matamoras)	17 1 st St.	Eligible
Milford Borough	Forester's Hall	Broad & Harford Sts.	Listed
Milford Borough	Gordon, Jervis Grist Mill Historic District	Water St., Mill St. & 7 th St.	Listed
Milford Borough	Hotel Fauchere & Annex	401-403 Broad St.	Listed
Milford Borough	McLaughlin, Dennis, House	608 Broad St.	Eligible
Milford Borough	Milford Historic District	Broad St., 4 th St., E. Ann St.	Listed
Milford Borough	Milford Historic District (Boundary Increase)	Sawkill Creek, Front St., John St., 7 th St.	Eligible
Milford Borough	Pike County Courthouse	Broad & High Sts.	Listed
Milford Borough	Pinchot, Gifford, House	W. end of Milford	NHL
Palmyra, Greene and Blooming Grove	Lake Wallenpaupack Dam & pipeline	West side S.R. 6 at Wallenpaupack Creek Bridge	Eligible
Palmyra, Greene and Blooming Grove	Paupack Consolidated School	S.R. 507 South of S.R. 6	Eligible
Palmyra Township	Promised Land State Park, Bear Wallow Cabin D	Promised Land State Park	Listed
Palmyra Township	Promised Land State Park, Whitaker Lodge District	Promised Land State Park	Listed
Shohola Township	Erie Railroad Bridge	S.R. 434	Eligible
Shohola Township	New York & Erie Railroad		Eligible
Shohola Township	Pond-Eddy Bridge	L.R. 51013 (Pa.)	Listed
Shohola Township	Shohola Glen Hotel	100 Rohman Rd.	Listed
Westfall Township	Conrail No. 2 Bridge		Eligible
Westfall Township	Mill Rift Hall	Bluestone Blvd.	Listed
Westfall Township	Nearpass House	Cemetery Rd.	Listed
Westfall Township	Peirce, Charles S., House "Arisbe"	West side U.S. 209, N. End of Milford	Eligible

CHAPTER 13

LAND USE

CHAPTER 13

LAND USE

Historically, Pike County's land use was predominately centered on the enjoyment of its natural resources and the extraction of timber, bluestone and other natural resources. As Pike County developed throughout the 1960's and 1970's, residential housing became much more prevalent in the generally heavily forested landscape. Municipal planning and zoning currently regulate the use of land in every municipality. Every municipality in the County currently regulates land use through Subdivision & Land Development regulations. All municipalities utilize a Zoning Ordinance, with the exception of Greene Township.

GENERAL PATTERNS

To better understand the existing land use makeup of the County, the generalized existing Land Use map is provided in Chapter 2, in the discussion on build-out analysis. In an effort to identify the actual use of lands within the County, the following table was developed to present a generalized breakdown of Developed Lands, Lands Open to Future Development, and Protected Lands within Pike County.

Table 18
PIKE COUNTY LAND DISTRIBUTION

Land Use Designation	Acreage	% of County
Developed Lands	118,539	33%
Residential	86,770.85	24.22%
Commercial	8,652.63	2.42%
Industrial	7,348.86	2.05%
Road/Utilities	8,986.29	2.51%
Unprotected Land	116,348	32.5%
Protected Lands	123,303	34.5%
Public Lands	117,884	32.91%
Easements	5,418	1.52%

Source: Pike County Office of Community Planning and County GIS Department
Acreages based upon GIS, assessment of Tax Maps & individual agency verification

Land use patterns are further detailed on the following maps. The first indicates clubs, Milford Experimental Forest and conservation easements. Hunt clubs and other clubs are a major land use within the County, and keeping them as open space should be a priority effort. While several large areas of land have been protected through conservation easements, land under conservation easements still constitutes a relatively small portion of total land use in Pike County.

Public lands comprise a large percentage of land within the County, including the Delaware Water Gap National Recreation Area, State Forest, State Gameland, County Owned Property, and the Promised Land State Park.

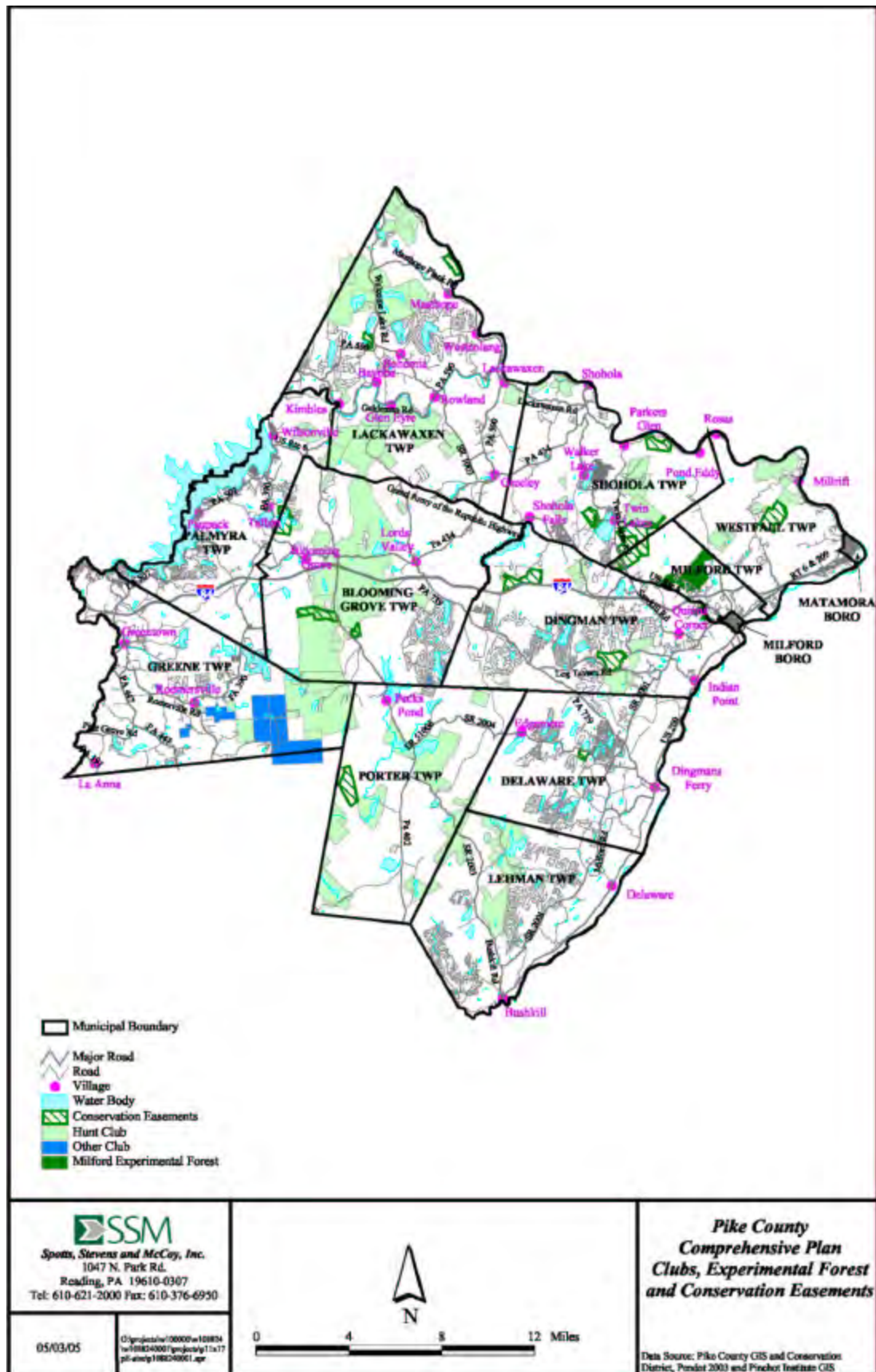
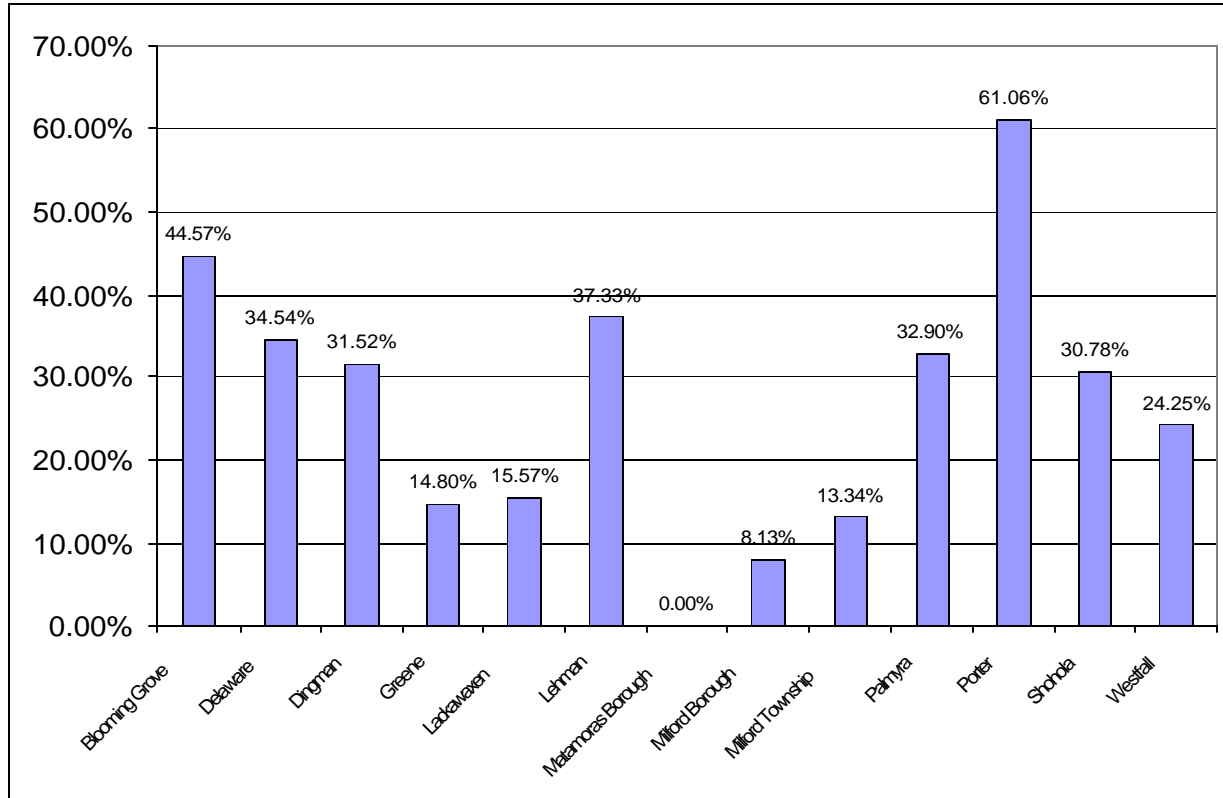


Table 19
Pike County/Municipal Public Land Acreage/Percentages

Municipality	Total Acres	Delaware State Forest (including Promised Land State Park)	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 Borough	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%



Source: DCNR, NPS, and Pike County GIS as of 5/24/06

Agricultural preservation is a current initiative in the County. The continuation of agricultural activities is particularly important to townships in western Pike County. There are also some notable unique agricultural productions disbursed throughout the County.

There are only two Boroughs in the County, Matamoras and Milford. Both of the Boroughs developed in traditional grid patterns, with traditional residential neighborhoods and main commercial streets. In recent years, commercial development located on the Rt6/209 corridor located between these two boroughs has impacted the region and altered the historic land uses.

There are smaller concentrations of land uses in village and hamlet settings scattered through the County, such as Greentown, Lackawaxen, Wilsonville, Shohola, Rowland, Masthope, Lords Valley, Millrift, LaAna, Paupack, Tafton, Greeley, Blooming-Grove, and Pond Eddy.

Table 20 LAND AREA IN PIKE COUNTY (Square Miles) – US Census Bureau	
Municipality	Area in Square Miles
Blooming Grove Township	75.3
Delaware Township	44.2
Dingman Township	58.2
Greene Township	60.2
Lackawaxen Township	78.6
Lehman Township	48.9
Matamoras Borough	0.7
Milford Borough	0.5
Milford Township	12.5
Palmyra Township	34.4
Porter Township	58.6
Shohola Township	44.7
Westfall Township	30.4
Pike County	547.2

Other than the Borough centers, major commercial areas include Route 739 south of Lords Valley, which continues to develop, Route 6 and Route 507 in the area of Wilsonville, the vicinity of the I-84 interchange north of Greentown, and the Route 6 and Route 6/209 corridor. Industrial land use is not a major category in the County. Relatively few industrial parcels are scattered throughout the County.

MAJOR RESIDENTIAL SUBDIVISIONS

Most of the residential development has occurred within large residential subdivisions scattered throughout the County. A majority of the townships have experienced the growth of residential development with most of the large subdivisions being approved during the 1960's and 1970's.

Infill within the large subdivisions from previous decades continues, but at a slower pace. A new period of subdivision of previously undeveloped large tracts for residential development is re-emerging, threatening retention of major open space parcels.

Private communities often started as second home developments and are generally managed by community associations, and have private street systems. Most of the

typical services are provided by the community association and not by the municipality. Second home conversion and community associations in general present many unique challenges to the County. Some of the challenges include:

- As many of the units were initially constructed as second homes, they may have not been built to the construction standards that would be applied to a year-round home constructed now under current building codes, including electric, sewage, water, insulation, etc.
- Infrastructure systems, particularly roads and storm drainage, may not have been subject to sufficient standards, inspection, and maintenance, and may not be adequate to handle the volumes of traffic, construction service vehicles traffic, and the volumes of stormwater that are experienced today and anticipated for the future.
- Since the residential community is private, they receive limited municipal services. Communities may have difficulty in funding appropriate services and making necessary infrastructure improvements. Residents pay association dues as well as municipal taxes.
- Developed as private communities, the subdivisions are typically not interconnected and have limited access points, which makes provision of emergency services more difficult.

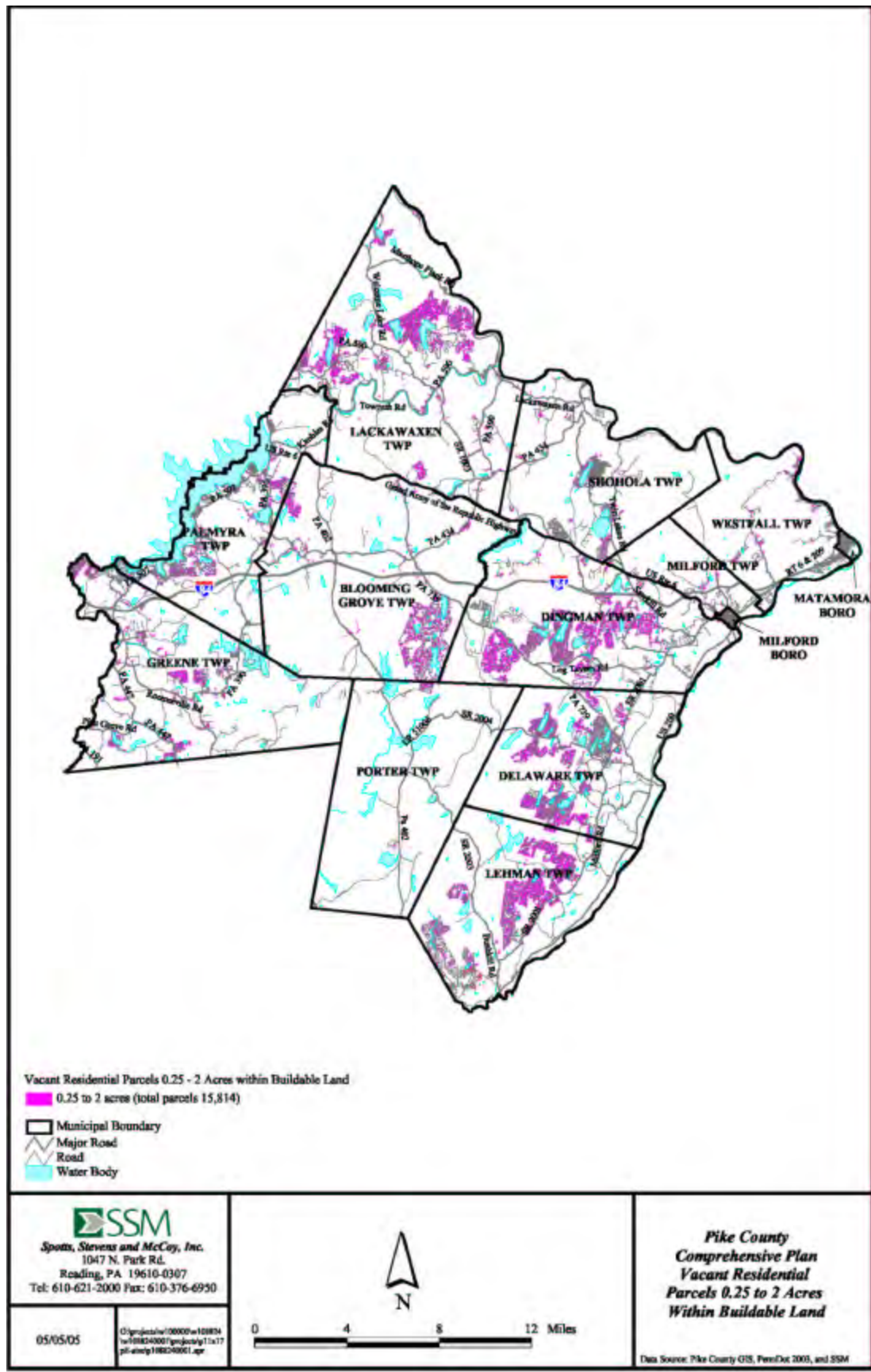
RECORDED SUBDIVISION PLANS

Appendix 15 contains a table of Pike County recorded subdivisions prepared by the Pike County Office of Community Planning. It indicates, by municipality, the subdivision name, owner/developer, approval date, acreage, lots, number of homes, whether there is community water or community sewer, and whether control is retained by the developer or a property owners' association. The table indicates:

- The recorded subdivisions encompass 55,886 acres, contain 61,074 lots, and 22,948 homes.
- The bulk of the lots are in very large subdivisions. There are 17 subdivisions of 1,000 lots or more.
- The largest development is Hemlock Farms with 4,226 lots. Saw Creek Estates contains 3,100, Wild Acres 3,044, Walker Lake 2,699, Birchwood Lakes 2,688, Masthope Rapids 2,500, Pocono Mountain Lake Estates 2,407, Fawn Lake Forest 2,076, and Pocono Ranchlands 2,000.
- Most of the largest developments are under the control of a property owners' association.
- The list indicates 61,074 lots and 22,948 homes. This is deceiving in that a number of the lots may have been combined, some of the property owners' associations are acquiring lots to retain as open space, and a number of lots are not suitable for building because of unsuitability for on-lot sewage disposal or other topographic conditions.

VACANT PARCELS

The next map indicates vacant residential parcels from 0.25 to 2 acres in size within buildable land (not on slopes exceeding 25% and not within wetlands, hydric soils or floodplains) in the County. There are 15,814 such parcels. There are some vacant residential parcels smaller than .25 acres. Most vacant residential parcels are not greater than 2 acres.



LARGE LANDOWNERS

Appendix 15 contains a list of land owners of parcels 200 acres or more in Pike County as of September 13, 2004. By far, the largest land owner in the County is the Commonwealth of Pennsylvania, with 97,517 acres. The second largest owner is the Blooming Grove Hunting and Fishing Club, with 19,557 acres. Third, is the United States of America (Delaware Water Gap National Recreation Area) 7,969 acres. Most of the following large property owners are hunting and fishing clubs, corporations, or community associations. A large number of private individuals are also included on this list.

A general class of ownership which comprises a significant amount of land in Pike County is camps, including YMCAs and YWHAs, Girl Scouts and Boy Scouts, and other camps. Some of the camp areas are vulnerable to future development as they are being marketed for future residential developments. Several camps and hunting clubs have sold to developers over the past 3 years.

BUILDING PERMIT ACTIVITY

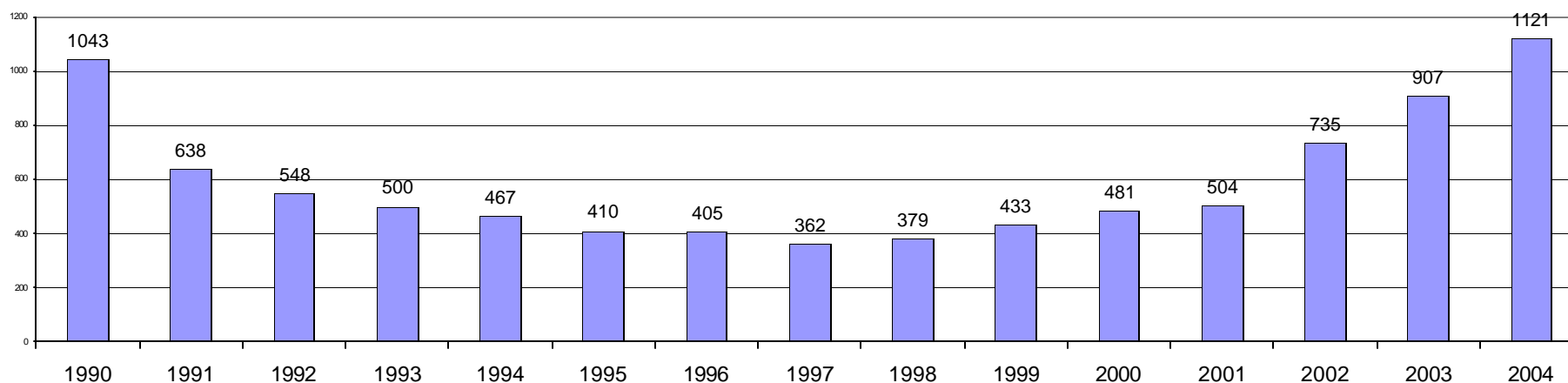
The following table indicates residential building permit activities in Pike County from 1990 to 2004 for the County as a whole and each municipality. The chart indicates County-wide residential permit activity. Charts for individual municipalities are provided in Appendix 15.

The number of permits issued per year declined steadily from 1990 to 1997. Since 1997, the number of building permits has increased steadily each year. In 2004, the total number of residential permits surpassed 1,000, a mark that was also met from 1986-1990. There was a slight slowing of residential permit activity for 2005; however, the numbers are projected to remain near the number approved for 2004.

Table 21
PIKE COUNTY, PA RESIDENTIAL BUILDING PERMITS - 1990-2004

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Blooming Grove	90	52	50	41	52	43	39	45	44	63	55	57	104	107	118
Delaware	109	80	65	45	29	26	39	31	50	77	90	79	101	100	143
Dingman	203	134	107	99	93	110	113	98	98	112	119	137	188	230	258
Greene	51	47	40	39	35	22	19	19	22	19	22	13	24	28	25
Lackawaxen	179	79	66	79	87	61	50	46	39	36	31	50	71	99	164
Lehman	307	178	133	125	105	87	103	76	63	62	101	87	125	186	223
Matamoras	1	4	2	0	2	3	1	2	3	5	1	4	4	6	5
Milford Boro	2	0	2	1	0	0	0	0	4	2	1	1	0	2	0
Milford Twp	10	10	13	8	15	8	5	9	7	8	7	9	23	25	32
Palmyra	60	32	37	27	29	24	21	16	25	21	21	34	48	60	76
Porter	6	4	7	8	4	6	2	0	8	7	8	5	12	18	23
Shohola	14	13	18	20	10	9	10	11	12	16	17	17	21	32	40
Westfall	11	5	8	8	6	11	3	9	4	5	8	11	14	14	14
Totals	1,043	638	548	500	467	410	405	362	379	433	481	504	735	907	1,121

Source: Pike County Board Of Assessment and Revision of Taxes & 21st Century Appraisals



RESIDENTIAL SALES PRICES

The average residential sales price in Pike County was relatively stable from July 1994 until June 1999. Since June 1999, the average residential sales price in the County has steadily increased to its highest level ever. In 2000, the average residential sales price was \$105,314 and by 2005 it grew to \$197,809 according to Multiple Listing Service (MLS) sales data, an 88% increase. These market driven prices are subject to the regional economy as well as availability and costs of housing in neighboring counties and states.

Table 22
Pike County MLS Sales

Year	Avg. Sale	Total # Sales	Total \$ Sales
2000	\$105,314	1496	\$157,549,244
2001	\$114,596	1545	\$177,051,542
2002	\$121,145	2175	\$263,490,557
2003	\$148,580	1973	\$293,148,394
2004	\$174,673	2210	\$386,027,479
2005	\$197,809	2095	\$414,409,182

Source: MLS data from Dynamic Data Systems and Bruce Motts, Appraiser

RESIDENTIAL AND COMMERCIAL TRENDS

As the population of Pike County has grown, second homes have been converted to permanent residences and new permanent residences have been constructed. The percentage of seasonal homes according to the US Census Bureau declined from 59.5% seasonal in 1990 to only 44.3% in 2000.

Commercial establishments have recognized the growing market to serve the needs of permanent residents as well as seasonal residents and tourists. The nature of commercial uses within the County has changed. More retail and service establishments are becoming year round businesses instead of seasonal businesses predominately serving the tourist trade. This is particularly evident along Route 6/209 in Westfall Township, where public sewer is available. Shopping centers and several major retail businesses have been constructed along this heavily traveled corridor. Several additional large freestanding retail establishments are currently under construction or are planned for construction to further serve the goods and services needs of the County's growing populace.

As the County's population continues to grow, residential and commercial structures will dot the landscape. It is imperative that best planning practices be utilized to preserve what the residents and visitors come to enjoy.

CHAPTER 14
INFRASTRUCTURE

CHAPTER 14 INFRASTRUCTURE

WATER SUPPLY

Clean water is required not only for basic human survival, but also for maintaining good health. With some exceptions, groundwater supplies underlying Pike County generally meet these needs for residents. However, it is a resource that is vulnerable to pollution from a variety of sources.

Pike County is 100% dependent on groundwater to meet its water needs. With the exception of bottled water originating from sources outside of the County, all water that is consumed at home, in school and in the work place originates as groundwater from private, community and municipal wells, and springs. Maintaining adequate and clean supplies of this resource is essential, not only in continuing to meet human demand, but also in supporting the County's economic sector and maintaining the health of the County's abundant and still largely intact Special Protection Watersheds.

The challenge lies in maintaining regional groundwater reserves in the face of continually increasing land development pressures. This challenge is made all the more clear and urgent with the realization that, for the last three and a half decades, Pike County has experienced a level of development distinguishing it as the fastest growing county in Pennsylvania and among the most rapidly developing in the nation. As residential and commercial development continues, more homes, buildings, roads and highways are built and more underground storage tanks and on-lot sewage treatment systems are installed. In addition, residents, through activities around the home, may unknowingly be contributing non-point source pollutants, including household hazardous wastes, to the groundwater they consume.

It becomes imperative that residents, government and non-governmental officials, and the business sector should make every effort to protect and plan for the long-term management of this critical resource.

General Water Quality

Pike County Water Quality Trends 1991-2001, prepared for the Pike County Conservation District, concluded:

"In general, water quality has been stable and good throughout the period of record. The presence of wastewater treatment plants in Pike County has had a slight but noticeable effect on water quality in the county, based upon the water sampling program. Negative effects include higher total phosphorus and nitrate nitrogen concentrations and an increase in fecal coliform bacteria. Positive effects include higher pH and dissolved oxygen concentrations. In general, countywide water quality has not changed over the period of record, but has been relatively good and stable since 1991. The biological monitoring program (macroinvertebrates) also shows that water quality was relatively stable from 1991 through 2000."

The 1991 USGS Groundwater Study, Geohydrology of, and Nitrogen and Chloride in, the Glacial Aquifer, Milford-Matamoras Area, Pike County, Pennsylvania, stated that the quality of water in the glacial aquifer is *“threatened because of contamination by salts and nutrients from septic systems and salts in roadway runoff.”* In a follow-up study, the Milford-Matamoras Groundwater Sampling Results 1981-2000, prepared by the Pike County Planning Commission and Pike County Conservation District, sampling results from wells in the area were presented. Generally, there were increased levels of Nitrate and Chloride from 1991 to 2000, but results varied with the different wells that were sampled.

The Pike County Water Resources Plan: Water Supply and Wellhead Protection Program of 1998 was conducted by the Pike County Office of Community Planning & Human Development and was performed to provide an evaluation of the existing and future viability of the County’s community water systems with respect to existing and projected future water demands. The plan recommended a variety of approaches to improve the ability of these systems to deliver water to existing and future residents. The plan indicated that:

“Groundwater quality in Pike County is generally very good and suitable for potable uses. The water is typically soft to moderately hard and slightly acidic to slightly basic in pH. There are some quality problems related to elevated levels in iron and manganese...”

Occasionally the presence of fecal coliform in groundwater in areas in close proximity to concentrations of on-lot sewage disposal systems is also a problem...

Fecal coliform contamination from on-lot sewage disposal systems is the single greatest contaminant problem encountered by on-lot water system users in the County. This problem is caused by a combination of factors, including inadequately sized sewage disposal fields, over-proximity to on-lot sewage disposal systems, failure to maintain and periodically empty septic tanks, and improperly sited and constructed wells...

There are numerous approved, but only partially developed, subdivisions throughout Pike County that are dependent on on-lot water and on-lot sewer. These are the areas of the County where there is perhaps the greatest potential for on-lot contamination of well water due to concentrations of development characterized by overproximity to on-lot sewage disposal systems and small sewage absorption fields.”

The Pike County Water Resources Plan also states:

*“A Water Resources Report prepared by the United States Geological Survey (Davis, 1989) indicated that large quantities of water probably flow through the Pike County groundwater reservoir. The County has a humid continental climate and has a long-term (1931-1981) average precipitation of 42 inches annually. In a normal year, about 992,000 gallons per day per square mile of water is recharged to County aquifers. Since Pike County is about 545 square miles in size, there are about **540 million gallons per day of groundwater resources on average available Countywide**. A majority of this groundwater resource would be available for potable water use...”*

The groundwater resources available in these geologic formations are generally adequate for both private and public supplies. This is due largely to the relatively high rate of precipitation (about 42 inches per year) across the County, which recharges the groundwater supply. Additional groundwater resources are available in the unconsolidated materials that line and fill the valleys of Pike County. Water in the unconsolidated materials can typically be withdrawn at higher rates than the geologic formations, but groundwater in the unconsolidated materials is more susceptible to contamination as these groundwater supplies are generally from shallow sources that can be more easily impacted by ground surface conditions.

...it appears there has been no decline in groundwater levels in Pike County. Even during the drought conditions of 1991, the groundwater supply was generally more than adequate and the Pike County Emergency Management Agency logged only limited reports of failing wells. However, with increased development occurring in the County, the available groundwater supply could be strained. In the future, conservation measures should be instituted to protect the water supply."

Water Usage

The Water Resources Plan inventory also stated:

"Total average daily water consumption for all uses in the County is approximately 7 million gallons per day (MGD) for 1996. Peak demand approaches 13 MGD..."

Fifty-nine (59) community water systems provide water to Pike County residents. Of these, fourteen (14) are actually just components of other systems in which they are interconnected and identified separately only for monitoring purposes by the state. In 1996, Pike County's water systems provided approximately 2.6 MGD in average daily water use with a total peak day water use of greater than 4.8 MGD. This difference is attributed to the large number of seasonal and thus high periodic peak populations of many of the County's residential developments. It is for this reason that peak water use, rather than average water use, more accurately depicts current system demand...

In addition, non-community water systems provide public water to primarily commercial, industrial, institutional and seasonal residential uses. The average daily water use for 141 County non-community water systems for which data is available is estimated at approximately 0.56 MGD."

Water Service Areas

The Water Facilities Map indicates public community water service areas, including two public systems. The Matamoras Municipal Water Authority utilizes wells and serves Matamoras Borough and portions of Westfall Township. The Milford Water Authority system uses springs and serves Milford Borough and portions of Dingman and Milford Townships. Some of the recommendations of the prior Water Resources Plan are listed in Appendix 19.



SANITARY SEWAGE DISPOSAL

Sewer Service Areas Map

The Sewer Service Areas map shows one public sewer service area, the existing and proposed service area of the Municipal Authority of the Township of Westfall. The map also shows community sewer service areas in developments which are served by private systems, the County Business Park, and the County Administration Center (served by a spray irrigation system).

Areas with moderate and severe limitations for on-site sewage disposal are also indicated. Soil suitability is based on the U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey database. Most of the County is classified as having severe limitations. Small areas of the County, mostly found along the Delaware River, are classified as having moderate limitations.

Westfall Township System

The Municipal Authority of the Township of Westfall (“Westfall Authority”) wastewater treatment plant (“WWTP”), which discharges to the Delaware River, has recently expanded its permitted capacity to 300,000 gallons per day. It serves both commercial and residential development in portions of Westfall Township. The Westfall Authority is currently seeking approval from both the Delaware River Basin Commission and the PA DEP to expand the WWTP to 820,000 gpd. The plant currently serves only Westfall Township, but Westfall Authority is continuing discussions with the Milford Authority to provide treatment for portions of Milford Township and Milford Borough, if a line can be constructed from Milford to Westfall Township along Route 6/209. Westfall Authority is also discussing a possible extension of its collection lines to serve Matamoras Borough. Milford and Matamoras Boroughs rely on on-site sewage disposal. The availability of public sewage disposal has helped spur commercial development along the Route 6/209 corridor in Westfall Township. PA DEP designated this facility as the regional sewage disposal facility. Discussions among the municipalities of Westfall, Matamoras, Milford Township, Milford Borough, and possibly Dingman Township should continue regarding a regional service area.



LIMITATIONS TO SEWAGE DISCHARGES IN THE COUNTY

Exceptional Value and High Quality Waters

The Pennsylvania Department of Environmental Protection has developed 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 use designations, such as cold water fishery, and water quality criteria necessary to protect these uses.

Special protection is provided for streams designated as high quality waters or exceptional value waters. Most streams in Pike County are classified as high quality waters. Bushkill Creek, Little Bushkill Creek, Deep Brook, Sawkill Creek, Adams Creek, and Toms Creek are designated exceptional value waters.

Delaware River

Neither the Lackawaxen River nor the Delaware River are classified as high quality or exceptional value. However, the Delaware River Basin Commission adopted regulations designed to protect existing high water quality in the 125-mile stretch of the Delaware River from Hancock, NY, to the Delaware Water Gap, which includes the full length of Pike County. The regulations require that the minimum level of wastewater treatment for all new and expanding wastewater treatment projects will be "Best Demonstrable Technology" that results in no harm to aquatic life, does not produce toxic chemical residue and results in effective bacterial and viral destruction. "Best Demonstrable Technology" is defined as tertiary level of treatment, including reduction in nutrients and high biochemical oxygen demand (BOD) removals.

Antidegradation Program of PaDEP (From PaDEP Water Quality Antidegradation Implementation Guidance, November 29, 2003)

For a new, additional, or increased point source discharge to an HQ or EV watershed, the person proposing the discharge is required to utilize a nondischarge alternative that is cost-effective and environmentally sound when compared with the cost of the proposed discharge.

If a nondischarge alternative is neither cost-effective nor environmentally sound, the person must use the best available combination of treatment, land disposal, pollution prevention, and wastewater reuse technologies and assure that any discharge is non-degrading, unless (in the case of HQ waters), DEP finds, after satisfaction of intergovernmental coordination and public participation requirements, that allowing lower water quality is necessary to accommodate important social or economic justification (SEJ) development in the areas in which the waters are located.

In addition, DEP will assure that cost-effective and reasonable management practices for nonpoint source control in HQ and EV waters are achieved. This process is known as the

antidegradation best available combination of technologies (ABACT) analysis. ABACT establishes a minimum level of performance for dischargers in HQ and EV waters based upon the more stringent of water quality-based effluent limits (WQBEL) or ABACT.

If ABACT produces a non-degrading discharge, the discharge can be approved in either HQ or EV waters. If implementation of ABACT would produce a degrading discharge, it cannot be used, without supplemental treatment, to ensure protection of existing quality in EV waters and could only be applied to HQ waters after approval of SEJ.

Additional information on nondischarge alternatives to HQ and EV waters, social and economic justification factors, and ABACT is presented in Appendix 14.

ENERGY CONSERVATION

There is an inter-relationship between land use, circulation, and energy conservation. Low density, single use, dispersed development can result in more vehicle trips, longer trips, and increased consumption of energy. Traffic congestion on roads can result in delays, which can result in wasting of fuel.

Governing bodies can also make information about energy saving measures available to residents and make a commitment to energy conservation programs at the County and Municipal level.

Policies that can promote energy conservation and minimize energy waste include:

- Making provision for **mixed-use development**, which can result in fewer and shorter trips.
- Utilizing a **compact development pattern** may also result in fewer and shorter trips. Designating growth areas in portions of the County, which are or could be served by public sewer and central water facilities, can encourage a compact development pattern.
- Where appropriate infrastructure is available, such as public sewer, central water, and adequate roads, **higher densities of development** would occur than in areas without adequate infrastructure.
- Encouraging use of a **bus system**, a para-transit circulator system, and park and ride facilities whereby reducing automobile trips.
- Implementing the transportation plan to **mitigate congestion** in the County, and resulting delays, can save fuel.
- Encourage development and design that is sited and designed to **maximize energy efficiency**.
- **Informing the public** about cost effective ways of cutting energy waste and costs can be accomplished through newsletters and literature.
- Allowing the use of cost-effective, safe and environmentally sound **renewable energy resources** can be considered.
- At the government level, implementing **energy use reduction programs** can reduce consumption and increase energy efficiency.
- Encouraging **telecommuting** can reduce vehicle trips.

CHAPTER 15
TRANSPORTATION

CHAPTER 15 TRANSPORTATION

As the County's population continues to grow and traffic volumes continue to increase, it is critical to work to prevent decline of the County's transportation system and proactively work to improve the system. Crucial to maintaining and enhancing the transportation system is implementing corridor improvement programs. State and federal road corridors are key elements in moving traffic from residential subdivisions to destinations within and outside the County, carrying through traffic, serving tourists, connecting centers within the County, and providing access to commercial development.

EXISTING CONDITIONS

The key to the County's growth and development is access, and the key to access is the transportation network serving the County. Since Pike County is not served by any mass transit systems, roads and highways carry visitors and commuters in and out of the County. As more second homes are converted to permanent residences, Pike County's commuter traffic, with employment destinations in the metropolitan areas of New Jersey and New York, will only increase. In fact, the U.S. Census reports that 72% of the Pike County workforce commutes outside the County with 48% of those commuters traveling outside of the Commonwealth. As one might expect, the automobile, including driving alone or carpooling, comprised 91% of the means of transportation to work. More Pike County residents walked to work (four percent) than used public transportation (one percent), while three percent worked at home. The data is clear; Pike County workers rely on the automobile as their chief means of transportation.



Outside of Matamoras and Milford, much of the residential development is in private communities with private road systems maintained by community associations. These communities tend to have limited access points for the number of units they contain, and are not interconnected to other developments. This can result in difficulties in providing emergency services to the developments. It also means that many residents are dependent upon the resources of their community associations for development road upkeep in order to access the public road system. Many of these roads were initially

constructed substandard, cannot hold up to the construction equipment and trucks that use them, and are in poor condition.

The primary road corridors within the County, other than I-84, are Route 6, Route 209, Route 6/209, Route 739, SR 2001, Route 507, Route 402, Route 390, as well as Route 191, Route 447, Route 590, Route 434, SR 1005 (Twin Lakes Road), SR 2004 (Silver Lake Road), SR 2006 (Log Tavern Road), and SR 2003 (Bushkill Falls Road). As these are all State roads, the ability of PennDOT to maintain roads as passable, especially during the winter months, is very important for mobility within the County.

The large number of people who live in Pike County and work elsewhere, particularly metropolitan New York and New Jersey, results in increasing volumes on those roads which lead to those areas or transit facilities which provide access during morning and evening peak periods. The automobile is the primary means of travel in the County.

TRENDS

- There are a number of **scenic drives** within the County due to the beautiful rural landscapes. There are also a number of roads within the County which have narrow cartways or no shoulders. It is necessary to strike a balance between maintaining the scenic, rural character of roads and providing for safe travel.
- During the **summer tourism season**, the County experiences increased traffic volumes. The 1992 County Comprehensive Plan applied a 1.7 multiplier to AADT to estimate summer traffic volumes. The US6/209 corridor as well as Route 507 and Route 739 are particularly subject to congestion in the summer months.
- The **increasing congestion** within the Route 6/209 corridor has drawn much attention, including the US 6/US 209 Congested Corridor Improvement Program (CCIP) study, but other corridors such as Route 739, Route 6, and Route 507 are likely to become further congested as additional commercial and residential development occurs. The US 6/209 corridor was nominated for the CCIP due to population and retail growth over the last 20 years. Weekend travel is particularly difficult, 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.
- Within corridors, particularly those with areas of vertical alignment constraints and acute intersections, **intersection improvements** are important to facilitating mobility. Managing access is also important to prevent congestion. Typically, as access decreases, mobility increases.

TRANSIT SERVICES

Rail

A recently upgraded rail line from Port Jervis, NY to New York City, NY (MTA – Metro-North Railroad) provides transportation services to many Pike County residents. The 2500 daily riders in January 2004 are expected to increase to 7500 within a few years. The Norfolk Southern (Conrail) line which passes through the County from Millrift to north of Masthope provides interconnections between Binghamton NY and New York City. The Stourbridge Line runs from Honesdale in Wayne County through Hawley and Lackawaxen and provides limited commercial rail and is primarily utilized by the Wayne County Chamber of Commerce for visitor excursions and a new steel fabrication facility.

Airports

Pike County has relatively easy access to a number of international airport options located in the region. Although not located within Pike County, Stewart International Airport in Newburgh, NY; Lehigh Valley International Airport in Allentown, PA; Wilkes-Barre/Scranton International Airport in Avoca, PA; and numerous airports in the New York City, NY region provide service to destinations throughout the US and worldwide.

Taxi/Van/Bus

Taxi service is available to most parts of Pike County through existing businesses in Port Jervis, NY; Milford, Blooming Grove, Dingmans Ferry, and Lehman Township. Van Service (Pike Area Agency on the Aging) is provided for senior citizens and, in certain cases, the general public. This service is predominately for medical appointment transport and essential shopping needs. The Shortline Bus Line (Port Jervis, NY, Westfall Township and Lords Valley, PA) also provides important commuting services to residents via connections to Scranton, Stroudsburg, and New York City, NY.

Delaware River Joint Toll Bridge Commission

The Delaware River Joint Toll Bridge Commission is currently completing a Northerly Crossing Corridor Congestion Mitigation Study of the Milford-Montague Delaware River bridge crossing. The Final Technical Memorandum #2 presents the results of Milford-Montague bridge area traffic analysis shown below. Recommendations will be forthcoming. LOS is level of service. A=best, F=worst, V/C ratio=volume to capacity

Table 23

MILFORD-MONTAGUE TRAFFIC ANALYSIS RESULTS					
Location	Analysis Type	Peak Hour	LOS	Max V/C Ratio	Max Delay (seconds)
Milford-Montague Bridge	Two-Way Two-Lane Highway	AM	C	0.19	N/A
		PM	C	0.28	N/A
		Weekend	D	0.39	N/A
Route 206/River Road (NJ)	Unsignalized Intersection	AM	A	0.02	9.1
		PM	A	0.06	9.7
		Weekend	A	0.07	9.9
Route 206/Deckertown Road/ Old Mine Road (NJ)	Unsignalized Intersection	AM	B	0.22	14.3
		PM	C	0.34	21.1
		Weekend	E	0.66	48.2
Route 206/SR 209 (PA) (Left turn from Bridge on SR 209 SB)	Unsignalized Intersection	AM	C	0.27	23.6
		PM	C	0.21	20.4
		Weekend	F	1.00	454.2
Route 206/SR 209 (PA) (Right turn from Bridge on SR 209 NB)	Unsignalized Intersection	AM	A	0.18	9.9
		PM	B	0.57	13.8
		Weekend	C	0.65	18.9

Traffic analysis results indicate that the Milford-Montague Bridge and surrounding intersections operate at LOS C or better during the Weekday AM and PM Peak Hours. Analyses show that motorists on the bridge and at the unsignalized intersections experience little or no delay during the peak hours. Traffic analysis results indicate that during the Summer Weekend Peak Hour, the Route 206/Deckertown Road/Old Mine Road intersection (NJ) and Route 206/SR 209 (Left turn from Bridge to SR 209 SB) operate at LOS E or worse. In both cases the critical left-turn movements have low volumes but must wait a considerable amount of time for other traffic movements to clear the intersections.

Transportation demand management techniques are difficult to apply in the County at this time because much of the commuting traffic is directed to locations outside the County. Compounding this difficulty is the peak periods of traffic that are largely associated with the County's recreation/resort/second home destinations and how the time of year equates to differing capacities. These traffic volumes will continue to grow in the County as the population continues to increase and retail and service establishments locate to serve the residents and visitors to the County. Finally, increased volumes can be expected due to potential trip-end generators that include the Pike County Business Park, Mountain Laurel Center, identified County and municipal Conceptual Growth Areas, and new and proposed residential developments.

The roads experiencing the largest volumes of traffic in the County are likely to experience the greatest development pressure and traffic volume increases. The volume is high since they move commuters, seasonal residents, and tourists to and from the

County and access the major residential subdivisions. Routes 6, 739, 507, and 6/209 are particularly important. Potential for development along Route 6 is significant. Route 739 has experienced extensive residential and commercial development and is likely to continue to do so. Routes 507 and 6/209 have experienced significant commercial, tourist, and residential development, and infill will continue.

No major State or Region-wide significance road building projects are anticipated in the County, and this makes it even more important to maintain and improve the arterial and collector road system that exists in the County.

FUNCTIONAL CLASSIFICATION OF ROADS

The following road classification is based upon PennDOT classifications and prior road classifications in the County:

Principal Arterial/Interstate

These roads provide interregional and interstate connections, are designed for unrestricted, high speed mobility of traffic, and have limited access only. Principle Arterial/Interstate provide no direct access from private property. Principal arterials/interstates provide the highest level of mobility, intersect with selected arterial or collector routes by means of interchanges, and carry the highest volumes of automobile and truck traffic with longer trip lengths. Most origins and destinations are from outside of the County.

Principle Arterial/Interstate

- Interstate Route 84 - *I-84 is the principal east-west route through the County and carries substantial volumes of through traffic. Interchanges are located at Route 6/209 in Westfall Township, Route 6 in Milford Township, at Route 739 and Route 402 in Blooming Grove Township, Route 390 in Palmyra Township, and Route 507 in Greene Township.*

Principal Arterial/Other, Minor Arterial

These roads provide connections between commercial and population centers in the County and connections between the County and adjoining communities, counties and states. This classification carries larger volumes of traffic at relatively high speeds, serves a mix of local and through traffic, carries low volumes of through truck traffic, and provides moderate to high levels of mobility. Access is limited by PennDOT highway occupancy permits and local zoning and subdivision ordinances. Typically, access is provided to larger parcels of property and private communities.

Principal Arterial/Other

- Route 209 from the Milford Montague Bridge to I-84 via Route 6
- Route 6/209 from the Delaware River to the Matamoras I-84 interchange
- Route 6/209 within Milford Borough

These roads are major commuting, second home, and tourist routes, provide access to the activity centers in and between the Boroughs, and access I-84. A steady flow of traffic is experienced through the center of the Boroughs of Milford and Matamoras.

Minor Arterial

- Route 6/209 from Matamoras I84 interchange to Milford. *Route 6/209 connects the two Boroughs and continues to develop as a major commercial and activity center.*
- Route 6 from Milford to the western County line. *Milford is the County seat and a commercial center. The Delaware Valley School complex and an increasing number of commercial enterprises are located between the Boroughs.*

- Route 209 Milford to Bushkill. *Route 6 is the County's other major east-west route and provides access to and from residential areas, and serves as a through route to the Lake Wallenpaupack area and Wayne County. The area of Wilsonville has developed commercially and contains the Wallenpaupack Area schools. Route 209 serves as a link between the mid-Atlantic states and New England and as access to the Delaware Water Gap National Recreational Area.*
- Route 739 from the Dingmans Choice Bridge to I-84. *Route 739 is a major commuting route from the subdivisions along it to the New Jersey metropolitan areas. It is becoming more commercialized in the Lords Valley area, serving residences and visitors in the central portion of the County. Route 739 also provides access to tourist destinations in the northern portion of the County and to I-84 and Route 6.*
- Route 402 *Route 402 provides a connection to the Marshall's Creek area and points south in Monroe County, to major recreational resources, and to I-84 and Route 6.*
- Route 390 *Route 390 provides access to Promised Land State Park, I-84, and the Lake Wallenpaupack area, connecting to Route 507.*
- Route 507 *Route 507 connects to I-84 and Route 6. It provides access to residential, recreational, and commercial development, and is the primary means of accessing Lake Wallenpaupack.*
- Route 191 *Route 191 cuts through the southwest corner of the County. It runs from Easton to Stroudsburg, to Hamlin, and is one means of traveling from I-80 to I-84.*

Major Collector/Minor Collector

Collector roads collect traffic from local streets for connection of residential areas to commercial and activity centers and arterials. They serve moderate levels of traffic at reduced speeds, serve more locally oriented traffic and less through trips, and carry primarily only "local delivery" truck traffic. Access is typically from smaller and more numerous properties. Access is limited by local municipal and PennDOT highway occupancy permits and local zoning and subdivision ordinances. Collectors provide reduced levels of mobility.

Major Collectors

- SR 2001 Milford Road *SR 2001 is a major intra-county connector of residential developments to Routes 6, 739 and 209, from Bushkill to Milford.*
- Route 739 between I-84 and Route 6 *Route 739 provides a connection between I-84 and Route 6. It connects to New Jersey via the Dingman's Choice Bridge.*
- Route 590 from Route 434 to the western County line *Route 590 provides a connection between Greeley, Lackawaxen, Rowland, and Hawley in Wayne County.*
- Route 434 *Route 434 connects Shohola to Greeley, Route 6, and Route 739 in Lord Valley. The County Business Park is located along Route 434 South of Route 6.*
- SR 1005 Twin Lakes Road *SR 1005 Twin Lakes Road connects Shohola and residential development in Shohola Township to Route 6.*
- SR 2006 Log Tavern Road *SR 2006 Log Tavern Road connects Route 739 and SR 2001 and provides access to subdivisions and community facilities.*
- SR 2003 Bushkill Road *SR 2004 Bushkill Falls Road connects SR 2001 to Route 402. It provides access to residential development, major resorts, the Mountain Laurel Center for the Performing Arts, and the East Stroudsburg School District North Campus.*

Minor Collectors

- SR 2004 Silver Lake Road *SR 2004 Silver Lake Road collects traffic from a number of subdivisions, and connects Route 402, SR 2001, and Route 739.*
- SR 4003 Welcome Lake Road *SR 4003 Welcome Lake Road provides access to resorts and connects Route 590 to Wayne County and the Narrowsburg, New York area.*
- Route 447 *Route 447 connects to Monroe and Wayne Counties and the Greentown area and is experiencing a growing volume of commuter traffic.*
- SR 3002, Roemerville Road *SR 3002 Roemerville Road provides access from Route 390 to the Greentown area.*
- SR 3001, SR 3004 Hemlock Grove Road *SR 3001/SR 3004 Hemlock Grove Road connects Route 447 to Route 507 and provides access to the Greentown area.*
- SR 4001 Ledgesdale Road *SR 4001 Ledgesdale Road provides access to destinations near Lake Wallenpaupack and provides a southern connection from Route 507 into Wayne County.*

Local Road

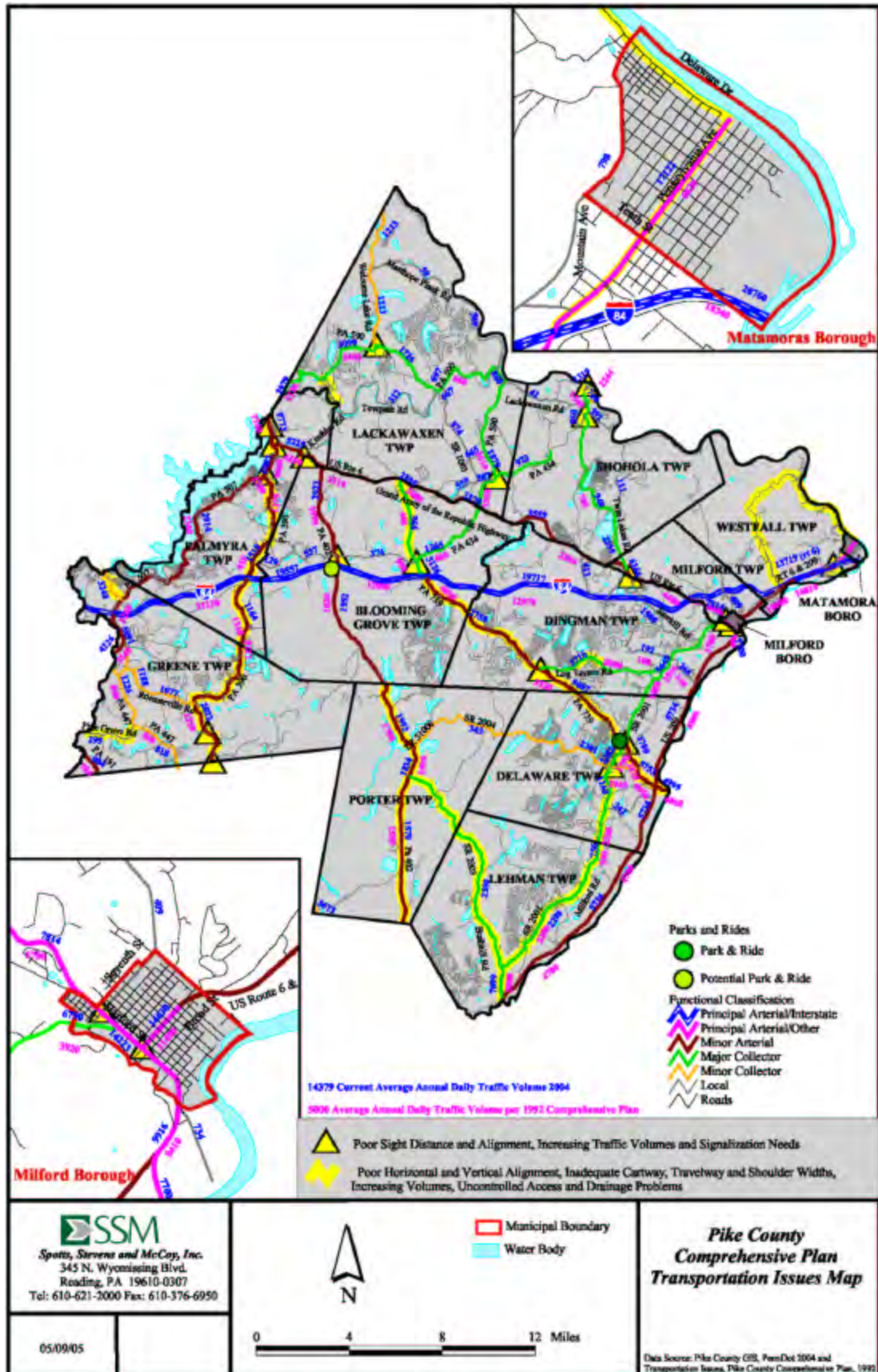
Local roads provide connection of residential properties and communities to collectors, serve the lowest levels of traffic at slowest speeds, and provide a high level of access from smaller residential parcels or areas with little development. Local roads carry local trips primarily with few through trips and carry minimal local delivery truck traffic.

Table 24
TRAFFIC VOLUME COMPARISONS 1992 TO 2003

Range of Traffic Volumes at Comparable Locations			Highest Traffic Volumes	
Road	1992 Comprehensive Plan AADT	2003 PennDOT AADT	1992 Comprehensive Plan AADT	2003 AADT
I-84	11,120 to 18,340	15,919 to 23,957	18,340	23,957
Route 6/209	6,820 to 11,400	13,000 to 14,000	11,400	16,183
Route 6	2,000 to 7,740	2,854 to 9,236	7,740	15,000
Route 739	460 to 5,550	966 to 5,455	5,550	5,500
SR 2001	1,850 to 3,700	1,829 to 6,495	5,000	6,709
Route 209	4,000 to 4,780	5,485 to 6,000	4,780	6,000
Route 507	2,260 to 6,640	3,403 to 6,000	6,640	6,000
Route 434	400 to 2,240	1,265 to 900	2,240	1,246
Route 390	1,100 to 1,210	2,056 to 1,911	1,210	2,056
Route 402	1,020 to 1,990	1,867 to 2,525	2,000	2,525
Route 590	660 to 1,610	745 to 1,965	1,610	2,979
Route 447	560 to 840	1,454 to 1,170	840	1,947
Route 191	784	864	784	864

AADT = Average Annual Daily Traffic Volume

The range of traffic volumes provides volumes available for comparable locations both in 1992 and 2003. The highest traffic volumes indicate the peak volumes for those roadways. The highest traffic volume may not appear in the range of volumes because there may not be volumes available for both 1992 and 2003 where the highest volumes occur.



TRANSPORTATION IMPROVEMENT PLAN (TIP)

The Pennsylvania Department of Transportation (PennDOT) is responsible for programming for all modes of transportation, providing a liaison with Pike County's local development district, the Northeastern Pennsylvania Alliance, coordinates with Pike County and regional agencies on transportation long range planning and short range programming (Transportation Improvement Program/Statewide Transportation Improvement Program) issues, and works to develop long range plans and short range programs and to address project-specific issues.



A TIP is developed in each Metropolitan Planning Organization, Rural Planning Organization, and Independent County and lists all highway, bridge, and public transportation projects for which federal and state capital funds are anticipated. The following are key aspects of the TIP:

- The TIP is the agreed upon multi-modal list of specific priority projects.
- The TIP is four years in length – based on the federal fiscal year (October 1st to September 30th).
- The TIP must be fiscally constrained by year – based on resources that can reasonably be expected to be available.
- Large projects can be programmed over multiple years, consistent with their cash flow requirements.
- The TIP must be updated every two years.
- The public must be involved in TIP development.
- The TIP may be modified or amended.
- All TIPs are incorporated into the Statewide TIP (STIP).
- The Federal Highway Administration, the Federal Transit Administration and the Environmental Protection Agency approve the STIP.
- The STIP is the first four years of the Twelve Year Program.
- Development of the TIPs and STIP is coordinated with the State Transportation Commission and elected officials.
- The TIP must conform to air quality standards established by the Clean Air Act Amendments of 1990 – if an area is designated as not meeting air quality standards.

In working under the above key aspects of the TIP, the Pike County Board of Commissioners, with assistance and direction provided by municipal officials and the

Pike County Road Task Force, proposed numerous existing and new projects to be included on the 2007-2010 TIP that is anticipated to be approved in 2006. Pike County's road network consists of numerous routes deemed "High Priority" by the Pike County Road Task Force and currently listed on the TIP. The Pike County Road Task Force also prioritized projects for "Inclusion Consideration" to PennDOT's TIP.

Pike County's High Priority projects, currently listed on the TIP include:

1. Milford-Bushkill #1 – SR2001
2. Milford to Matamoras – US6/209
3. Well Road Relocation – Rt434
4. Pond Eddy Crossing – SR1011

It is imperative that these high priority projects get appropriate funding and are implemented as soon as possible. The Milford-Bushkill project impacts nearly half of the County's population and is a main arterial for the traveling public. The final sections of this project, south of the SR2001/Rt739 intersection, need immediate attention and funding for implementation and construction. The Well Road Relocation project impacts a recently approved County Business Park and is instrumental for future County economic growth, as well as safety needs. The Pond Eddy Crossing project is currently in the planning stage, and construction needs to be expedited.

In an effort to assess the transportation needs of the County, the Pike County Board of Commissioners and the Pike County Office of Community Planning initiated discussions with municipal officials representing Pike County's 11 Townships and 2 Boroughs. The projects requested by those municipal officials were, in turn, discussed and prioritized by the Pike County Road Task Force. The following projects listed for Inclusion Consideration are all considered priority projects by the individual municipal officials. These projects are identified as an immediate need via municipal Comprehensive Plans and/or the County's Comprehensive Plan. Serious consideration is needed for funding these County-wide transportation needs.

Pike County's Inclusion Consideration projects for addition to the TIP are:

- | | | |
|-----|-----------------|---|
| 1. | SR2004 | Silver Lake Road – from Rt402 to Rt739 |
| 2. | Rt390 | Promised Land Road – from Rt507 to I84 |
| 3. | I84 Interchange | SR4001 – Raymondskill Road underpass |
| 4. | SR1005 | Twin Lakes Road – from SR1007 to Rt434 |
| 5. | SR2006 | Log Tavern Road – from SR2001 to Rt739 |
| 6. | Rt402 | North of I84 to US6 |
| 7. | SR4006 | Towpath Road – from Rt590 to Rt590 |
| 8. | Rt434 | Well Road – US6 to Rt739 – consider add to #47968 |
| 9. | SR1017 | Delaware Drive – from US6/209 to Millrift |
| 10. | SR2017 | Foster Hill Road – from Milford Borough to I84 |
| 11. | SR1013 | Cummins Hill Road – US6/209 to T434 |
| 12. | Rt590 | SR4006 to T367 |
| 13. | SR4001 | Ledgedale Road – Wayne Co. Line to Rt507 |

The above-listed roadways would benefit from a series of upgrades including drainage improvements, widening, straightening, shoulder improvements as well as overlays. These roadway projects are in need of serious and immediate attention. The addition of a new I84 interchange off of Raymondskill Road would provide direct access to the population centers of Dingman Township and surrounding municipalities and may reduce congestion concerns in Milford Borough.

With the County's growth issues and transportation needs also come questions as to how to address the situations and how to implement the appropriate solutions. Studies are needed to determine appropriate courses of action to alleviate traffic, improve signage and signalization, increase safety, and provide adequate parking facilities, etc. Identified via our municipal inquiry were 4 locations that would benefit from in-depth planning studies.

Pike County's Traffic Planning Studies that are in need of inclusion:

1. Milford Borough – US6/209 - Traffic (O&D), signage, signalization, parking, bypass
2. Matamoras Borough – US6/209 - Traffic (O&D), signage, signalization, parking
3. Delaware/Dingman/Blooming Grove Townships – Rt739 - Traffic & Safety
4. Greene Township – Roemerville Road SR3002 – Traffic & Safety

Milford and Matamoras Boroughs have similar concerns due to traffic increases. Although a Congested Corridor Improvement Program was performed for the 6.79-mile stretch between the two municipalities, the Borough's themselves were not included and are in need of studies to address and recommend appropriate courses of action. An Origin & Destination plan may appropriately address the concerns of Borough officials.

Route 739, a main arterial serving the municipalities of Delaware, Dingman, and Blooming Grove, is a heavily traveled and ever growing Commercial corridor. This route has consistently been of concern due to the numerous accidents and snow conditions that exacerbate the driving conditions and endanger thousands of school children traveling this route on a daily basis. Roemerville Road (SR3002) located in Greene Township is a rural roadway that has been experiencing numerous accident reports and involves abundant s-curves, improper banking, and drainage problems.

With the growing population in the County, implementation and construction of these projects is paramount to the safety of our residents and visitors. These and future projects are needed to further support the County's efforts to maintain and enhance the transportation infrastructure needs that are vital to the County's overall quality of life, traveling safety, and economic prosperity.

COMMUTING DATA AND TRENDS

Pike County had the highest mean (average) travel time for commute to work of any County in Pennsylvania in 2000. The mean travel time for the County was 46 minutes. The mean travel time for Pennsylvania and the United States was 25 minutes. The longest mean travel times in the County were in Lehman Township (60 minutes), Dingman Township (53 minutes), Delaware Township (51 minutes), and Blooming Grove Township (47 minutes). This lengthy travel time shows the daily commute that many residents make to the employment centers of New York and metropolitan New Jersey.

Table 25

TRAVEL TIME TO WORK IN MINUTES 2000						
	Percent of Commuters					
	Under 15	15-29	30-44	45-59	60-89	90 or More
Pennsylvania	30.4	36.1	18.4	7.6	4.9	2.6
Pike County	19.6	20.3	18.2	11.3	12.0	18.7
Blooming Grove Twp.	23.6	21.0	14.4	8.9	10.3	21.8
Delaware Township	9.6	14.3	19.9	17.5	21.1	17.7
Dingman Township	10.4	17.6	22.1	13.0	13.9	23.1
Greene Township	22.3	23.5	19.1	17.5	8.3	9.4
Lackawaxen Township	27.9	29.3	14.0	6.7	9.0	13.0
Lehman Township	10.1	18.4	16.5	8.1	13.1	33.9
Matamoras Borough	43.0	20.6	15.3	10.5	3.6	7.1
Milford Borough	46.0	19.7	14.1	7.9	6.4	5.8
Milford Township	33.5	25.3	14.3	5.8	8.4	12.7
Palmyra Township	29.4	25.4	22.5	9.4	5.5	7.9
Porter Township	17.5	22.2	21.6	9.4	14.0	15.2
Shohola Township	14.0	26.4	17.7	13.7	12.0	16.2
Westfall Township	40.0	20.8	16.5	6.9	7.4	8.4

In 2000, 11% of Pike County commuters had a commute of 45-59 minutes (for Pennsylvania the percentage was 7.6%), 12% of the commuters had a commute of 60-89 minutes (5% for Pennsylvania), and 19% had a commute of 90 minutes or more (3% for Pennsylvania). For Monroe County, the percentages were 8%, 8%, and 13%, respectively.

Those that experience long commutes out of the County experience a reduction in the quality of life because of time lost commuting, the physical and mental toll of the commute, the cost of the commute, time away from family, stress on children who have less time with parents, and likelihood of reducing commitment to and participation within the community. Creation of family sustaining jobs in the County can help address the travel time to work issue.

Relocation of retirees and commuting workers to the County can have impacts on municipal budgets. Services that were experienced in metropolitan areas are anticipated upon relocation to Pike County. This expectation strains the County, municipal, community and volunteer organizations that provide services to the County's residents.

In 2000, 91% of Pike County workers went to work by car, truck, or van. Only 3% used public transportation (including taxi). Two percent (2%) walked and 3% worked at home. These statistics denote the high reliance on the personal automobile as the main means of travel in a 100% rural county.

Table 26
2000 RESIDENCE COUNTY
to WORKPLACE COUNTY
FLows

Residence County	Workplace County	Count
Pike Co. PA	Pike Co. PA	5,464
Pike Co. PA	Orange Co. NY	1,976
Pike Co. PA	Wayne Co. PA	1,928
Pike Co. PA	Monroe Co. PA	1,841
Pike Co. PA	Sussex Co. NJ	1,662
Pike Co. PA	Morris Co. NJ	1,218
Pike Co. PA	New York Co. NY	1,004
Pike Co. PA	Bergen Co. NJ	412
Pike Co. PA	Essex Co. NJ	373
Pike Co. PA	Lackawanna Co. PA	344
Pike Co. PA	Kings Co. NY	300
Pike Co. PA	Passaic Co. NJ	234
Pike Co. PA	Queens Co. NY	208
Pike Co. PA	Hudson Co. NJ	179
Pike Co. PA	Union Co. NJ	177
Pike Co. PA	Warren Co. NJ	169
Pike Co. PA	Sullivan Co. NY	162
Pike Co. PA	Bronx Co. NY	157
Pike Co. PA	Northampton Co. PA	111
Pike Co. PA	Westchester Co. NY	97
Pike Co. PA	Middlesex Co. NJ	96
Pike Co. PA	Somerset Co. NJ	94
Pike Co. PA	Richmond Co. NY	94
Pike Co. PA	Luzerne Co. PA	93
Pike Co. PA	Rockland Co. NY	90
Pike Co. PA	Nassau Co. NY	80
Pike Co. PA	Lehigh Co. PA	76
Pike Co. PA	Suffolk Co. NY	59
Pike Co. PA	Columbia Co. PA	40
Pike Co. PA	Bucks Co. PA	40
Pike Co. PA	Dutchess Co. NY	33
Pike Co. PA	Ulster Co. NY	31
Pike Co. PA	Monmouth Co. NJ	31
Pike Co. PA	Ocean Co. NJ	27
Pike Co. PA	Hunterdon Co. NJ	27
Pike Co. PA	Philadelphia Co. PA	26
Pike Co. PA	Montgomery Co. PA	24
Pike Co. PA	Fairfield Co. CT	21
Source: US Census Bureau		

CHAPTER 16

POPULATION AND HOUSING DATA AND TRENDS SUMMARY

CHAPTER 16 POPULATION AND HOUSING DATA AND TRENDS

POPULATION DATA AND TRENDS

Pike County's population has been steadily growing for decades. With Pike County's proximity to the New York-New Jersey metropolitan area, many new residents recognized the quality of life and affordable housing costs in making their decision to relocate in Pike County. This trend continues. The total population change from 1960 to the year 2000 decennial census was 406%, from 9,158 residents in 1960 to 46,302 in 2000. Most of the increase that the County experienced over this period was derived from net migration from the NY-NJ urban center. In comparison to Pike County's 65.6% population increase over the last decade, the population of Pennsylvania rose only 3.4%. Pike County's growth was 29.1% from 1960 to 1970, 54.6% from 1970 to 1980, 53.1% from 1980 to 1990, and 65.6% from 1990 to 2000.

Table 27

PIKE COUNTY POPULATION CHANGE (1960-2000)										
County or Municipality	1960	1970	% Change 60-70	1980	% Change 70-80	1990	% Change 80-90	2000	% Change 90-00	% Change 1960 -2000
Pike County	9,158	11,818	29.1	18,271	54.6	27,966	53.1	46,302	65.6	405.6
Blooming Grove Twp	424	548	29.25	1,176	114.6	2,022	71.9	3,621	79.1	754.0
Delaware Twp	549	671	22.22	1,492	122.35	3,527	136.4	6,319	79.2	1051.0
Dingman Twp	382	518	35.6	1,855	258.11	4,591	147.5	8,788	91.4	2200.5
Greene Twp	793	1,028	29.63	1,462	42.22	2,097	43.4	3,149	50.2	297.1
Lackawaxen Twp	1,068	1,363	27.62	2,111	54.88	2,832	34.2	4,154	46.7	289.0
Lehman Twp	318	624	96.23	1,448	132.05	3,055	111.0	7,515	146.0	2263.2
Matamoras Borough	2,087	2,244	7.52	2,111	-5.93	1,934	-8.4	2,312	19.5	10.8
Milford Borough	1,198	1,190	-0.67	1,143	-3.95	1,064	-6.9	1,104	3.8	-7.8
Milford Twp	386	418	8.29	633	51.44	1,013	60.0	1,292	27.5	234.7
Palmyra Twp	651	1,204	84.95	1,722	43.02	1,976	14.8	3,145	59.2	383.1
Porter Twp	51	88	72.55	277	214.77	163	-41.2	385	136.2	654.9
Shohola Twp	413	574	38.98	986	71.78	1,586	60.9	2,088	31.7	405.6
Westfall Twp	838	1,348	60.86	1,825	35.39	2,106	15.4	2,430	15.4	190.0

Source: US Census Bureau

One factor that impacts the continued population growth is the conversion of seasonal homes to year round homes. As residential developments were created in the County, a majority of the homes built within these communities were utilized for seasonal or recreational use, commonly referred to as "second homes". Over time, many new

residents moved into the County permanently and these second homes reverted to year round habitation further escalating the County's population.

Table 28

SURROUNDING COUNTIES and PIKE COUNTY MUNICIPAL POPULATION COUNTS					
	1990 Census Population	2000 Census Population	% Change in Population	2004 Estimate	Estimated % Change 2000- 2004
Carbon County, PA	56,846	58,802	3.4%	61,194	4.1%
Lackawanna Co., PA	219,039	213,295	-2.6%	209,932	-1.6%
Luzerne County, PA	328,149	319,250	-2.7%	313,431	-1.8%
Monroe County, PA	95,709	138,687	44.9%	158,925	14.6%
Pike County, PA	27,966	46,302	65.6%	54,117	16.9%
Schuylkill County, PA	152,585	150,336	-1.5%	147,913	-1.6%
Wayne County, PA	39,944	47,722	19.5%	49,127	2.9%
Sussex County, NJ	130,943	144,166	10.1%	152,218	5.6%
Orange County, NY	307,647	341,367	11.0%	370,352	8.5%
Sullivan County, NY	69,277	73,966	6.8%	76,110	2.9%
Blooming Grove Twp.	2,022	3,621	79.1%	4,232	16.9%
Delaware Twp.	3,527	6,319	79.2%	7,548	19.4%
Dingman Twp.	4,591	8,788	91.4%	10,699	21.7%
Greene Twp.	2,097	3,149	50.2%	3,509	11.4%
Lackawaxen Twp.	2,832	4,154	46.7%	4,800	15.6%
Lehman Twp.	3,055	7,515	146.0%	8,969	19.3%
Matamoras Borough	1,934	2,312	19.5%	2,541	9.9%
Milford Borough	1,064	1,104	3.8%	1,199	8.6%
Milford Twp.	1,013	1,292	27.5%	1,539	19.1%
Palmyra Twp.	1,976	3,145	59.2%	3,544	12.7%
Porter Twp.	163	385	136.2%	430	11.7%
Shohola Twp.	1,586	2,088	31.7%	2,334	11.8%
Westfall Twp.	2,106	2,430	15.4%	2,773	14.1%
Sources: 1990 and 2000 Censuses of Population and Housing, U.S. Census Bureau; U.S. Census Bureau 2004 Population Estimates					

Historically, Pike County's fastest growing municipalities, percentage wise over this 40 year period from 1960 to 2000, have been Lehman Township (2,263%), Dingman Township (2,201%), Delaware Township (1,051%), Blooming Grove Township (754%), Porter Township (655%), and Shohola Township (406%). Pike County grew faster, percentage wise, than any surrounding county or nearby Pennsylvania county from 1990 to 2000. Monroe County was the closest with a 44.9% increase followed by Wayne County at 19.5%.

Another important factor in Pike County's demographics is the increasing median age. From 1990 to 2000, Pike County's median age increased from 37.1 to 39.6. In comparison, the median age for Pennsylvania went from 34.4 to 38.0. The increase for the United States went from 32.7 to 35.3 from 1990 to 2000. Pike County experienced a numerical increase in all age groups excepting the 25 to 34 age group. Percentage of the total population decreased in the Under 5, 20 to 24, 25 to 34, 60 to 64, and 65 to 74 age groups. The most substantial decrease occurred in the 25 to 34 age group declining from

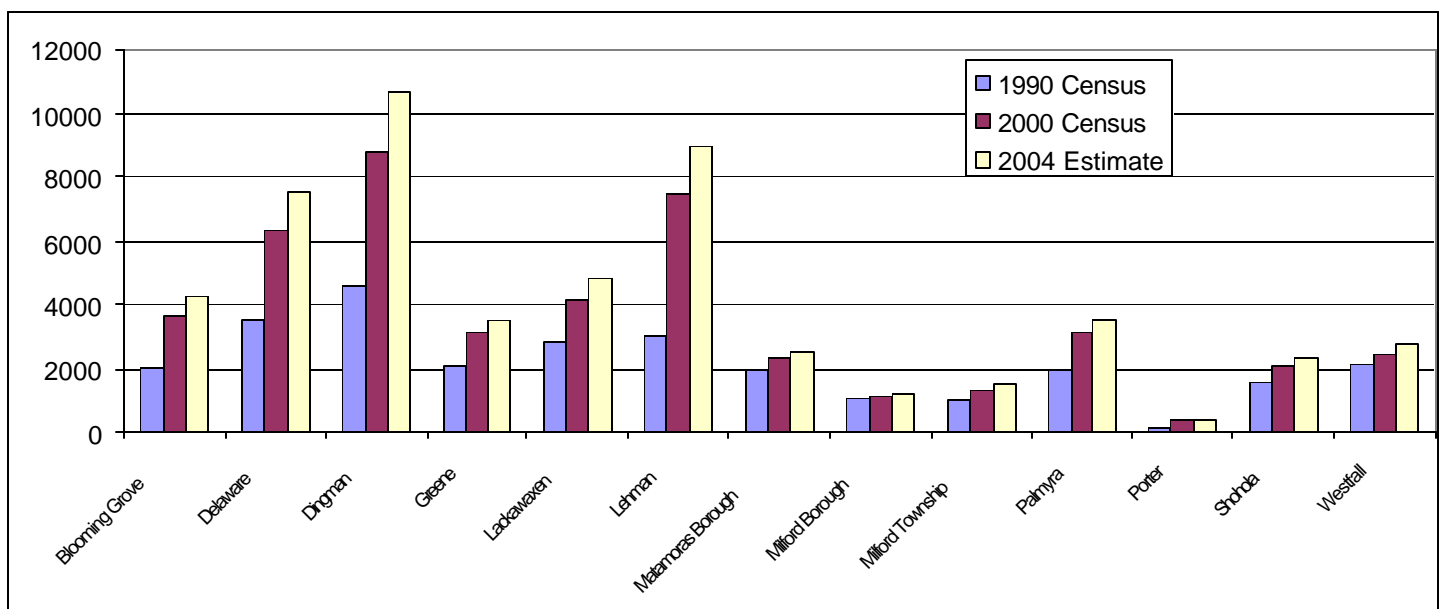
16.8% of the population in 1990 to only 10% of the population in 2000. The US Census Bureau's 2002 estimates identified Pike County's Under 5 category as the third largest percentage decline (an 11% decrease from 2720 to 2420) in the Commonwealth.

The largest increases in percentage were in the 35 to 44 and the 45 to 54 age groups. The largest decreases in percentage were in the 25 to 34 and Under 5 age groups. These trends appear to reflect a loss of young men and women and younger families to job markets outside the County, while older commuting families move into the County.

Table 29
Pike County 1990-2004 Population Density

Municipality	Square Miles	Acres	1990	Persons per Square Mile	Persons per Acre	2000	Persons per Square Mile	Persons per Acre	July 1, 2004*	Persons per Square Mile	Persons per Acre
Blooming Grove	75.3	48192	2022	26.85	0.04	3621	48.09	0.08	4232	56.20	0.09
Delaware	44.2	28288	3527	79.80	0.12	6319	142.96	0.22	7548	170.77	0.27
Dingman	58.2	37248	4591	78.88	0.12	8788	151.00	0.24	10699	183.83	0.29
Greene	60.2	38528	2097	34.83	0.05	3149	52.31	0.08	3509	58.29	0.09
Lackawaxen	78.6	50304	2832	36.03	0.06	4154	52.85	0.08	4800	61.07	0.10
Lehman	48.9	31296	3055	62.47	0.10	7515	153.68	0.24	8969	183.42	0.29
Matamoras Borough	0.7	448	1934	2762.86	4.32	2312	3302.86	5.16	2541	3630.00	5.67
Milford Borough	0.5	320	1064	2128.00	3.33	1104	2208.00	3.45	1199	2398.00	3.75
Milford Township	12.5	8000	1013	81.04	0.13	1292	103.36	0.16	1539	123.12	0.19
Palmyra	34.4	22016	1976	57.44	0.09	3145	91.42	0.14	3544	103.02	0.16
Porter	58.6	37504	163	2.78	0.00	385	6.57	0.01	430	7.34	0.01
Shohola	44.7	28608	1586	35.48	0.06	2088	46.71	0.07	2334	52.21	0.08
Westfall	30.4	19456	2106	69.28	0.11	2430	79.93	0.12	2773	91.22	0.14
Totals	547.2	350208	27966	51.11	0.08	46302	84.62	0.13	54117	98.90	0.15

*2004 Estimate from US Census Bureau

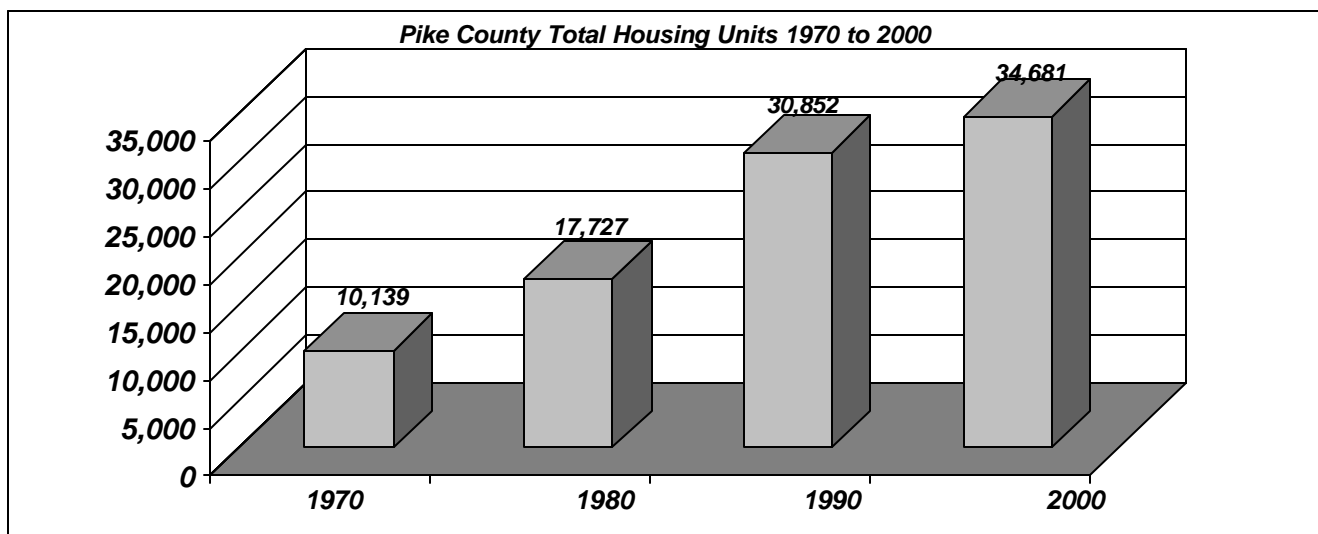


HOUSING DATA AND TRENDS

Total housing units also escalated during this period growing from 10,139 units in 1970 to 34,681 in 2000, a 242% increase. The greatest increases occurred from 1970 to 1980 (75%) and 1980 to 1990 (74%). The increase from 1990 to 2000 was only 12% as many of the seasonal homes were converted to year round use. From 1970 to 1990, the number of housing units built in the County exceeded the increase in residents, indicating many units were constructed as second homes.

Table 30

PIKE COUNTY HOUSING UNITS							
	1970	%70-80	1980	%80-90	1990	%90-00	2000
Blooming Grove Twp	391	421	2,037	52.4	3,104	5.4	3,273
Delaware Twp.	1,167	96.2	2,290	30.8	2,995	15.3	3,453
Dingman Twp.	676	105.2	1,387	201.4	4,181	36.1	5,689
Greene Twp.	1,251	35	1,564	63.9	2,563	8.5	2,780
Lackawaxen Twp.	944	53.5	1,526	112.8	3,248	15.5	3,750
Lehman Twp.	443	249	1,546	157.1	3,975	17.1	4,655
Matamoras Boro.	807	5.9	855	7.7	921	6.1	977
Milford Boro.	507	2.8	521	8.2	564	-0.7	560
Milford Twp.	205	49.8	370	52.1	563	5.5	594
Palmyra Twp.	1,859	69.2	3,146	24.3	3,911	-1.9	3,838
Porter Twp.	636	33.3	848	2.8	872	6.2	926
Shohola Twp.	627	38.3	867	236.3	2,916	5.9	3,089
Westfall Twp.	576	44.6	833	24.7	1,039	5.6	1,097
Pike County	10,139	74.8	17,727	74.0	30,852	12.4	34,681



The U.S. Census Bureau estimates the increase in housing units in Pike County from April 2000 to July 2004 as 2,564 or 7.4%. This was the second highest percentage increase in Pennsylvania (Monroe County had the highest increase at 9.5%). The estimated population increase for the same period was 7,815. This reflects a more proportional balance of housing unit to population increase than has occurred in the County in the past. From 2003 to 2004, the Census Bureau estimates housing units in the County grew by 2.3, the highest rate of growth in the state. 828 additional units resulted in an estimated total of 37,245 for Pike County in 2004.

In 2000, 43% of housing units in Pike County were owner occupied, 8% renter occupied, and 50% were vacant. Corresponding percentages for Pennsylvania were 65%, 26%, and 9%. The US Census bureau classifies vacant as seasonal, recreational or occasional use, for rent or sale, and boarded up. Pike County is unique in the number of vacant units it contains, most of them being second homes. In 1990, 66 percent of housing units in Pike County were vacant. There is also a lack of available rental units within the County.

Housing Types

Most of the housing units in the County are single family detached (81% in 2000). The percentage of single-family detached homes increased from 1990 to 2000 showing a trend that was also experienced in the previous census. 15% of the County's housing units were classified as mobile homes. Of concern is the relatively low percentage of multiple family units in the County (4.5% compared to 34% for Pennsylvania).

In 2000, Pike County had 15,350 vacant housing units for seasonal, recreational, or occasional use, the largest number of any County in Northeastern Pennsylvania. Pike County also had a significant decrease in such vacant units, from 18,369 in 1990 to 15,350 in 2000. This primarily reflects conversion of units to year-round housing. In comparison, Wayne County decreased from 11,938 to 10,855 vacant seasonal, recreational, or occasional use units from 1990 to 2000. Monroe County decreased from 14,935 to 14,705.

The only municipalities in Pike County that do not have large percentages of their housing stock as vacant seasonal, recreational, or occasional use units are Matamoras and Milford Boroughs and Milford and Westfall Townships.

From 1990 to 2000, only Dingman Township experienced an increase in vacant seasonal, recreational, or occasional use units, from 2,368 to 2,435. The large percentage of second homes plus resort facilities and day visitors can result in the population of Pike County more than doubling on a peak summer weekend.

Housing Values

Median house value in Pike County in 2000 was \$118,300, compared to \$97,000 for all of Pennsylvania. Median rent for Pike County in 2000 was \$701, compared to \$531 for Pennsylvania. Pike County historically has had some of the highest median house values and median rents in Pennsylvania.

While the housing costs in Pike County are relatively affordable for many people moving from even higher-cost areas in the metropolitan New York and New Jersey region, the housing costs do present a problem in finding suitable affordable housing for many people residing and working, or those on fixed incomes, in Pike County. Young families and families with low to moderate incomes increasingly have a difficult time finding affordable housing in the County.

Numerous additional tables of Population and Housing statistics can be found in Appendix 16.

CHAPTER 17

ECONOMIC DEVELOPMENT

CHAPTER 17

ECONOMIC DEVELOPMENT

As this plan looks toward the future, one cannot underestimate the impact the local economy plays in how the County will change in the future. Improving on the availability of family-sustaining jobs within the County is recognized as a priority. As the population continues to grow, demands for goods and services grow as well. Also vital to the economic well being of the County is to expand on the County's strengths, benefit from our regional location, continue to promote tourism and the natural beauty of our environs, and attract development that is appropriate and beneficial.

Table 31

Rank	PIKE COUNTY'S TOP EMPLOYERS
1	Delaware Valley School District
2	Woodloch Pines Inc.
3	Wallenpaupack Area School District
4	East Stroudsburg School District
5	Pike County Government
6	Wal-Mart Associates Inc.
7	United States Government
8	Pennsylvania State Government
9	The Home Depot USA, Inc.
10	Altec Lansing Technologies Inc.

Source: Pennsylvania Department of Labor & Industry, 3rd Quarter 2004: 9/20/05 CWIA

Factors in Considering an Approach to Economic Development

The economic development strategy in Pike County is focused on entrepreneurial development, expansion, and retention of existing businesses and limited attraction of new businesses. This strategy ensures the continuing pristine nature of Pike County's natural environment, which makes the tourism industry the largest industry in the county.

In order to develop an approach to the County's future economic development plan, an assessment of current trends is needed. The current makeup of the County's economy still relies on the Tourism and Service industries. The predominant sectors were Educational, Health and Social Services; Wholesale and Retail Trade; Arts, Entertainment; Recreation, Accommodation and Food Services; and Manufacturing and Construction.

The unemployment rate in the County fluctuates seasonally due to the significant number of workers who are dependent upon the recreation/tourism industry. The months that experience the highest unemployment rate in the County are typically January, February, March, November, and December. The unemployment rate from 1996 to 2002 ranged between 3.3 and 5.2 percent on an annual basis.

Table 32

PIKE COUNTY PERCENT EMPLOYED BY LABOR FORCE SECTOR	
Employment Sector	Percent of Labor Force
Educational, health, & social services	18.2%
Wholesale & Retail Trade Sectors	17.2%
Arts, entertainment, recreation, accommodation & food services	10.8%
Manufacturing Sector	10.0%
Construction Sector	8.9%
Other Service Sector (except public admin.)	7.9%
Professional, scientific, mngmt., admin., & waste mgt.	7.5%
Finance, Insurance, & Real Estate Sectors	7.4%
Utilities, Warehousing & Transportation Sectors	6.5%
Public Administration Sector	4.7%
Agriculture, Forestry & Mining Sectors	0.7%

Source: US Census Bureau & the Center for Rural Pennsylvania

Compiled by Pike County Industrial & Commercial Development Authority

The impact of Tourism on Pike County's economy is presented below:

Table 33**PIKE COUNTY TOURISM ECONOMIC IMPACT**

	2000	2001	2002 (Projected)
Total Direct Travel Expenditures	\$198,650,000	\$194,220,000	\$204,610,000
Payroll	\$107,070,000	\$104,620,000	\$110,280,000
Employment	6,340	6,240	6,530
Taxes	\$48,310,000	\$47,150,000	\$49,760,000

Source: Pocono Mountains Vacation Bureau, Inc. 2003 Annual Report

The Pocono Mountains Vacation Bureau also reported tourism expenditures in Pike County of \$210,750,000 in 2003 and \$221,229,000 in 2004. Employment was reported as 6,730 in 2003 and 7,070 in 2004.

- According to the 2000 Census, the industries having the greatest number of establishments in Pike County in 2000 were retail trade (114), construction (105), accommodation and food services (90), other services except public administration (83), and food services and drinking places (61).
- Net domestic migration to Pike County was estimated to be 1,401 from July 2000 to July 2001; 1,745 from July 2001 to July 2002; and 2,017 from July 2002 to July 2003, as reported by the Pennsylvania State Data Center.

The State Data Center also reported the following average monthly employments and payrolls by industry for Pike County in 2002, for the top 10 industries:

Table 34
Pike County Industry, Employment, and Payroll

Industry	Employment	Payroll
Accommodations and Food Services	1,948	\$28,966,824
Retail Trade	1,331	\$25,635,000
Health Care and Social Assistance	692	\$15,747,598
Other Social Services(except public administration)	621	\$10,905,132
Manufacturing	359	\$17,224,816
Construction	342	\$10,227,287
Real Estate and Rental and Leasing	293	\$5,445,252
Information	192	\$9,797,592
Professional, Scientific and Technical Services	183	\$5,739,148
Finance and Insurance	144	\$5,137,677

Source: Pennsylvania State Data Center – 2002 data

- The number of business establishments in Pike County increased from 635 in 1990 to 719 in 2000, according to the Bureau of Census.
- The Pike County Business Park contains 615 acres along Route 434, south of Route 6. Twenty-one parcels have been proposed, ranging from 6.6 to 37.8 acres. Nine lots are initially available. The Business Park is located 2.8 miles from Exit 34 of I-84.
- Northampton Community College has opened a branch along Route 6 in Shohola Township.
- The County may consider the preparation of a Pike County Business Incubator Feasibility Study.
- Assistance with building business, marketing, and financial plans is available through the University of Scranton's Small Business Development Center (SBDC). Pike County Industrial Development Corporation (PIDCO) is the Pike County outreach location.
- Major County-wide economic development agencies include PIDCO, the owner of the County Business Park; the Pike County Industrial and Commercial Development Authority (PCICDA); the Pike County Chamber of Commerce; and the Hawley-Lake Wallenpaupack Chamber of Commerce.

PIDCO, PCICDA, and the Chambers of Commerce are tasked with establishing coordinated economic development and marketing efforts, including promoting business within the County, marketing to attract businesses, supporting existing or new businesses, and promoting tourism.

- A hotel room excise tax has been imposed in Pike County to support tourist promotion activities of the Pocono Mountains Vacation Bureau (PMVB). Major initiatives with the tax revenue will be support of the Mountain Laurel Center for three years and a mid-week meeting/convention marketing plan. A portion of the tax revenue will be returned to Pike County for use in promoting tourism and convention promotion and development.

In response to the issue of the hotel room excise tax, a group of hospitality businesses have formed the *Pike County Visitors Bureau*. Their interest is to provide comment on this and other issues, and work cooperatively with the PMVB to provide a fuller marketing effort against off-season, overnight stays through a stronger County identity, especially in the area of ecotourism.

EMPLOYMENT DATA AND TRENDS

Pike County residents in 2000 were most likely to work within Pike County (5,464). Pike County residents employed outside of the County commuted daily to Orange County, New York (1,976); Wayne County, Pennsylvania (1,928); Monroe County, Pennsylvania (1,841); Sussex County, New Jersey (1,662); Morris County, New Jersey (1,218); and New York County (1,004). Please refer to the table “2000 Residence County to Workplace County Flows” which shows all workplaces with 20+ commuters and the table entitled “Place of Work for Workers 16 years and Older State and County Level – 2000” in Appendix 16.

Of those Pike County workers, 52% worked in Pennsylvania (28% Pike County, 24% other PA counties) while 48% of County workers worked in another state. Lehman, Dingman, and Delaware Townships and Matamoras Borough had especially high percentages working out of state.

Of the employed persons 16 years and older in Pike County in 2000, 29% were in managerial, professional, and related occupations (33% for Pennsylvania), 18% were in service occupations (15% for Pennsylvania), 27% were in sales and office occupations (27% for Pennsylvania), 0.4% were in farming, fishing, and forestry occupations (0.5% for Pennsylvania), 13% were in precision construction, extraction and maintenance occupations (9% for Pennsylvania), and 14% were in production, transportation, and material moving occupations (16% for Pennsylvania). The higher percentages for Pike County in the service and construction occupations reflect the importance of recreation/tourism and home building to the economy of the County.

INCOME DATA AND TRENDS

Median household income in Pike County in 2000 was \$44,608, compared to \$40,106 for Pennsylvania as a whole. 7% of persons in Pike County were below poverty level (11% for Pennsylvania). 5% of Pike County families were living below poverty level (8% in Pennsylvania).

From 1989 to 1999, the percent increase in household income in Pike County was 3%. For Pennsylvania it was 6%. In Pike County, families below poverty level were more likely to be married couples and less likely to be male or female headed family as is common for Pennsylvania as a whole.

EDUCATIONAL ATTAINMENT DATA AND TRENDS

Persons in Pike County age 25 and older in 2000 were more likely to be a high school graduate or higher, less likely to have a bachelor's degree or higher and less likely to have a professional or graduate degree as compared to Pennsylvania as a whole.

Table 35

EDUCATIONAL ATTAINMENT of Persons Age 25 and Older 2000 Census

Percent of Persons					
	Total Persons	Less than High School Graduate	High School Graduate or Higher	Bachelor's Degree or Higher	Professional or Graduate Degree
Pennsylvania	8,266,284	18.1	81.9	22.4	8.4
Pike County	31,525	13.2	86.8	19.0	6.7
Blooming Grove Twp	2,692	13.4	86.6	21.8	8.7
Delaware Township	4,036	13.1	86.9	14.3	4.7
Dingman Township	5,552	7.6	92.5	24.4	8.5
Greene Township	2,295	16.4	83.6	15.7	5.3
Lackawaxen Township	2,909	16.1	83.9	14.5	4.6
Lehman Township	4,891	14.5	85.5	16.4	4.8
Matamoras Borough	1,587	15.1	84.9	14.9	6.0
Milford Borough	809	13.6	86.4	28.9	11.7
Milford Township	933	11.4	88.6	26.1	10.0
Palmyra Township	2,317	12.0	88.0	23.7	8.9
Porter Township	293	19.1	80.9	10.2	2.4
Shohola Township	1,491	12.1	87.9	19.6	7.5
Westfall Township	1,720	19.4	80.6	17.4	7.6

Source: U.S. Department of Commerce, Bureau of The Census, 2000 Census of Population and Housing, SF3



ECONOMIC DEVELOPMENT IN PIKE COUNTY

There are 2 economic development agencies in Pike County, the Pike County Industrial and Commercial Development Authority (IDA) and the Pike County Industrial Development Corporation (PIDCO). Both are non-profit organizations dedicated to providing a stable employment base in Pike County while preserving the County's culture and natural beauty. Pike County's Economic Development agencies have adopted the following as their goals and action plan:

PIKE COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY (IDA)

GOALS & ACTION PLAN

1. Work with county and local government to help provide the infrastructure needed to support the business community.
 - a) Meet with local government agents to find out their goals/needs for next few years to identify areas (eg. roads and traffic) in which we can help and to ensure they have the information they need on available resources to help them meet their needs.
2. Assist with the implementation of the upcoming County Comprehensive Plan.
 - a) Obtain draft report and identify areas in which we may be helpful and meet with Commissioners/planners to discuss specific strategies/roles for IDA
 - b) Consider obtaining (mail or meetings) business community input on the economic development recommendations in the Plan.
3. Help attract appropriate businesses to Pike County.
 - a) Maintain database of available commercial properties
 - b) Continue to support the efforts of Penn's Northeast
 - c) Continue to develop the web site and other materials to promote area
 - d) Cooperate with and support PIDCO efforts to sell sites at the Business Park
4. Assist with the retention and expansion of existing local businesses.
 - a) Co-sponsor workshops that help local businesses understand availability of resources that will help them grow and succeed. Cooperate with the Pike County Chamber of Commerce (PCCC) and its initiative to get workshop information on its website for businesses
 - b) Maintain inventory of available commercial space and network with local businesses to identify space needs (eg. BREP interviews)
 - c) Prepare a brochure of services that the IDA can provide to area businesses. Consider joint effort with PIDCO and PCCC
5. Assist Pike County entrepreneurs interested in starting up a new business.
 - a) Continue to act as liaison with the SBDC
 - b) Create a list of services/businesses we'd like to attract to Pike County and then promote to specific target industries/businesses
 - c) Maintain a list of businesses for sale and promote them on web site etc.
 - d) Conduct an annual workshop specifically for anyone interested in starting a business

PIKE COUNTY INDUSTRIAL DEVELOPMENT CORPORATION (PIDCO)
GOALS & ACTION PLAN

1. Develop sources of funding to support PIDCO endeavors, including but not limited to the sale of the Business Park.
 - a) Sell sites at the Business Park
 - b) Research grants or other funding sources that may have been overlooked at the local, state and federal levels
2. Provide educational opportunities to help local business succeed.
 - a) Cosponsor workshops with the IDA and PCCC
 - b) Survey local businesses to determine what topics might be most helpful
3. Make business aware of, and help them to, access economic stimulus programs.
 - a) Develop marketing plan to increase awareness of PIDCO and its mission. Consider a booth at events such as PCBA Home Show and Pear Blossom Tent Fair. Consider joint publication with IDA and PCCC
 - b) Consider the creation of a membership program to encourage broader participation by the “industrial” business community (leaving the “commercial” to the PCCC). Need to define benefits of such a membership
4. Assist with the implementation of the new County Comprehensive Plan.
 - a) Get a copy of draft plan (specifically, economic development sections) and review/discuss to determine areas PIDCO might assist
 - b) Establish a committee to meet with County Commissioners/Planners to discuss areas for PIDCO assistance
 - c) Consider joint effort with IDA to seek broader input from the Pike County business community on the economic development recommendations of the plan.

More specifically, their major objective is to assist in the retention and expansion of existing firms and the attraction of new business to Pike County through the following:

- To provide such financial assistance, and training, as may be available to prospective firms interested in expanding or locating in Pike County.
- To provide confidential business consulting services, through the University of Scranton's Small Business Development Center, to all individuals interested in starting, expanding, or improving an existing small business.
- To provide research data, concerning Pike County's employment, population, financial aid, housing, tax rates, real estate, zoning, transportation and other facilities.
- To work with the County, State, and Federal agencies to provide such other assistance that may be available and required by interested firms.

PERSPECTIVE OF THE RESIDENTS ON ECONOMIC DEVELOPMENT

The residents clearly express that maintaining the natural pristine nature of the county is vital. The natural resources attracted many visitors to the County. As the permanent population grew and continues to grow, commercial development followed recognizing the population increase and buying power. The tourism, real estate, and construction industries rely heavily on the continued attractiveness of the county. Without the

continuing healthy ecotourism industry growth, the social dynamics and attractiveness of the county would likely change dramatically.

In order to fully understand the feelings and concerns of the public regarding the future economic development approach in Pike County, the following Pike County Comprehensive Plan Survey and Penn State Cooperative Extension Study's outcomes were utilized.

Pike Comprehensive Plan Survey

In the 2004 survey of Pike County residents conducted as part of this Comprehensive Plan Update, 464 respondents thought commercial development over the past 10 years was excessive, 662 thought it was appropriate, and 557 thought it was lacking. 218 respondents thought industrial development was excessive, 558 thought it was appropriate, and 870 thought it was lacking. Job training opportunities and job opportunities were the aspects of Pike County with which respondents expressed the least degree of satisfaction.

The survey asked, "In your opinion, are more of these services desirable in Pike County?" The responses were as follows:

Table 36
Survey – Desired Services

	Strongly Agree	Agree	Total Agree	Neutral/ Undecided	Disagree	Strongly Disagree	Total Disagree	Percent Agree	Total
Research and development firms	309	558	867	413	285	136	421	40.9%	1701
Light manufacturing	243	717	960	351	262	134	396	45.6%	1707
Tourism attractions	247	546	793	421	344	147	491	36.1%	1705
Health services	563	800	1363	234	83	41	124	73.9%	1721
Legal and financial services	140	460	600	615	346	132	478	27.6%	1693
Warehousing and distribution	104	367	471	516	475	227	702	19.7%	1689
Restaurants	229	695	924	391	318	93	411	43.2%	1726
Personal services	145	569	714	643	235	87	322	35.7%	1679
Big box retail	69	248	317	501	481	381	862	12.5%	1680
Specialty retail	122	547	669	514	325	181	506	30.5%	1689
Outlet stores/wholesale trade	128	398	526	392	445	341	786	21.1%	1704
Business support services	119	505	624	655	254	139	393	30.2%	1672
Technology based firms	292	680	972	395	202	131	333	47.8%	1700
Cultural facilities	248	633	881	477	211	121	332	43.6%	1690
Medium to heavy manufacturing	67	294	361	391	526	410	936	13.8%	1688
Professional service firms	146	591	737	559	255	132	387	35.6%	1683
Corporate offices	201	606	807	422	279	181	460	37.6%	1689
Convenience stores	86	365	451	477	530	236	766	18.3%	1694
Business parks	128	470	598	461	369	255	624	25.9%	1683
Shopping centers	165	371	536	344	472	355	827	21.2%	1707
Strip malls	94	199	293	338	563	504	1067	10.6%	1698
Residential development	69	327	396	427	527	321	848	15.7%	1671
Preservation of forestland/farmland	769	600	1369	217	73	41	114	75.5%	1700
Telecommuting	367	539	906	517	156	90	246	47.3%	1669
Assistance/incentives for business startups	211	438	649	569	298	172	470	30.1%	1688
Recreational opportunities	316	686	1002	443	183	87	270	50.5%	1715

Two clear favorites were preservation of forestland/farmland and health services. Telecommuting, technology based firms, light manufacturing, research and development firms, cultural facilities, restaurants, and recreational opportunities received moderate support.

In the 2004 survey, 78% of respondents agreed economic development was an important planning issue facing the County in the next ten years while 64.2% agreed tourism was important as well. Of the top six issues, only road improvements did not deal with environmental protection or growth management.

Also in the 2004 survey, 35.9% of respondents agreed with a tax increase to support economic development, 38.5% agreed with an increase to support assisting small business operations, and 33.8% agreed with an increase to attract large employers.

Tourism and ecotourism, recognized as arguably an important factor in the County's future economic development, depends heavily on the natural environment. The quality and quantity of these natural assets needs to be preserved to maintain the industry.

Penn State Cooperative Extension Study

In 1994, the Penn State College of Agricultural Sciences Cooperative Extension conducted a survey of 500 randomly selected Pike County residents and received 251 responses. In summarizing the economic development aspects of the survey, the report states:

"In planning efforts to increase the quality of life in Pike County, the majority of respondents gave highest priority to protecting and conserving land resources, community green spaces and parks, and water resources. These goals were followed by protecting and conserving wildlife, balancing economic growth with sustainable resource management, and including trees and open spaces in land use plans. Of second priority were employment issues, such as assisting small business development, stimulating professional and service job growth, and providing employment rehabilitation and counseling programs."

In establishing long-term goals to enhance the quality of life in Pike County, the majority of respondents disagreed that local efforts should try to limit economic growth. They did indicate, however, that they were not interested in subsidized industrial recruitment to provide local jobs. The majority of respondents indicated some concern that natural resources be managed in the economic development process, however. In prioritizing tax spending to improve quality of life, respondents rated assistance to small business operations, improving availability of health care, and developing natural resource

management programs. Again, attracting, recruiting, or expanding large-scale industry received lowest priority as an activity to enhance quality of life.

Finally, when asked about the potential for forest-based industry development in Pike County, the majority of respondents indicated a preference to see local forests preserved rather than used as a source for providing local jobs. Respondents indicated a concern over potential negative environmental impact for harvesting, unwise harvesting tactics, and too much logging and exportation of local timber. When asked what kinds of forest-based jobs would be preferred, the respondents most frequently selected recreation and tourism, conservation and management, and community forest related industries.

To summarize, Pike County respondents surveyed in this Cooperative Extension Study appeared to enjoy the quality of life their local area has to offer. The scenic beauty and appearance of the area obviously are important to the majority of respondents. Survey respondents indicated these values by prioritizing resource conservation and management as key goals for planning future economic development and for enhancing their quality of life, despite the indication that local employment conditions are bleak. Several respondents explained these conditions as being due to the “rural” nature of the county and that residents should expect to commute to jobs. The majority of respondents, however, suggested that small businesses and industries and tourism related business be developed as a way to boost local employment. Also, the majority of respondents clearly expressed no desire to see subsidized programs to target and recruit large industries to their area.



MAJOR RECREATIONAL ASSETS

The ecotourism industry involves aspects such as river trips, camping, fishing, wildlife tours and observation, birdwatching, snowmobiling, guides, equipment rentals and sales, lodging, dining, waterfall viewing, swimming, boating, skiing, hunting, orienteering, biking, horseback riding, hiking, environmental education and interpretation, and foliage touring.

The Pike County Chamber of Commerce has identified four heritage tours in Pike County. Tour 1 is Bushkill to Milford, to Matamoras, with side trips to Bushkill Falls Road attractions, Child's Recreation Site, Grey Towers National Historic Site, Cliff Park/Hackers Falls, Pike County Park, Lost Camp Trail/Stairway Lake, and Mill Rift. Tour 2 is Shohola to Lackawaxen to Kimbles. Tour 3 is Lake Wallenpaupack. Tour 4 is Greentown to Promised Land, to Bushkill.

Delaware River – National Park Service

The Delaware River Water Trail is viewed by its organizers as connecting people to the river for responsible recreational pursuits and contributing to the local and regional ecotourism industry. The river trip industry along the Delaware currently employs about 1000 people and attracts 500,000 visitors annually.

The Delaware Water Gap National Recreation Area as well as the Upper Delaware Scenic and Recreational River are both run by the US Department of Interior. National Park Service lands serve as major recreational destinations in Pike County. The Delaware River has the distinction of being one of the cleanest free flowing rivers in the eastern United States.

Lake Wallenpaupack

Lake Wallenpaupack, which is located along most of the western boundary of Pike and Wayne Counties, also serves as a major recreational destination. Unlike the other major destinations, extensive commercial and residential development has occurred along the lake.

State Gamelands/Delaware State Forest

The County also contains extensive areas of state forest land located in the Pennsylvania Bureau of Forestry District #19 Delaware State Forest and large acreages of Pennsylvania State Gamelands located on Gamelands #180, 209, 116, 183, and 316 in Pike County.

Environmental Learning Centers

Major environmental learning centers in the County include the Pocono Environmental Education Center, located within the Delaware Water Gap National Recreation Area in Delaware Township and the Lake Wallenpaupack Environmental Learning Center located in Palmyra Township. The Lake Wallenpaupack Center is owned and operated by Pennsylvania Power and Light and is situated on the lakeshore near the dam.

Rail Service

Rail service within the County also impacts the local economy. The Stourbridge Line Rail Excursion runs from Honesdale in Wayne County to Lackawaxen. The Norfolk-Southern rail line connects from Port Jervis, New York to Lackawaxen. Both can be utilized for future economic development in the transportation of goods.

Private Lands

Private lands in the County form a working landscape, essential to the County's economy and attractive rural character, including hunting and fishing clubs, summer camps, rural bed and breakfast inns, hotels, vacation resorts, and family forestlands and farms. Public and private lands define the County's rural quality of life. This rural quality of life is the foundation of the primary element of the economy which is tourism. Rural quality of life, including small towns, recreational and cultural amenities, and beautiful natural landscapes, which has attracted tourists and commuters, could be used as a marketing tool to attract new businesses and entrepreneurs to build a more diverse economy with higher-paying jobs to the County, if appropriate infrastructure were available.

ECONOMIC DEVELOPMENT APPROACH

One possible approach to attracting tourists and new business is to market Pike County as having the highest quality of life and greenest setting in the greater New York and Philadelphia regions, being the closest rural tourism destination, and serving as the gateway to nature for New York and Philadelphia. Areas of influence to our economy include Stroudsburg, Scranton, Honesdale, Middletown, and Dover. Given the Orange County, New York business park at Middletown/Goshen, NY and the future Wayne County Business Park at Sterling, it is unlikely that more than one major business park in Pike County would be appropriate within the next ten years if a Wayne County park is developed.



CHAPTER 18

COMMUNITY FACILITIES
and
SERVICES

CHAPTER 18

COMMUNITY FACILITIES and SERVICES

Healthy, attractive, and well-planned communities do not just occur naturally. They are created through the vision and perseverance of local governments who are responsible for guiding growth, preserving natural resources, and delivering public services.

As development increases, so does the cost of the provision of services associated with that development. Counties and municipalities are burdened with these increased costs and sometimes find it difficult to provide the same level of public services to their growing populations. This Comprehensive Plan is ultimately developed to improve the quality of life for the residents and visitors of Pike County.

In an effort to identify the feelings and concerns of the County's residents and visitors, numerous questions were posed in a questionnaire that was developed and disseminated in the Summer of 2004. The results of the questionnaire were utilized to ascertain and prioritize many of the recommendations found throughout this plan.

COMMUNITY SURVEY RESULTS

Numerous questions were asked in the questionnaire. One particular question asked whether residents are satisfied with certain aspects of Pike County:

- 74.8% of respondents were satisfied with Fire Service.
- 71.3% were satisfied with recreational opportunities.
- 68.5% were satisfied with ambulance service.
- 61.9% were satisfied with library services.
- 53.0% were satisfied with availability of emergency medical care.
- 51.0% were satisfied with social opportunities.
- 50.8% were satisfied with availability of doctors.
- 50.1% were satisfied with schools.
- 39.0% were satisfied with cultural facilities.
- 37.7% were satisfied with tax rates.
- 22.2% were satisfied with day care facilities.
- 21.9% were satisfied with higher education.

The results show quite a range of satisfaction, with a low of 11.5% satisfied with job training services to a high of 87% for environmental quality. Also posed was a question dealing with the need for more cooperation among the Townships and Boroughs. Respondents felt that the following were worthy of increased municipal cooperation: emergency medical service (85.7%), solving transportation problems (83.1%), joint comprehensive planning (83.0%), regional fire protection (78.8%), regional police protection (78.0%), and open space and recreation planning (77.8%).

When asked whether residents agreed or disagreed that the following are important planning issues facing Pike County in the next 10 years:

- 86.8% agreed emergency services was an important issue.
- 81.1% agreed hospital services was an important issue.
- 80.6% agreed police protection was an important issue.
- 77.8% agreed cooperation between homeowners associations and municipal government was an important issue.
- 77.6% agreed intermunicipal cooperation was an important issue.
- 74.8% agreed telecommunications service was an important issue.
- 75.6% agreed adequacy of existing electrical services as an important issue.
- 71.6% agreed education opportunities was an important issue.
- 71.2% agreed recreational opportunities was an important issue.
- 64.7% agreed social and cultural opportunities was an important issue.

60.3% of respondents said they would agree with a tax increase to support increased police/public safety. 46.9% indicated they would agree with a tax increase to support parks and recreation. 40.2% indicated they would agree with a tax increase to support biking, hiking, and walking opportunities.

When asked if more of certain services were desirable in Pike County, 73.9% said health services, 43.6% cultural facilities, and 50.5% recreational opportunities. The full results of the questionnaire can be found in Appendix 1.

IDENTIFIED ISSUES

In addition to those issues identified as important by respondents to the Survey, the following other issues have been identified during the course of preparing the plan:

- Limited public participation of residents basically only spending weekends in the County because of commuting, the large number of private communities in the County, and efforts to develop a greater sense of community.
- Limited history of municipal cooperation in addressing regional growth issues, and fostering increased intermunicipal cooperation. Importance of getting municipal officials active in Plan Implementation.
- Getting people Countywide involved in implementation of the Comprehensive Plan and cooperative efforts of the County and municipalities in providing municipalities tools for implementation, such as updated Comprehensive Plans, Act 537 Sewage Facilities Plans, zoning ordinances, and subdivision and land development ordinances.
- Establishing appropriate standards and requirements for developers.
- Dam monitoring and maintenance.
- Securing reliable and affordable electric service throughout the County and expanding natural gas service areas outside the Boroughs.
- Expanding GIS databases, access, and use within the County.
- Limited police coverage in the County and substantial reliance on community association security forces.
- Update existing and complete new Act 167 Stormwater Management Plans for all County watersheds.

- State recognition of needs of high growth areas.
- Funding enhanced municipal services, especially emergency services and police services.
- Encouraging municipalities and private owners' associations to discuss responsibilities in provision of services to residents.
- Providing accessible services and facilities for youth and seniors.
- Improving the health care facilities available to County residents.
- Increasing higher educational opportunities in the County.
- Difficulty in getting volunteers to participate in organizations.
- Recognition that given the location, desired rural character, and population of Pike County, there will be limitations on the services which are, can, and will be provided to residents and businesses.
- Further coordination of emergency services within the County.
- Expectations of developers for improvements and contributions.

COMMUNITY FACILITIES MAP

The following Community Facilities Map indicates the location of community facilities such as: Borough and Township buildings, fire and ambulance companies, State Police Barracks, dams, communication and cell towers, State Park, County Park, State Forest lands, State Gamelands, Pike County Administration Center, Pike County Business Park, National Park Service Facilities, and a number of other facilities which are listed in the Table at the end of this Chapter. In addition, electric, telephone, cable service areas, and natural gas service areas are described in the notes. These Community Facilities are listed by number at the end of this chapter.

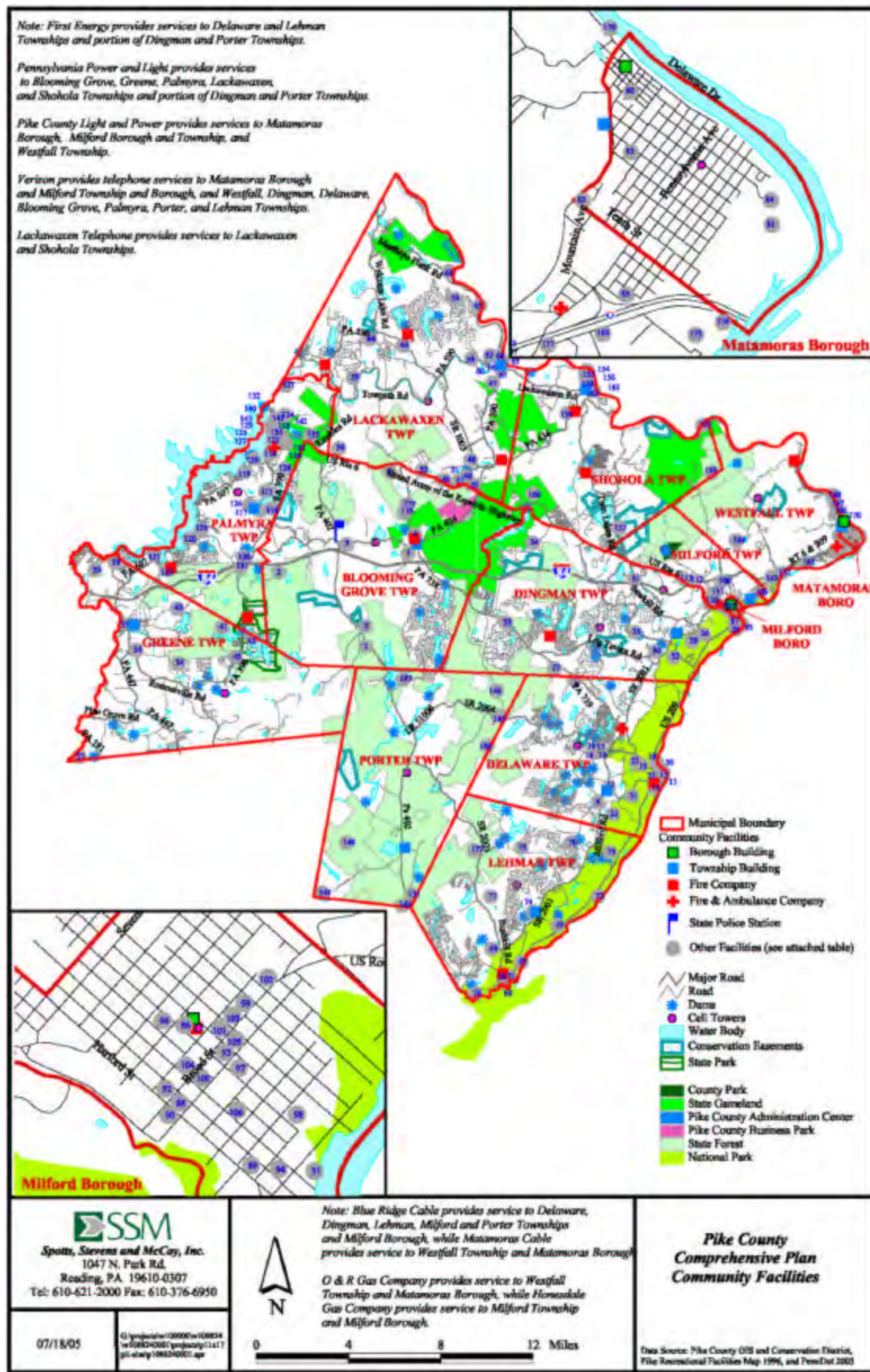


Table 37
COMMUNITY FACILITIES IN PIKE COUNTY

No.	Name		
1	Boiling Spring	47	Camp Lee Mar
2	Bruce Lake Natural Area	48	Camp Shohola for Boys
3	Conservation District Office	49	Camp Timber Tops
4	Lord House 1850 (privately owned)	50	Costa's Family Fun Park
5	Maple Run-Delaware State Forest Trail Access	51	Greely Lake Access Area
6	Owego Ranger Station-Delaware State Forest	52	Lackawaxen Aqueduct
7	Tarkill Forest Demonstration Area	53	Lake Owego Camp
8	Camp Log-N-Twig	54	Ski Big Bear
9	Camp Speers/Eljabar YMCA	55	Pine Forest Camp
10	Deer Leap Falls	56	Roebbling Bridge/Delaware Aqueduct
11	Delaware Township Park	57	Ross U. Rosencrance Memorial Park
12	Dingmans Boat Launch	58	Scenic Route along Towpath
13	Dingmans Bridge/House	59	Ascotty's White Water Rafting
14	Dingmans Campground	60	St. Mark's Church-1848
15	Dingmans Falls/Visitors Center	61	St. Mary's 1863
16	Dutch Reformed Church	62	Sylvania Tree Farm
17	Factory Falls	63	Two River Junction
18	Fulmer Falls	64	Woodloch Springs Resort
19	George W. Childs Park	65	Zane Grey Launch Fishing Access Site
20	Kittatiny Canoes	66	Zane Grey Museum/Scenic Drive
21	Loch Lommond Park Area	67	Bushkill Access Boat/Canoe
22	Pennsylvania District Delaware Water Gap Nation Recreation Area/Fitness Trail	68	Bushkill Falls
23	Silverthread Falls	69	Bushkill Gristmill Marker
24	Buck and Beaver Camp	70	Camp Hidden Falls
25	Camp Netimus	71	Church of Bushkill 1874
26	Cliff Park Inn Golf	72	Eshbach Boat Launch
27	Dingman-Delaware Elementary & Middle Schools	73	Kens Woods Campground
28	Hacker's Falls	74	Lehman Park Area
29	Milford Boat Launch	75	Pocono Environmental Education Center
30	Mt. Haven Country Resort	76	Scenic Route 209 through Lehman, Delaware, Dingmans, Milford and Matamoras
31	New Jersey YMHA and YMHA Camps/Nah Jee Wah Cedar Lake Camping Center	77	Tamiment Resort
32	Raymondskill Falls	78	Old Tin Smith Shop/General Store
33	Rock Hill Scout Reservation-Camp Williams	79	Tom's Creek Picnic Area
34	Delaware State Forest Recreation Area-Millbrook	80	Hope Evangelical Church-1892
35	Greene Township Playground	81	Matamoras Airport Park
36	Hemlock Grove-United Methodist Church-1875	82	Matamoras Movie Theater
37	LaAnna Church 1889	83	Methodist Church-1891
38	Ledgedale Campsites	84	Old Stone House
39	Ledgedale Natural Area	85	Interstate 84 Pike Welcome Center
40	Pine Lake Natural Area	86	Borough Building-1899
41	Promised Land State Park/Campground	87	Chamber of Commerce Information Booth
42	SJM Boat Rentals -Promised Land	88	Community House former Pinchot home now Library
43	State Park Office	89	Del A View-1847
44	Aludar Stables	90	Dimmick Inn-1828
45	Camp Colang	91	Ethel N. Barckley Memorial Park
46	Camp Greely	92	Forester's Hall former Forestry School
		93	Hotel Fauchere former hotel-1886
		94	Laura Villa Country Inn
		95	Milford Beach
		96	Milford Elementary School
		97	Milford Movie Theater

98	Orville R. Nearing Memorial Park	137	Tafton Dike Observation Area
99	Pike County Administration Building	138	Tanglewood Ski Area
100	Pike County Chamber of Commerce	139	The Boat Shop
101	Pike County Courthouse-1875	140	Wallenpaupack High School
102	Pike County Historical Society/Columns	141	Wallenpaupack Area Middle School
103	Pike County Jail-1814	142	Wallenpaupack Scenic Boat Tour
104	Presbyterian Church-1875	143	Wilsonville Recreation Area Campground
105	Tom Quick Inn-1882	144	Camp William Penn
106	United Methodist Church-1864	145	Delaware State Forest Headquarters/Edge mere Ranger Station
107	Upper Mill-1882	146	File Mile Meadow
108	Dick Snyder's Llama Farm	147	Pecks Pond State Forest Picnic Area
109	Flex Fitness and Dance Center	148	Pennel Run Natural Area
110	Grey Towers-1884	149	Scenic Route 402 from entrance at Porter to Peck's Pond to Route 6
111	Old Schocopee Schoolhouse	150	Stillwater Natural Area
112	Scenic Route 84 from Milford to Greentown	151	Thunder Swamp Trail System-Main Trailhead
113	Scenic Route 6 from Milford to Hawley	152	All Veteran's Bridge-1904
114	Pocono Action Sports Marina	153	Buckhorn Natural Area
115	Camp Lenape	154	Chauncey Thomas Building-1849
116	Camp Oneka	155	Church of St. Jacobi-1871
117	Fairview Lake Access Area/PA Fish Commission	156	Rohman's, was the Shohola Glen Hotel
118	Hawley-Lake Wallenpaupack Chamber of Commerce	157	Shohola Elementary School
119	1st Klas Marina	158	Shohola Caboose
120	Paupack Hills Golf Course and Country Club	159	Shohola Firehouse Ballfield
121	Ironwood Point Recreation Area and Camping Area	160	Shohola Recreational Area/Falls/Waterfowl Management Area/Dam
122	Lake Wallenpaupack Overlook	161	Upper Delaware Scenic & Recreational River Ranger Office
123	Lighthouse Harbor Marina	162	Vinton's Country House built in 1830 now a restaurant
124	North Elementary School	163	Arisbe, The Charles Peirce House
125	Palmyra Beach	164	Big Wheel Roller Skating Rink
126	Palmyra Municipal Park	165	Delaware Valley Elementary, Middle and High Schools
127	Paupack Falls and Devil's Hole	166	Indian Head Canoes
128	Pine Creat Yacht Club	167	Lander River Trips
129	Pocono Mountain Vacation Bureau Information Center	168	Kittatiny Canoes
130	Pocono Mountain Vacation Bureau Information Center East	169	Malibu Dude Ranch
131	Pocono Mountain Vacation Bureau Information Center West	170	Matamoras Boat Access Pennsylvania Fish Commission
132	PP&L Visitor Center	171	Matamoras Driving Range
133	Scenic Drive along Route 507	172	River Beach Campsites
134	Shepard's Marine and Service, Inc.	173	Riverview Inn-Senior Luncheons
135	Shooting Range PA Game Commission	174	Tri-State Canoe and Campground
136	Spirit of Paupack Cruise		

COMPARATIVE EVALUATION OF FISCAL CONDITION

In 2000 Fairmount Capital Advisors, Inc. prepared Pike County and its Governments. A Comparative Evaluation of Fiscal Condition for the Pike County Commissioners. The study concluded:

“In comparison to similar jurisdictions, both the County and its municipalities incur costs significantly higher than average. This is true even after adjusting for a higher growth rate (and resulting higher current population) of the County. This higher cost structure can be attributed to the following several factors.

General Effects of Growth

Jurisdictions that grow quickly need to incur higher costs for both infrastructure and operations than jurisdictions that have been and continue to be stable in terms of population growth. On the municipal level this could be the result, for example, of the need to have a full time staff to process permits resulting from increased building. At the County level, increased growth may lead to the requirement for increased judicial and corrections expenditures.

Entrepreneurialism

In several cases, the County has chosen to plan, build and operate facilities that have the potential to defray costs of providing required governmental services. In addition to departments that normally generate income from fines, fees and assessments to offset expenditures, facilities such as the Jail have the potential to deliver savings on a governmental service that Pike would otherwise have to provide. Our analysis, focusing as it does, primarily on expenditures, overstates the per capita cost of delivering these services.

Physical Layout and Growth Patterns

Pike County is a large jurisdiction with topography that makes delivery of many basic governmental services difficult. Centralized services may not always make sense in a location where it is difficult to reach all of the corners of the County. In this respect, some duplication of staffing and facilities, particularly in public safety, may not only be unavoidable but rather necessary.

Seasonality

Pike County’s population grows significantly larger in the warmer months. Because of this, certain facilities and functions for the County and its municipalities need to be larger. Slightly higher per capita expenditures for governmental services, particularly in public safety, judiciary and corrections are reasonable given a higher seasonal population.”

COUNTY AND MUNICIPAL PARK FACILITIES

Pike County leases 325 acres from PA Department of Conservation and Natural Resources on Schocopee Road in Milford Township. A master plan has been prepared for the Park, which is intended to provide outdoor recreation, conservation education, conservation of natural resources, a community resource, and make forested open space more accessible to County residents. The plan for the park calls for walking trails, a group camp area, pavilions, parking areas, fishing pier, beach, boat launch, open lawn, cabins, and interpretive trails.

No additional County parks are planned at this time. The County has provided Community Development Block Grant (CDBG) funding for improvements to municipal parks. The County also intends to provide technical assistance to municipalities for recreation planning and for applying for grant funding to plan for and implement recreational facilities. Municipalities in the County are taking a more proactive role in providing recreation facilities for their residents. Dingman and Lehman Townships are currently planning for major municipal parks for their municipalities.



There are a number of state and federal recreation areas within the County, including Promised Land State Park, Delaware Water Gap National Recreation Area, State Gamelands, and State Forest. Lake Wallenpaupack, the Upper Delaware Scenic and Recreational River Corridor, and Lake Greeley are also major recreational resources.

Camp Speers-Eljabar YMCA is the only YMCA facility which serves the County. Administrators are considering a major expansion of its facilities off Route 739 near the Delaware-Dingman Township line.

TELECOMMUNICATIONS FACILITIES

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.

MUSEUMS, CULTURAL AND EDUCATIONAL CENTERS

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.

The Mountain Laurel Center for the Performing Arts has the potential to be a cultural and educational resource within the County.

Environmental Education Centers include the Pocono Environmental Education Center and Wallenpaupack Environmental Education Center.

PIKE COUNTY PUBLIC LIBRARY SYSTEM

Branches of the County Library are located in Milford Borough, on Log Tavern Road near Route 739 in Dingman Township, and at St. Luke's Center in Greeley along Route 590, Lackawaxen Township. The Main Branch, which has been housed in the Community House in Milford for over 100 years, is undersized and outdated. A larger, modern facility for the Main Branch is needed and is a prerequisite to enhanced library services for the County. The southwestern portion of the County is the least well served and should be considered in future service expansions.

SCHOOL DISTRICT FACILITIES

The County is served by three school districts. The Delaware Valley School District serves Delaware Township, Dingman Township, Matamoras Borough, Milford Borough, Milford Township, Shohola Township, and Westfall Township. The Delaware Valley Elementary School, Delaware Valley Middle School, and Delaware Valley High School are located along Route 6/209. The Dingman-Delaware Middle School, Dingman-Delaware Elementary School, and Dingman-Delaware Primary School are located along Route 739.

The East Stroudsburg Area School District contains a total of ten schools and serves Lehman and Porter Townships and municipalities in Monroe County. The Bushkill Elementary School, Lehman Intermediate School, and North High School are located on Bushkill Falls Road. The remaining schools are located in Monroe County.

The Wallenpaupack Area School District contains a total of six schools and serves Blooming Grove, Greene, Lackawaxen, and Palmyra Townships, and municipalities in Wayne County. Wallenpaupack Area High School, Wallenpaupack Area Middle School, and North Elementary School are located along Route 6 in Wilsonville.

Table 38

PIKE COUNTY SCHOOL DISTRICTS	
School District Name	
Delaware Valley School District	Delaware Township
	Dingman Township
	Matamoras Borough
	Milford Borough
	Milford Township
	Shohola Township
	Westfall Township
East Stroudsburg Area School District	Lehman Township
	Porter Township
Wallenpaupack Area School District	Blooming Grove Township
	Greene Township
	Lackawaxen Township
	Palmyra Township
Source: Pennsylvania Department Of Community And Economic Development (DCED)	

As the County continues to grow and enrollment increases, school taxes continue to rise commensurate with the growth. For example, in the Delaware Valley School District, for 1990-91 the millage rate was 49 mils (Pike County's real estate re-assessment year). In 2005-06, the rate was 94.2 mils, a 52% increase over the 15 year period. The School District is now considering purchasing land for a new elementary school, which will free up the existing Delaware Valley Elementary School for use by the High School and Middle School.

Table 39

POST-HIGH SCHOOL DESTINATION 2003-2004				
	Total Graduates	College Bound Pennsylvania	College Bound Outside Pennsylvania	Non-College Bound
Pennsylvania	123,473	78,074 (63%)	15,096 (12%)	30,305 (25%)
Delaware Valley SD	374	184 (50%)	150 (40%)	39 (10%)
East Stroudsburg Area North SD*	203	131 (65%)	31 (15%)	41 (20%)
Wallenpaupack Area SD*	256	163 (63%)	30 (12%)	63 (25%)

Source: Pennsylvania Department of Education

* ESASD & WASD include students from Monroe and Wayne Counties, respectfully

Post-high school destinations of public high school graduates as shown in the table above clearly show a trend towards higher education among the school districts serving Pike County. According the Pennsylvania Department of Education, Pike County school districts had the highest percentage of college bound graduates, the highest percentage going to 2-year colleges, the highest percentage by far of 2-year college students going out of state, and the highest percentage of 4-year college students attending out of state, when compared to Monroe County, Wayne County, Lackawanna County, and Pennsylvania totals.

School District Data And Trends

The East Stroudsburg School District enrollment increased from 5,910 in 1996 to 8,124 in 2006, a 38% increase. The Delaware Valley School District enrollment increased from 4,080 in 1996 to 5,763 in 2006, a 41% increase. The Wallenpaupack Area School District enrollment increased from 3,278 in 1996 to 4,097 in 2006, a 25% increase.

Table 40

School District Enrollment Projections			
Year	Delaware Valley School District	East Stroudsburg Area School District	Wallenpaupack Area School District
2000-2001	4911/ 5051	6863/ 6864	3806/ 3711
2001-2002	5051/ 5182	7175/ 7343	3765/ 3798
2002-2003	5182/ 5378	7481/ 7451	3866/ 3858
2003-2004	5378/ 5510	7598/ 7589	3967/ 3908
2004-2005	5519/ 5681	7923/ 7922	3956/ 4005
2005-2006	5647/ 5763*	8053/ 8124*	4036/ 4097*
2006-2007	5802/ 5838	8253/ 8464	4003/ 4181
2007-2008	5858/ 5913	8396/ 8873	4046/ 4264
2008-2009	5988/ 6035	8521/ 9141	4096/ 4349
2009-2010	6095/ 6109	8668/ 9425	4118/ 4435
2010-2011	6215/ 6192	8776	4120/ 4523
2011-2012	6362/ 6283	8939	4153/ 4613
2012-2013	6519/ 6390	9137	4208/ 4705
2013-2014	6673/ 6452	9291	4272/ 4799
2014-2015	6838/ 6656	9441	4341/ 4894

Source: Pennsylvania Department of Education – 9/05 data

DVSD, ESASD, and WASD enrollment and projections in **Bold**

* SD total current enrollment verified 4/06

Table 41

SCHOOL DISTRICT ENROLLMENT GROWTH				
1992-93 to 2005-06				
School District	1992-93 Enrollment	2005-06 Enrollment	Numerical Increase	Percentage Increase
Delaware Valley	3,195	5,763	2,568	80.4%
Wallenpaupack Area	2,675	4,097	1,422	53.2%
East Stroudsburg Area	4,301	8,124	3,824	88.9%

Source: DVSD, WASD, and ESASD figures

The limited availability of higher educational facilities that are available locally to the County residents is a concern. Currently, Northampton Community College maintains a small branch along Route 6 in Shohola Township.

SENIOR CENTERS

Three senior centers are located in the County, the Blooming Grove Senior Center at the County Administration Center in Blooming Grove Township, the Bushkill Senior Center at Newman Smith Post 514 on Old Milford Road, Lehman Township, and the Lackawaxen/Shohola Senior Center at the Lackawaxen Firehouse on Beisel Road and Route 590. Additional distribution of senior centers and clubs may be appropriate in the future.

WWW.PIKEPAHELP.ORG

The Pike County Information and Referral System On-Line is funded by United Way of Pike County. The system lists Human Services, Health Services, Public Services, Community Resources, Education Resources, Environmental Resources, and Arts and Cultural Resources serving the residents of Pike County.

HEALTH CARE

Pike County is one of six counties in Pennsylvania without a hospital. Currently, residents are dependent upon facilities in Port Jervis, New York; Newton, New Jersey; East Stroudsburg, Pennsylvania; Scranton, Pennsylvania and Honesdale, Pennsylvania, unless they wish to travel to hospitals further away. The Pike County Visioning process identified access to health care as one of the principal shortcomings of the County.

Improvement of the healthcare services available to our growing populace should continue to be considered including a possible future centrally located County Hospital. Hospitals provide for the well-being of the residents and provides a good foundation for economic growth, providing high paying stable (family-sustaining) jobs in both professional and non-professional sectors.

- The availability of psychiatrists is a concern as well as support services for those clients that use MH/MR.
- The lack of an adequate number of OB/GYN physicians is a concern that needs to be addressed as many women travel out of county/state for care. The lack of a hospital within the County perpetuates this need.

The Pike County Health Care Study group commissioned a Health Needs and Resources Assessment, which was published in 2003. The principal findings and recommendations of that assessment are:

- Perceptions regarding the critical need for a county based hospital and a high degree of out-of-state insurance coverage were not supported at this time.
- Problems in access to specialty care services and after-hours urgent care were present.
- County residents scored well on the vast majority of health status measures, the exceptions being Respiratory Cancer and Access to Prenatal Care.
- There are three relatively distinct established health care markets or communities in Pike County:
 - Northwest Community which relies upon Wayne Memorial and facilities to the west (Blooming Grove, Lackawaxen, Palmyra)
 - South/southwest Community which relies upon Pocono Medical Center and facilities to the southwest (Greene, Lehman, Porter)
 - Northeast Community which relies upon services from New York and New Jersey facilities (Delaware, Dingman, Matamoras, Milford Borough, Milford Township, Shohola, Westfall)
- The concept of one center of health care anchored by a county-based hospital seemed impractical at this time because of current levels of use, even though the population of Pike County has reached a level which could support its own hospital. Rather, a centrally located facility which provides coordinated access to specialty outpatient services and urgent care may represent an unmet need which could possibly be met through a centrally located shared site which maximizes individual health system resources. The financial viability of a shared site could be enhanced given its intent to draw from all communities in the county.
- The availability of urgent care and its relationship to emergency medical services is unclear to many County residents and is a highly expressed need in the community. Youth in the county, a group which one might think had little concern for health care, identified it as one of their top concerns.
 - The current and proposed availability of urgent care should be reviewed in detail relative to locations, hours of operation, and capacities.
 - A description of current urgent care capacities should then be circulated to Pike County residents along with a description of medical conditions appropriately treated at urgent care centers and the role of emergency medical services in the County.

- The potential interest in sharing a centrally located service site should be explored with the study group members. The examination should focus on the benefits that could accrue to both the community and each member of the study group through the operation of a shared site.
- As with the urgent care area, several components of the assessment identified expressed needs for specialty health care services. The most notable was an expressed need for psychiatrists by service providers and indirectly by youth through their high concern for services for the prevention of violent behavior, suicide and depression.
 - The current and proposed availability of specialty care should also be reviewed in detail relative to locations, hours of operation, and capacities.
 - A description of current specialty and subspecialty capacities should then be circulated to Pike County residents.
 - The potential interest in sharing a centrally located service site should be explored. The examination could focus on the benefits that would accrue through the operation of a shared site.
- Appropriate Pennsylvania State agencies should be continually be advised of the importance of out-of-state hospital utilization in Pike County, the vast region of Zip Code 18428, and the reporting ramifications of utilizing zip codes that cross county borders.

PIKE COUNTY EMERGENCY COMMUNICATIONS CENTER/911

The Pike County 911 Center dispatches for 15 volunteer fire departments, 10 volunteer ambulance corps, two volunteer quick response services and four municipal police departments 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 and equipment are coordinated from all fire companies.

LOCAL FIRE AND EMS ORGANIZATIONS

Currently, there are 16 volunteer fire departments based within Pike County that provide service. In addition, the Greene-Dreher FD from Wayne Co. provides service to part of Greene Township, Welcome Lake F.D from Wayne Co. provides service to the upper portion of Lackawaxen Township and the Lumberland F.D. from Sullivan Co., NY provides service to the Pond Eddy portion of Shohola and Westfall Townships.

EMS Service is provided by 15 Ambulance Services and 2 fire department QRS (quick response service) units. Of the 15 ambulance services, 8 are part of the fire service. Bushkill Emergency Corps which services Lehman Township is based in and dispatched by Monroe County. Hawley Ambulance serves a portion of Lackawaxen Township and is based in and dispatched by Wayne County. Newfoundland Ambulance is based in and dispatched by Wayne County as well. Tusten Ambulance and Lumberland F.D.

Ambulance are based in and dispatched by Sullivan Co. NY. Port Jervis Ambulance is based in Orange Co. NY.

As for the number of volunteers, at last count, the average fire department had about 30 active members. Pike County is similar to the rest of the state and has seen a huge decline of volunteers over the past 20 years. It is estimated that there are no more than 500 active volunteers in the County between both fire and EMS.

In addition to the fire fighting abilities of the departments located in the County's municipalities, personnel are also employed by the Pennsylvania Bureau of Forestry and Delaware Water Gap National Recreation Area. Local fire and EMS organizations are generally well distributed throughout the County and nearby locations:

Table 42

Pike County Fire Departments and Emergency Medical Services

BLOOMING GROVE TOWNSHIP

Fire: Blooming Grove Vol. V.D.
Hemlock Farms Fire & Rescue
EMS: Hemlock Farms F.D. Ambulance

DELAWARE TOWNSHIP

Fire: Delaware Township F.D.
EMS: Delaware Township Ambulance

DINGMAN TOWNSHIP

Fire: Dingman Township F.D.
Milford F.D.
EMS: Dingman Township F.D. Ambulance
Milford F.D. Ambulance

GREENE TOWNSHIP

Fire: Promised Land F.D.
Greene-Dreher F.D. – *From Wayne Co.*
EMS: Promised Land F.D. Ambulance
Newfoundland Ambulance

LACKAWAXEN TOWNSHIP

Fire: Central Vol. F.D.
Forest Vol. F.D.
Greeley Vol. F.D.
Lackawaxen F.D.
Welcome Lake F.D. - *From Wayne Co.*
EMS: Lackawaxen Ambulance
Hawley Ambulance – *From Wayne Co.*
Tusten Ambulance – *From Sullivan Co. NY*

LEHMAN TOWNSHIP

Fire: Bushkill F.D. – *Dispatched from Monroe Co.*
EMS: Bushkill Emergency Corp – *Dispatched from Monroe Co.*

MATAMORAS BOROUGH

Fire: Matamoras F.D.
EMS: Matamoras F.D. QRS
Port Jervis Ambulance *from Orange Co, NY*

MILFORD BOROUGH

Fire: Milford F.D.
EMS: Milford F.D. Ambulance

MILFORD TOWNSHIP

Fire: Milford F.D.
EMS: Milford F.D. Ambulance

PALMYRA TOWNSHIP

Fire: Tafton F.D.
EMS: Tafton F.D. Ambulance

PORTER TOWNSHIP

Fire: Hemlock Farms Fire & Rescue
EMS: Hemlock Farms F.D. Ambulance

SHOHOLA TOWNSHIP

Fire: Shohola F.D.
Lumberland F.D. – *From Sullivan Co. NY*
EMS: Shohola F.D. Ambulance

WESTFALL TOWNSHIP

Fire: Westfall F.D.
Mill Rift F.D.
Lumberland F.D. – *From Sullivan Co. NY*
EMS: Mill Rift QRS
Westfall F.D. Ambulance
Lumberland F.D. Ambulance – *From Sullivan Co. NY*

FIRE SERVICE AND EMERGENCY MEDICAL SERVICE (EMS)

The Pike County Visioning Final Report issued in October 1999 found that Communities have been hard-pressed to keep up with the provision of services, including fire and emergency medical service (EMS), as a result of growth pressures.

The County relies almost entirely on volunteers to provide vital EMS and fire services for residents. A dozen all-volunteer fire companies serve the 13 municipalities in the county. Approximately 23 volunteer fire and ambulance companies provide protection throughout the County. These companies collectively have approximately 500 volunteers who provide emergency services throughout the county. Approximately 85 to 100% of the total funds used to run these companies come from private donations. Most of these companies are confronted with ongoing problems of retaining volunteers, raising sufficient funds to purchase and maintain adequate and updated equipment, and obtaining sufficient training. As the number of residents and residences increase and the number of volunteers decrease, fire services currently stretched to their limits, will be further stressed to provide adequate emergency protection for the County.

The problems for EMS services are very similar. The over-riding problem is lack of manpower to handle the volume of calls. EMS services in the County rely on volunteers, and the number of volunteers have been dropping largely due to liability issues, the risk of AIDS, higher training requirements, the increasingly mundane nature of the work (i.e., increasing number of "transportation calls" from an aging population and fewer emergency calls), and other related problems.

Both services are suffering from problems associated with the rapid and somewhat haphazard growth in county, particularly in the private communities. Lack of standards for roads and signs has made it difficult and occasionally impossible to respond to life and property-threatening emergencies. EMS and fire program managers throughout the county feel that volunteerism needs to improve to adequately respond to the increasing call volume. Residents are not aware of the extraordinary service provided to them at virtually no cost, entirely through the work of volunteers.

The Visioning Final Report (1999) continues by stating it is likely that no one solution in this fire and emergency services issue will work for the entire county, but some mix of the following options should be considered.

- Regionalize Fire and EMS services within the county to meet the needs of the growing population.
- Increase personal incentives for volunteers. Incentives such as tax breaks or pensions could be actively explored in cooperation with state and local government as positive inducements to volunteer service.
- Increase/Improve Training for emergency service providers. Additional financial support for training should be provided in order to reduce the time volunteers must spend raising funds. A new fire training center is also needed and should be developed.

- Provide seed money for equipment, facilities, etc. Most volunteers are willing to work harder to raise funds if some operational seed money is provided as an incentive.
- Continue to Improve Communications and Road Signage.
- Upgrade EMS service. Areas in eastern and central Pike County do not have advanced life support (ALS) services, which are critical to assuring that patients with life-threatening illnesses or injuries survive until they arrive at hospitals. The county should also be divided into three separate response areas to improve rapid and coordinated delivery of service.
- Increase Public Education - County residents need to be educated on the proper use of the 911 system and the definition of what constitutes a “true emergency.”
- Provide leadership. The County has an important role in providing leadership to identify possible sources of funding and to develop partnerships which will work towards the coordination of possible solutions to the issue.

Members of the Visioning Government/Infrastructure Task Force projected in 1999 that the county was on the edge of a serious problem that was not receiving adequate attention. They stated that “volunteers can give only so much of their time and energy to these critical and mandatory services. The increasing problems with providing adequate coverage to an expanding community will only get worse with time unless the county takes some of the recommended actions to support and fund its volunteer operations. Modest expenditures now will likely forestall the potential need for major expenses (i.e., professional, full time staff) in the future.”

The bottom line in all these recommendations is that a relatively small investment will lead to a stronger and healthier volunteer commitment and will accordingly improve services to residents. The only alternative, one which has not been advanced by even the most taxed volunteer operations is to create a much more expansive professional fire and EMS service. The county needs to make a small investment now to forestall the possibility of much more significant costs in the near future.

Pike County Advanced Life Support (ALS)

Formed in May 2003, it is comprised of paid paramedics and volunteer Emergency Medical Technician (EMT) drivers. 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. Hospitals are located in Port Jervis, NY; East Stroudsburg, PA; Honesdale, PA; Newton, NJ; and Scranton, PA.

Particular concerns of Pike County ALS include bringing together all EMS to discuss improving service in the County; improving funding to pay medics more and pay expenses; and increasing the number of medics and the number of stations in the County in order to expand service area. Additional ALS service in the County is provided from Honesdale, Bushkill, and Hamlin.

Municipal Assistance for Emergency Medical Service

A recent *Pennsylvania Township News* article suggested the following ways in which EMS can be assisted by municipalities:

- **Find out what they need** – Meet with your EMS provider on a regular basis to find out what the group needs and how the township can help.
- **Put out the call for volunteers** – Advertise for EMS volunteers in your newsletter and on your Web site. Find out if the EMS provider needs administrative volunteers, in addition to medical ones, and try to connect the group with local business people, a CPA, or a bank manager.
- **Offer volunteer incentives** – If the township sponsors recreation programs, special events, or even has a township pool, offer free tickets or a free membership to anyone who volunteers for EMS duty.
- **Help EMS providers with grant searches and grant writing** – Use your own experience securing grants for the township to show EMS providers where to look, such as the state Department of Community and Economic Development and other state and federal agencies. If they're new at grant writing, offer some pointers.
- **Check out purchasing options using state contracts** – Emergency medical equipment is available for purchase through statewide contract. Tell the EMS provider how the system works and also alert them to the availability of state and federal government surplus programs.
- **Consider funding options** – Townships can use the new emergency and municipal services tax to help fund emergency medical services. They can also dedicate up to half a mill of township taxes to such services.

Some townships make annual donations to their EMS provider a regular part of the budget, and others participate in special fundraising campaigns.

PIKE COUNTY SHERIFF'S OFFICE

The Pike County Sheriff's Office includes twenty full time Deputy Sheriff's and four Administrative Assistants. The Sheriff's duties cover a wide area of responsibilities including:

- Provision of security to the Courthouse and County Facilities
- Inmate Transportation
- Service of Process (complaints, subpoenas, summons, eviction etc.)
- Sheriff's Sales
- Issue Permits to Carry Firearms
- License to Sell Firearms
- Enforcement Arm of the Courts
- Traffic Enforcement
- Tobacco Compliance
- Arrest Warrants
- Protection from Abuse Orders
- Weapons Confiscation

The Sheriff's Office also has full authority to arrest on breaches of the peace in their presence, including motor vehicle violations.



Services to all municipalities include a K-9 Unit for drug detection as well as Search and Rescue Services. The K-9 Unit assists local, state, and federal entities, including police and fire departments, with Drug Enforcement and Search and Rescue Missions. DCNR is provided search assistance due to the large amount of State Forest acreage in the county.

The Office of the Sheriff in Pennsylvania is a constitutional office. Each of Pennsylvania's 67 counties has a Sheriff. The term of each elected Sheriff is four years. Pennsylvania Sheriff's trace their history back to England prior to the signing of the Magna Carta. Deputy Sheriff's are well trained and must complete 780 hours of training. In addition, they must complete regular in-service training.

Community programs in Pike County provided by the Sheriff include:

TRIAD, a partnership between senior citizens and law enforcement that directs services such as fraud preventions, telephone scams, home safety tips and much more.

D.A.R.E., Drug Abuse Resistance Education, is an anti-drug and anti-violence program that utilizes uniformed Deputy Sheriff's to teach our youth in the school classrooms. This program teaches our youth to resist drugs and negative peer pressure.

School Resource Officer, This program provides uniformed Deputy Sheriff's in schools. In our turbulent world, this provides protection for students, facility, and the general public.

With the extensive population growth in the County, the Sheriff's Office assists police in their duties when requested. Many areas of the county have no police coverage other than State Police. The Sheriff's Office has assisted many government organizations with providing Deputy Sheriff's to keep the peace at many county wide events. At times of emergency or civil unrest the Sheriff's Office becomes the Commander. Examples are evacuation and maintaining order during the past two major weather events which evacuated entire towns.

The Sheriff's Office has the only Bomb Squad in the region. Two certified Bomb Technicians, with state of the art equipment, comprise this unit. Signed formal agreements with Pike, Monroe and Wayne counties for mutual aid exist. The Bomb Squad is tied to the Scranton City Bomb Squad, so they can assist each other during large events if necessary. The Sheriff's Office is a member of the North East Pennsylvania Terrorist Task Force and receives equipment and training.

POLICE SERVICE STUDIES

Improving police service in Pike County has been, and continues to be, a major concern. Four sections regarding police service follow. The first presents the findings of the Pike County Visioning Final Report regarding police service. The next section includes discussion from the prior County Comprehensive Plan regarding police service. The third section discusses the 2005 Northeast Pike County Regional Police Department feasibility study. The final section includes material on regional police services prepared by the Governor's Center for Local Government Services.

This background information has been consolidated here to facilitate discussion of how to improve police service in the County. Policies and actions to address police service and related issues are outlined in Chapters 8 and 9.

Findings of Pike County Visioning Final Report Regarding Police Service

The issue of Public Safety (Police, Fire, EMS) is critical to the health, safety and welfare of the citizens of Pike County. With the expanding population, the demands placed upon the present and future Public Safety Agencies is significant.

Pike County must have adequate law enforcement protection for all residents through professional, adequately-funded and equipped police departments commensurate in size with the county's expanding population. Communities have been working at addressing the provision of new or increased law enforcement services. The exorbitant costs make it beneficial for municipalities to work together to provide these needed services.

At present, there are only four communities within the county, the townships of Westfall and Shohola and the Boroughs of Matamoras and Milford, with municipal police forces. Those four departments provide law enforcement for a comparatively small portion of the County's total population. Other rapidly growing municipalities, particularly Dingman, Delaware, and Lehman townships, have no municipal police forces. In the past, Lehman Township and Middle Smithfield Township participated in a study to assess the feasibility of establishing a joint municipal police force. More recently, Lehman formally formed a police committee for their municipality and they are currently performing a feasibility study for municipal police services.

The Pennsylvania State Police provide public law enforcement for the balance of the county. Typically there are no more than two to five officers per shift. They are responsible for the entire County and act as primary police service for a majority of the County's municipalities. This equates to a large land area and population to serve also noting the fact that the County's population more than doubles during the summer months. Despite their best efforts, they are hard-pressed to provide adequate and/or timely enforcement.

The County has a Sheriff's Office, but the deputies work primarily for the court system. While performing the duties of the Sheriff's Office, vehicle enforcement and breaches of the peace are enforced. However, the Sheriff and Deputies are currently not approved to "patrol". In an attempt to enhance resident sense of security, many private communities have an array of law enforcement and security arrangements. Some have large, professional departments; some have private security guards with limited authority; some have part-time volunteers and community watch patrols; some have nothing whatsoever. Efforts to coordinate community enforcement operations have met with limited success.

The cost of enforcement is a primary problem. Many residents have moved here to avoid taxes and resist efforts to increase them. Recent battles over school budgets reveal the difficulties that would be associated with funding expanded law enforcement options.

It is likely that no one solution will work for the entire county, but some mix of the following options should be considered.

- Upgrade County Sheriff's Office, upon approved state statutes as permissible by law.
- Develop Regional Police Forces. The townships with the greatest population and fastest growth, Dingman, Delaware, and Lehman Townships could develop a regional police force, possibly with the inclusion of Blooming Grove and other townships. Discussions with the appropriate townships should be initiated to determine if such an approach would be feasible. The county should also seek available state grant money to conduct studies of area options.
- Strengthen the Pennsylvania State Police. The statutory ceiling on the number of troopers statewide was recently revoked, so it may be possible to increase the number of troopers at the Blooming Grove barracks. This option should be pursued through county representatives to state government. The state police, however, do not have municipal enforcement as a primary responsibility, so efforts in this arena should complement other actions.
- Improve Law Enforcement Coordination and Liaison. A concerted effort needs to be made to strengthen links between law enforcement entities and improve operational efficiency, particularly between private security and governmental law enforcement organizations. Periodic conferences, shared information, coordinated operating procedures, shared dispatch and other methods should be actively pursued, up to and including establishment of a formal coordination center.

The County should begin by conducting grant-funded problem studies, augmented by working meetings with enforcement authorities and elected officials from the state, county, municipalities, and private communities.

A formal system for coordinating enforcement operations among private and public law enforcement organizations in the county, including a chartered council with representatives from each of these spheres, should be established in the near future to lay the ground work for a comprehensive approach to dealing with enforcement problems in the future. Information on potential enforcement problems and issues should be presented at public meetings and through the media.

Discussion Regarding Police Service from Prior County Comprehensive Plan

Pike County's permanent population continues to expand; which coupled with the County's high weekend and seasonal population places an extra strain on the County's police forces. The municipalities which do not maintain municipal police forces have been calling for increased Pennsylvania State Police manpower, and those with municipal forces need improved coverage. An in-depth comprehensive evaluation of police facilities and services in the County is needed.

Currently, the local police forces act predominantly in a responsive manner. The forces do provide 24-hour patrol, but, due to limited manpower and large service areas, they are inactive until a report is actually filed. The County's growing permanent and seasonal population and the increased criminal activity associated with this population growth creates a need for more preventative police activities, such as increased state and municipal police funding and manpower.

The Pennsylvania Department of Community Affairs (DCA) submitted in 1982 A *Regional Police Study of the Eastern Pike County Municipalities* to the Townships of Delaware, Dingman, and Westfall, and the Boroughs of Matamoras and Milford. The report, in reviewing the County's police facilities and service, recommends that "total consolidation of the police agencies serving Eastern Pike County Communities [the Townships of Delaware, Dingman, and Westfall, and the Boroughs of Matamoras and Milford] . . . is the most practical approach of the options [for improvement in police facilities and services] that are available for the area" and that "total consolidation of police services will provide for a strong police organization in the Eastern Pike area . . . and improve the delivery of police service." This document should be revised if needed, and its recommendations should be seriously discussed by the municipalities involved. The inclusion of additional municipalities should also be considered, especially considering Lehman Township's recent proactive efforts. If a regional force were to be implemented in the County, the DCA's *Regional Police Services in Pennsylvania, a Manual for Local Government Officials* should serve as a guide for the development of the regional police agency.

Increased involvement of the County Sheriff's Office in law enforcement should also be investigated. In any case, the County should participate with local officials in any effort to improve local police services in the County, as the population increases and as such service is needed. The County should continue to provide and improve existing emergency dispatching system.

Northeast Pike County Regional Police Study

The Northeast Pike County Regional Police Department feasibility study was released in March, 2005. The study was funded by the Pennsylvania Governor's Center for Local Government Services and prepared by the Center's Police Peer-to-Peer Management Consultant.

The study evaluated the feasibility of consolidating police services for Matamoras and Milford boroughs, Milford Township, and Westfall Township. Matamoras, Milford Borough and Westfall each have their own force. The study considered advantages and disadvantages of consolidation and recommended regionalization as a cost-effective way to deal with growing future police needs more efficiently than could be done other ways.

The study is currently being reviewed by the four municipalities, who will meet to discuss issues related to regional police service and the costs which each municipality would actually incur. Impact would likely be greatest in Milford Township, which does not have a police force. Initiating a regional police force would result in a substantial tax increase in the Township.

Given that most municipalities in the County currently do not have municipal police forces, initiation of police service, either municipal or regional, would result in municipal tax increases to fund the police service. State representatives have indicated that studies by the State show that cost reductions to municipalities can result from forming regional forces rather than maintaining individual forces.

Issues facing the existing police departments which were indicated in the feasibility study as supporting centralized police service are:

- Increasing cultural diversity of population.
- Growing population, with its growth in crime.
- Persistent and growing drug problems, especially in schools and youth.
- Rise of gangs and youth violence in schools and in the communities, especially in southern Pike County.
- Proliferation of liability issues.
- Increased mandatory police training requirements.
- Potential for increased serious terrorist threats and post 9/11 homeland security threats.
- Increasing incident responses requires more equipment, more officers, upgrading equipment, and 24/7 coverage.
- Relative revenue declines (revenue not keeping up with costs to provide comprehensive basic police services).

The study noted certain advantages of regionalization, including:

- Improved uniformity and consistency in law enforcement.
- Better coordination of police services.
- Better distribution of police personnel and removal of duplication of effort and equipment.
- Better coverage when training is required or certifying a regional trainer.
- No need for a working chief. A chief can be a full-time chief rather than splitting his/her duties in the office or in the field.

- Offer a better array of services.
- Enhanced promotion and career opportunities, reduced officer turnover rate, enforcement of local ordinances (such as parking, that cannot be done by state police) and probably faster response because state police have to patrol other municipalities with few officers.

Disadvantages cited include:

- Loss of local control.
- Less direct citizen contact with local officers known as neighbors.
- Fear of job loss through regionalization.
- Loss of local non-law enforcement duties, such as opening or closing parks.

CHAPTER 19

IN CLOSING

CHAPTER 19 IN CLOSING

Pike County owes its economic and social well being to the scenic beauty and natural resources that attract people and businesses and provide quality of life to residents: clean and abundant water resources, clean air, intact forests and open space, abundant wildlife and public recreational lands. However, in the next decade, the County is expected to absorb thousands of new residents. Since closing the door is not a realistic option, we urgently need to identify new strategies for incorporating growth, moving beyond traditional planning and reacting to new development on a project-by-project basis towards more sustainable, community oriented patterns of growth and development.

Growth may be inevitable, but sprawl and environmental degradation don't have to be. Sprawling development patterns and resulting loss of open space impact the environment in multiple ways. Not only do we lose the natural landscape features we value – stream corridors, forests, wetlands, etc., we also lose the essential functions and values that these features provide: runoff control, pollutant filtration, groundwater recharge, flood storage, wildlife habitat, recreational and scenic values, to name just a few.

Can we grow smarter, balancing development with the protection of natural resources? There are some encouraging initiatives underway that are moving us in that direction. Pike County Commissioners and the Office of Community Planning are working with local municipalities and residents on a Comprehensive Plan that will provide broad goals for the county's future development particularly as it relates to land use policies. A proposed Open Space, Greenways and Recreation Plan will complement the comprehensive planning process by inventorying existing public and private open spaces and identifying additional lands with potential for open space preservation or recreation. Some municipalities are joining forces in multi-municipal planning efforts and Delaware Township Supervisors recently appointed the first Environmental Advisory Council in the County.

Translating smart growth principles into meaningful action requires changes in the way whole communities function. Local governments, community groups, lenders, real estate professionals, developers, transportation officials, state governments and others need to start "thinking outside of the box", looking for alternative approaches to dealing with the pressing challenges of growth that will preserve and enhance communities over the long term. While there is no "one size fits all" solution, there are a number of planning techniques and options available to local governments that have been used successfully in a variety of urban, suburban and rural settings across the country.

Citizens need to be involved early on in shaping long-term planning and land use strategies and in the election of leaders committed to the same. Rather than fighting hundreds of individual battles, citizens and officials must work together – long before development plans are on the table – to identify resources that are important to the community, then prepare land use regulations that preserve those resources and promote sustainable development. Elected officials need to hear constructive input from a broad range of individuals and groups in order to make tough decisions about their community's future. Effective planning doesn't happen in a vacuum; it must be a true reflection of community values rather than a quest for individual or short-term gains. We all need to take a more proactive role if we hope to be successful in protecting and preserving Pike County's resources for future generations.

Source: The News Eagle - March 19, 20, 21, 2005 edition Conservation Horizons

Author: Pike County Conservation District - entitled *Growing Smarter – Preserving and Enhancing Our Communities*

APPENDIX 1

COMMUNITY SURVEY RESULTS

Pike County Comprehensive Plan Community Survey Results

August 31st, 2004

Pike County

Office of Community Planning

HC8 Box 6772

Hawley, PA 18428

T: 570.226.6293 **F:** 570.226.8222

www.pikepa.org/communityplanning.htm

www.pikepa.org/complansurvey.htm

Surveys Out June 16 through August 16, 2004

25,000 copies distributed in total

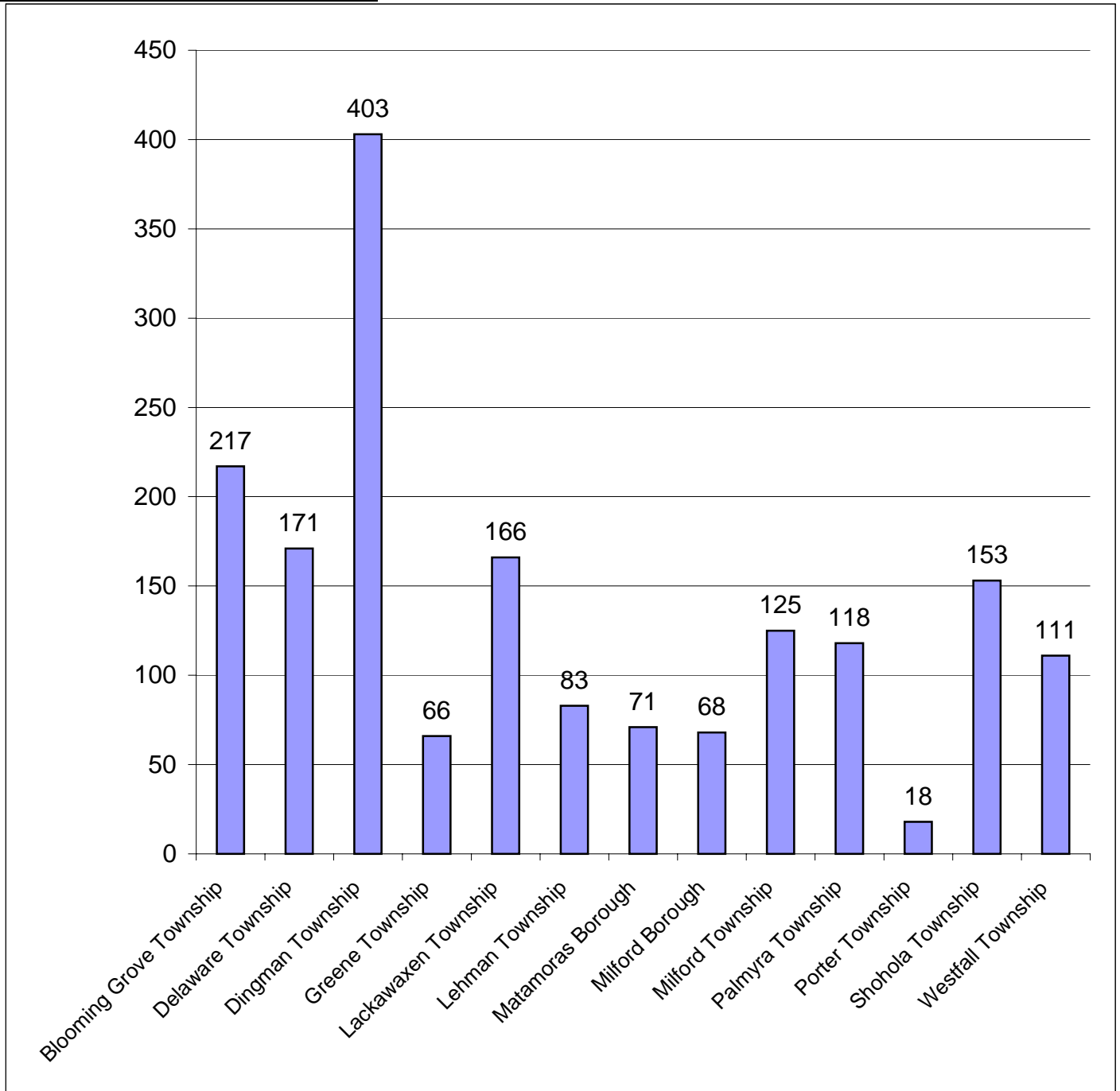
20,695 surveys disseminated via local newspapers

4,305 distributed via meetings and presentations

Total of 1,770 survey's tabulated

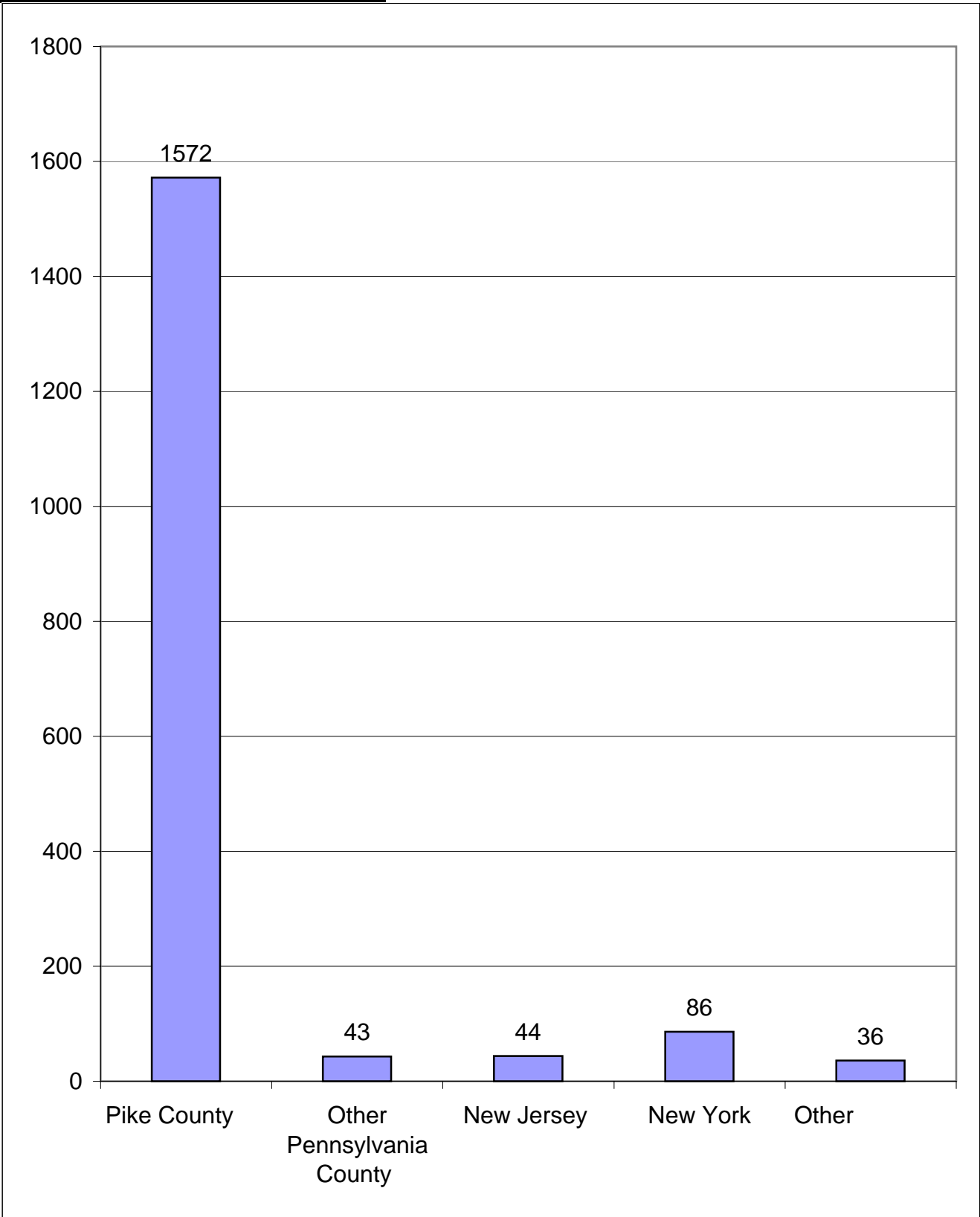
What township or borough do you live in?

Blooming Grove Township	217	12.3%
Delaware Township	171	9.7%
Dingman Township	403	22.8%
Greene Township	66	3.7%
Lackawaxen Township	166	9.4%
Lehman Township	83	4.7%
Matamoras Borough	71	4.0%
Milford Borough	68	3.8%
Milford Township	125	7.1%
Palmyra Township	118	6.7%
Porter Township	18	1.0%
Shohola Township	153	8.6%
Westfall Township	111	6.3%
Total	1770	



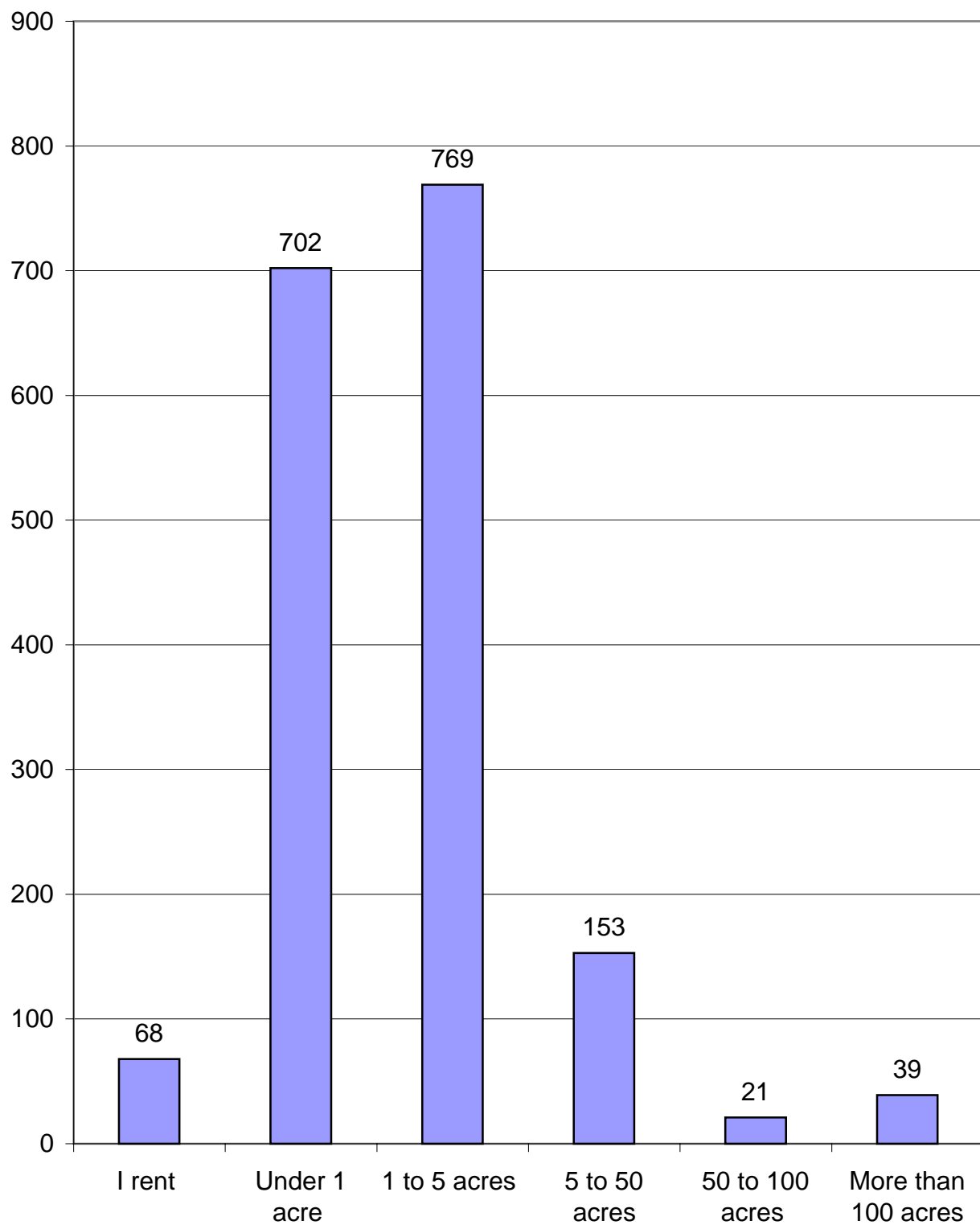
Where do you claim your year-round residency?

Pike County	1572	88.3%
Other Pennsylvania County	43	2.4%
New Jersey	44	2.5%
New York	86	4.8%
Other	36	2.0%
Total	1781	



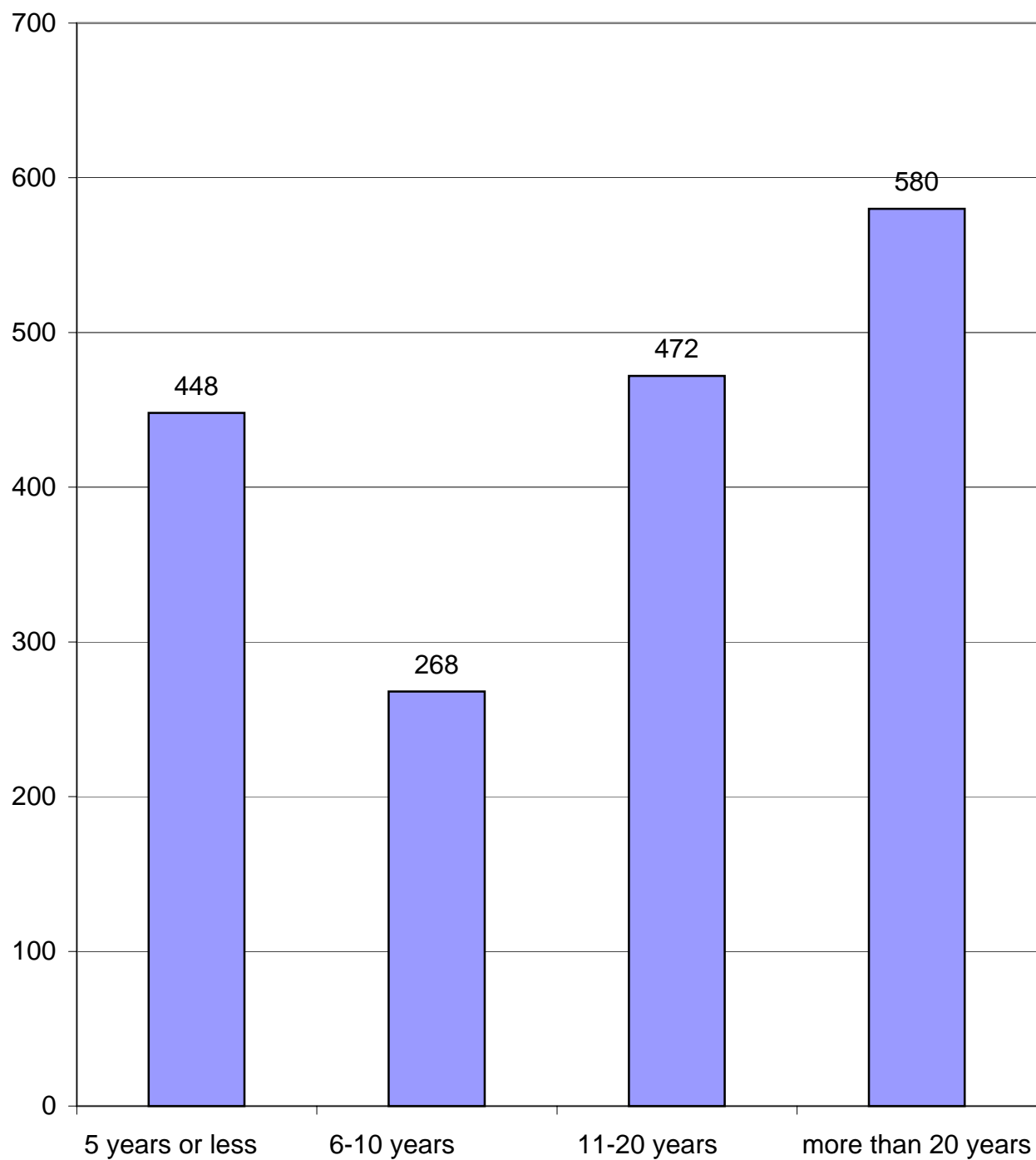
How much land do you own in your Township or Borough?

I rent	68	3.9%
Under 1 acre	702	40.1%
1 to 5 acres	769	43.9%
5 to 50 acres	153	8.7%
50 to 100 acres	21	1.2%
More than 100 acres	39	2.2%
Total	1752	



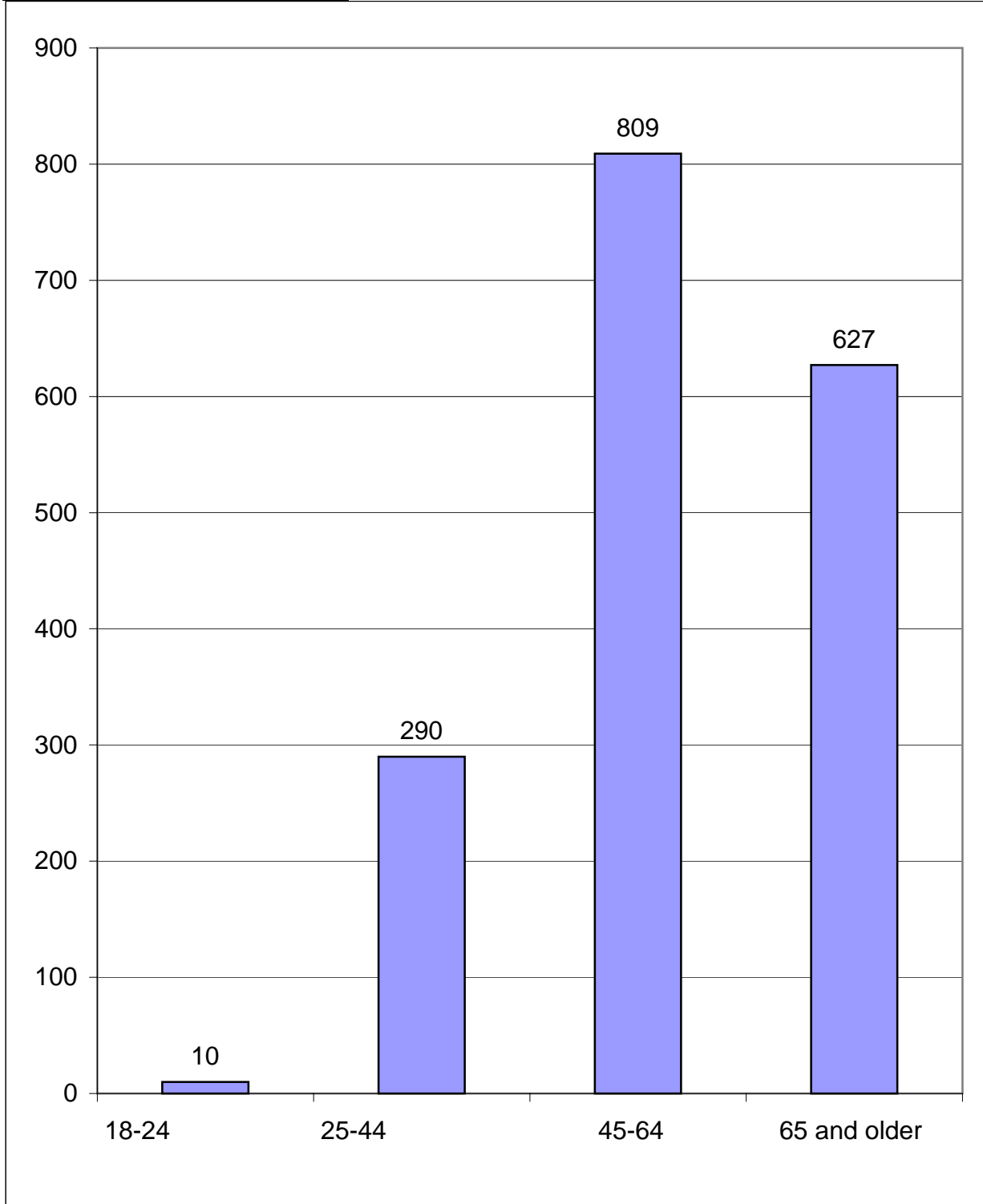
How long have you lived in Pike County?

5 years or less	448	25.3%
6-10 years	268	15.2%
11-20 years	472	26.7%
more than 20 years	580	32.8%
Total	1768	



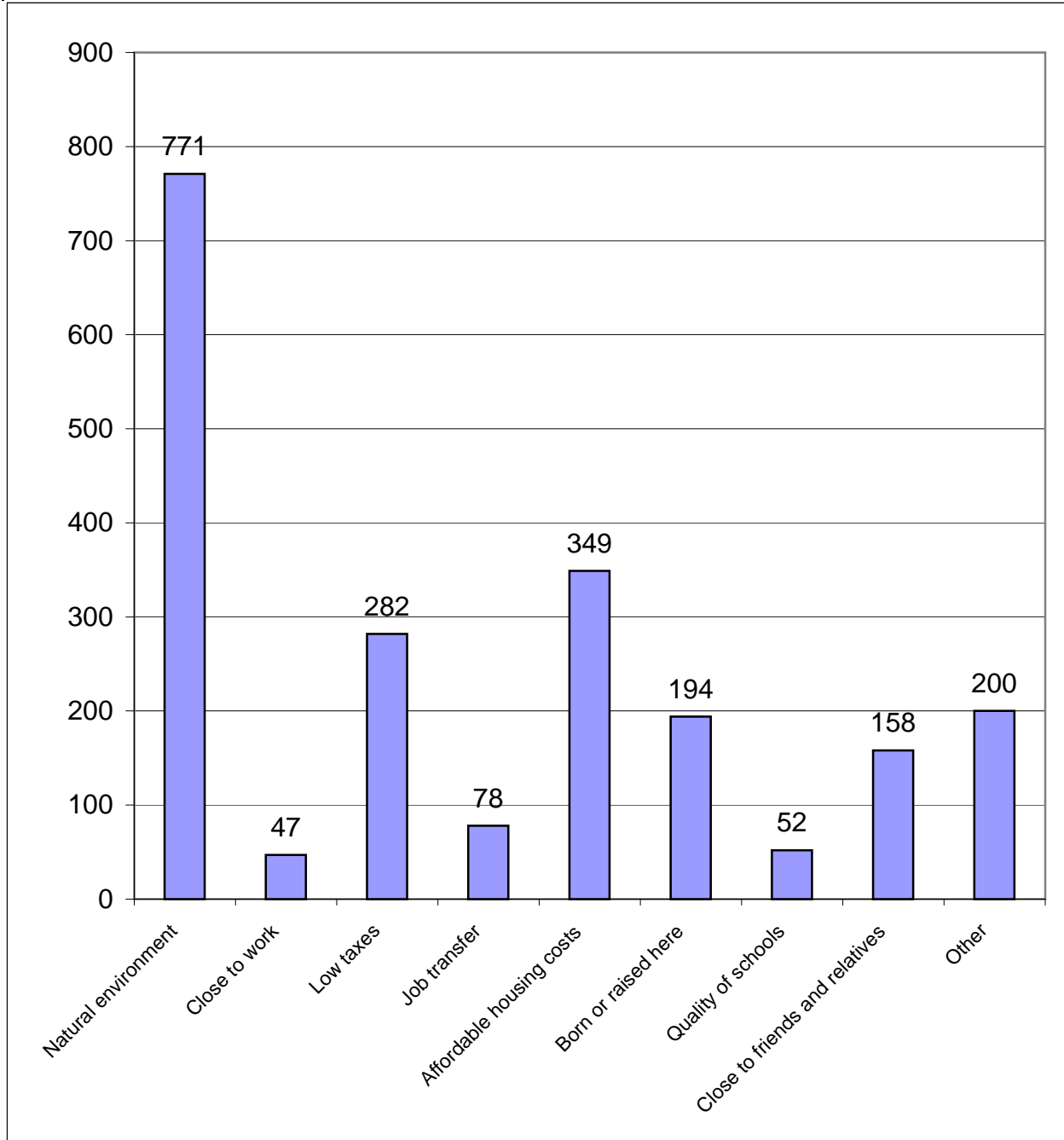
What is your age?

18-24	10	0.6%
25-44	290	16.7%
45-64	809	46.6%
65 and older	627	36.1%
Total	1736	



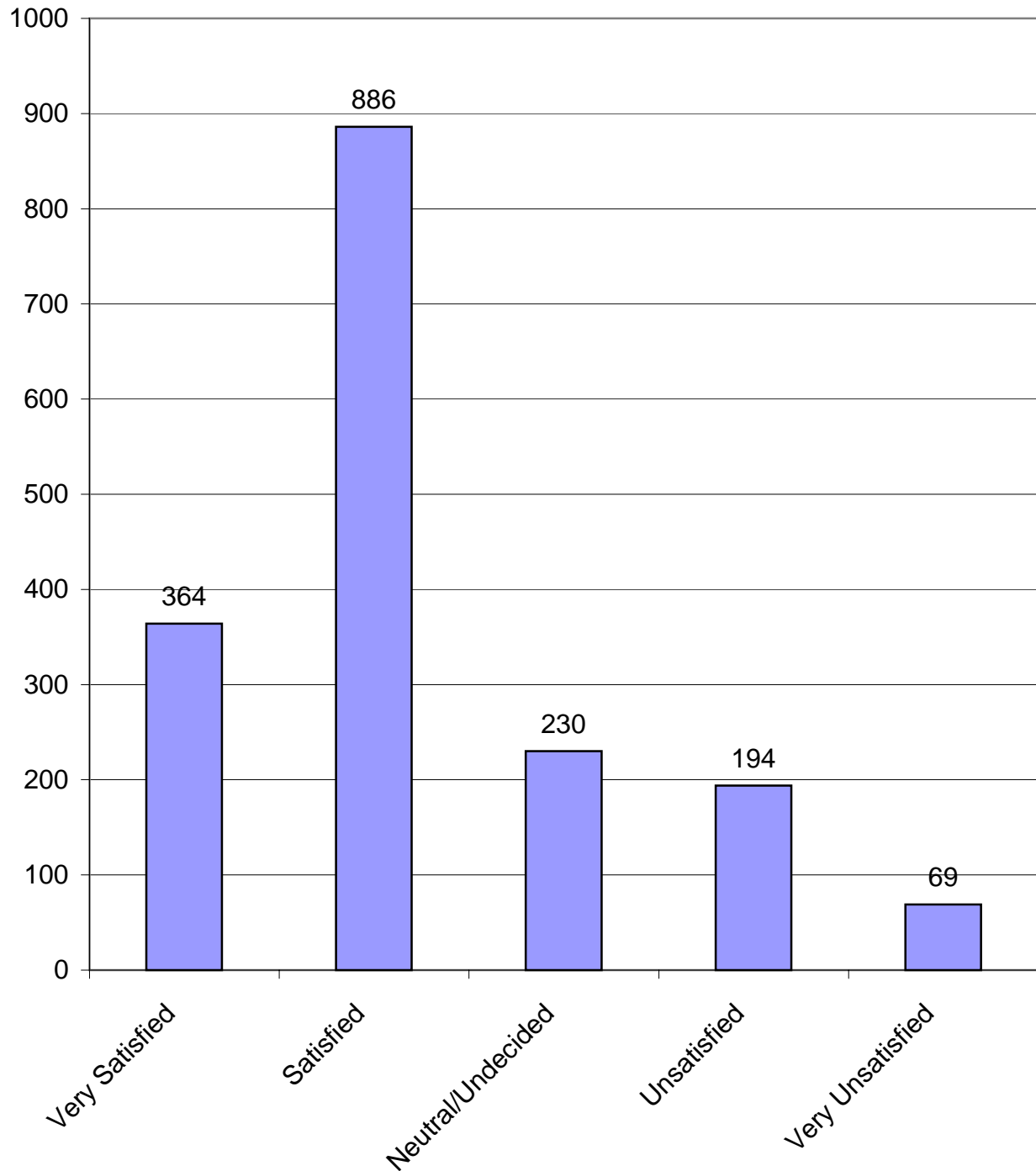
What one reason most influenced your original decision to live or spend time in Pike County?

Natural environment	771	36.2%
Close to work	47	2.2%
Low taxes	282	13.2%
Job transfer	78	3.7%
Affordable housing costs	349	16.4%
Born or raised here	194	9.1%
Quality of schools	52	2.4%
Close to friends and relatives	158	7.4%
Other	200	9.4%
Total	2131	



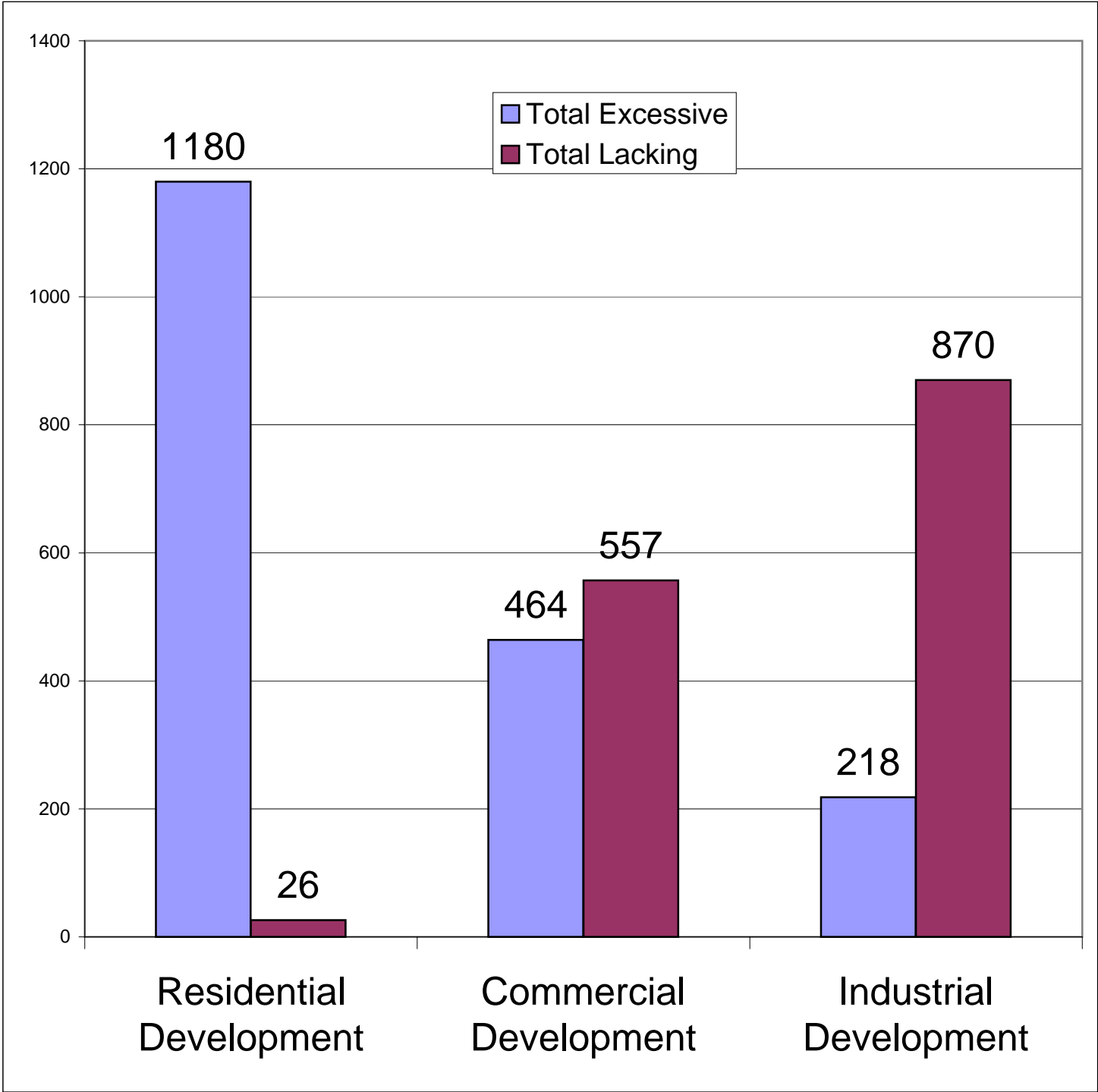
Have your expectations of Pike County been met?

Very Satisfied	364	20.9%
Satisfied	886	50.8%
Neutral/Undecided	230	13.2%
Unsatisfied	194	11.1%
Very Unsatisfied	69	4.0%
Total	1743	



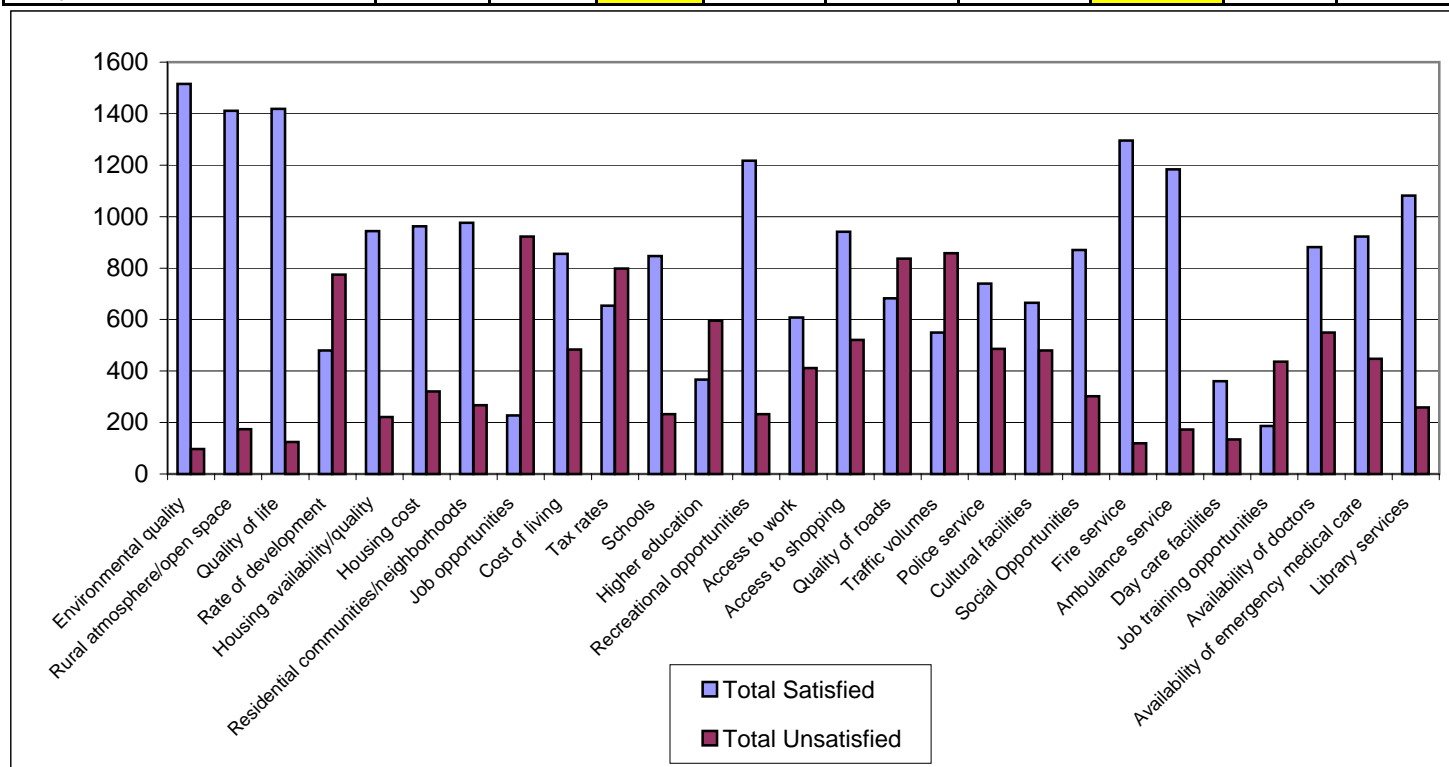
Do you believe that the amount of increase in residential, commercial and industrial development in Pike County over the last ten years was ?

	Very Excessive	Excessive	Total Excessive	Appropriate	Lacking	Severely Lacking	Total Lacking	Percent Excessive	Total
Residential Development	508	672	1180	545	20	6	26	67.4%	1751
Commercial Development	192	272	464	662	430	127	557	27.6%	1683
Industrial Development	78	140	218	558	574	296	870	13.2%	1646



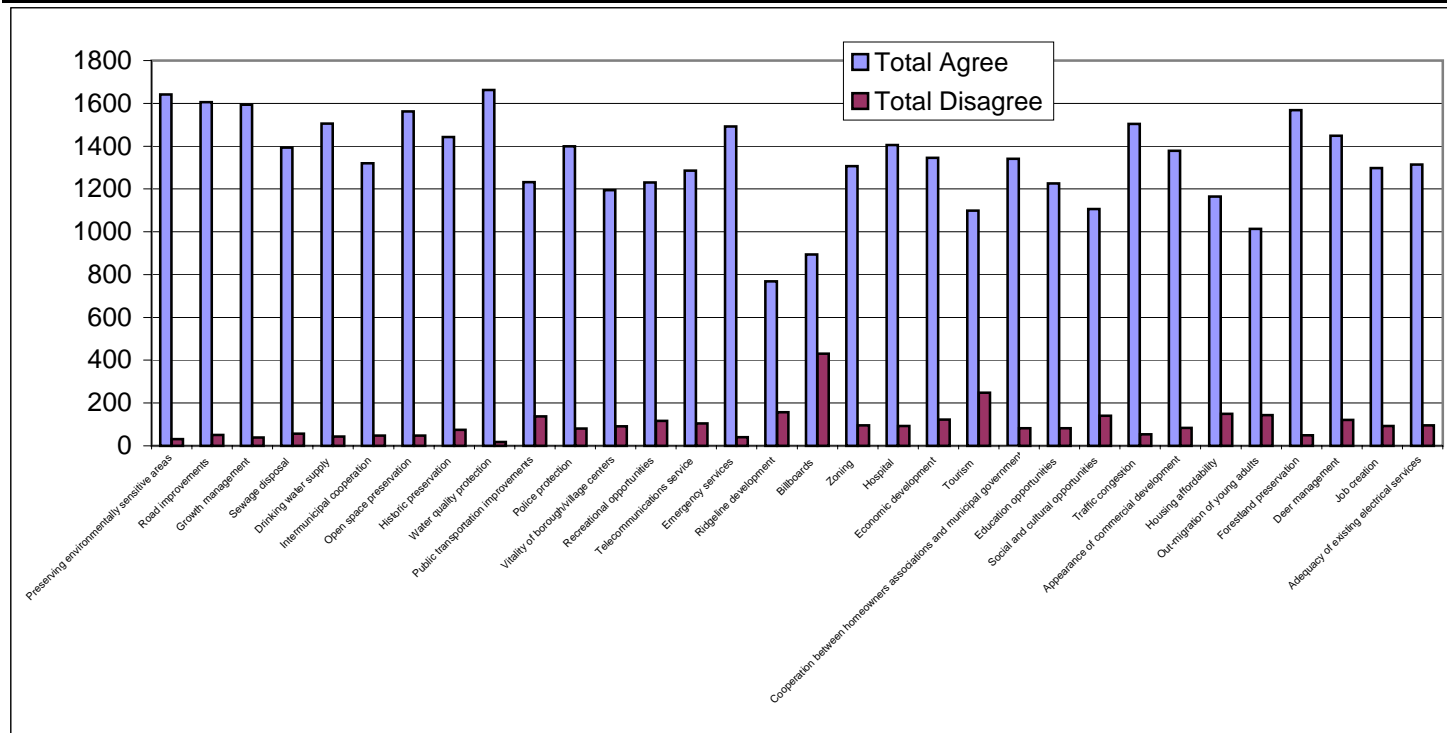
Please indicate whether you are satisfied with the following aspects of Pike County.

	Very Satisfied	Satisfied	Total Satisfied	Neutral Undecided	Unsatisfied	Very Unsatisfied	Total Unsatisfied	Percent Satisfied	Total
Environmental quality	484	1031	1515	130	82	15	97	87.0%	1742
Rural atmosphere/open space	428	983	1411	152	143	31	174	81.2%	1737
Quality of life	423	996	1419	165	104	20	124	83.1%	1708
Rate of development	49	431	480	441	529	246	775	28.3%	1696
Housing availability/quality	105	839	944	538	182	39	221	55.4%	1703
Housing cost	104	858	962	412	251	70	321	56.8%	1695
Residential communities/neighborhoods	146	830	976	433	203	64	267	58.2%	1676
Job opportunities	21	207	228	530	619	303	922	13.6%	1680
Cost of living	58	797	855	359	374	110	484	50.4%	1698
Tax rates	65	589	654	284	517	281	798	37.7%	1736
Schools	206	640	846	612	159	73	232	50.1%	1690
Higher education	61	306	367	711	417	178	595	21.9%	1673
Recreational opportunities	272	945	1217	259	188	44	232	71.3%	1708
Access to work	87	521	608	630	305	107	412	36.8%	1650
Access to shopping	85	856	941	246	421	100	521	55.1%	1708
Quality of roads	38	644	682	206	563	274	837	39.5%	1725
Traffic volumes	41	509	550	310	537	321	858	32.0%	1718
Police service	87	653	740	491	327	159	486	43.1%	1717
Cultural facilities	53	612	665	562	380	100	480	39.0%	1707
Social Opportunities	74	796	870	534	238	64	302	51.0%	1706
Fire service	243	1052	1295	317	97	22	119	74.8%	1731
Ambulance service	241	942	1183	372	140	33	173	68.5%	1728
Day care facilities	44	317	361	1131	110	24	134	22.2%	1626
Job training opportunities	26	161	187	1006	327	109	436	11.5%	1629
Availability of doctors	73	808	881	305	430	119	549	50.8%	1735
Availability of emergency medical care	110	812	922	369	322	126	448	53.0%	1739
Library services	174	907	1081	407	200	58	258	61.9%	1746



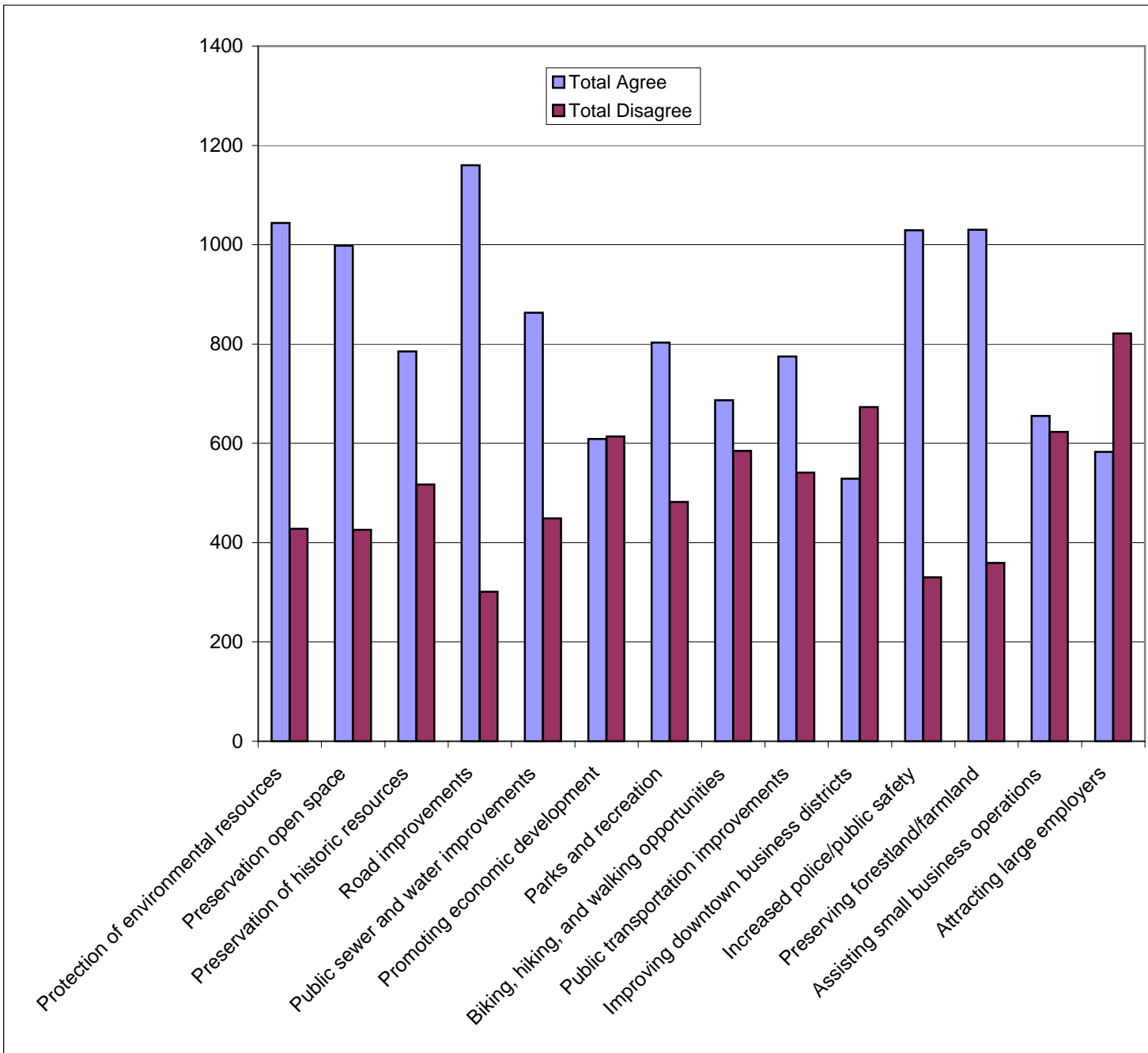
Do you agree or disagree that the following are important planning issues facing Pike County in the next 10 years?

	Strongly Agree	Agree	Total Agree	Neutral Undecided	Disagree	Strongly Disagree	Total Disagree	Percent Agree	Total
Preserving environmentally sensitive areas	1209	432	1641	79	27	5	32	93.7%	1752
Road improvements	907	699	1606	99	39	12	51	91.5%	1756
Growth management	1105	488	1593	101	29	10	39	91.9%	1733
Sewage disposal	805	589	1394	287	43	14	57	80.2%	1738
Drinking water supply	949	556	1505	187	32	11	43	86.7%	1735
Intermunicipal cooperation	595	725	1320	333	32	16	48	77.6%	1701
Open space preservation	1067	496	1563	131	38	10	48	89.7%	1742
Historic preservation	833	609	1442	229	61	14	75	82.6%	1746
Water quality protection	1200	463	1663	65	11	7	18	95.2%	1746
Public transportation improvements	574	658	1232	372	99	38	137	70.8%	1741
Police protection	631	768	1399	256	61	19	80	80.6%	1735
Vitality of borough/village centers	430	765	1195	423	65	26	91	69.9%	1709
Recreational opportunities	424	807	1231	382	96	21	117	71.2%	1730
Telecommunications service	625	661	1286	328	84	21	105	74.8%	1719
Emergency services	708	784	1492	187	32	8	40	86.8%	1719
Ridgeline development	356	412	768	692	101	56	157	47.5%	1617
Billboards	499	395	894	379	239	192	431	52.5%	1704
Zoning	679	628	1307	310	68	27	95	76.3%	1712
Hospital	779	626	1405	234	74	19	93	81.1%	1732
Economic development	612	733	1345	248	87	36	123	78.4%	1716
Tourism	395	704	1099	366	160	88	248	64.2%	1713
Cooperation between homeowners associations and municipal government	676	665	1341	300	49	33	82	77.8%	1723
Education opportunities	537	689	1226	404	63	19	82	71.6%	1712
Social and cultural opportunities	362	745	1107	463	111	29	140	64.7%	1710
Traffic congestion	908	596	1504	175	41	13	54	86.8%	1733
Appearance of commercial development	710	668	1378	258	61	22	83	80.2%	1719
Housing affordability	480	685	1165	401	110	39	149	67.9%	1715
Out-migration of young adults	446	568	1014	530	104	39	143	60.1%	1687
Forestland preservation	1031	537	1568	119	37	12	49	90.3%	1736
Deer management	942	507	1449	173	77	44	121	83.1%	1743
Job creation	746	551	1297	328	60	33	93	75.5%	1718
Adequacy of existing electrical services	618	696	1314	330	68	27	95	75.6%	1739



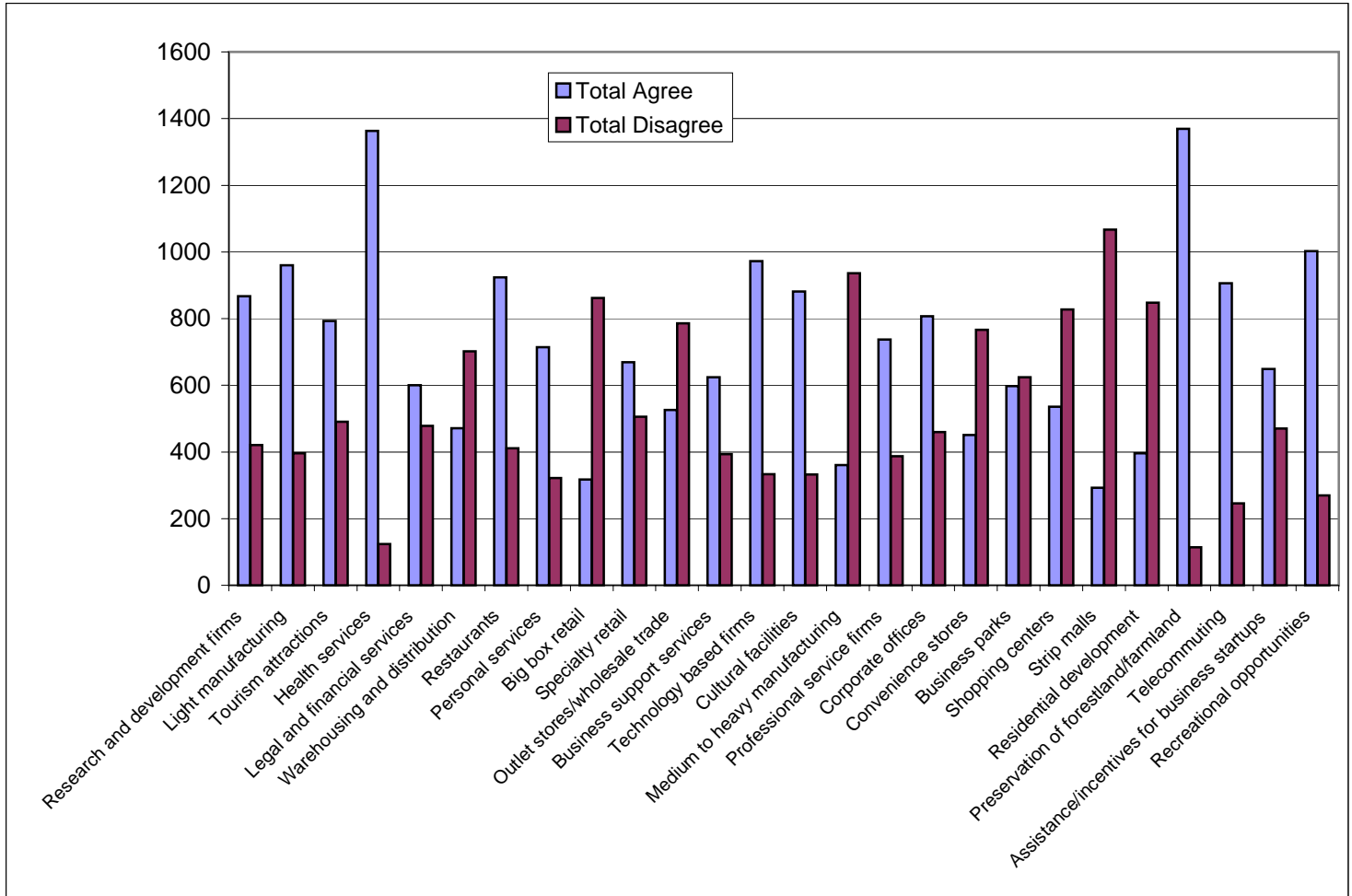
Would you agree or disagree with a tax increase to support the following?

	Strongly Agree	Agree	Total Agree	Neutral Undecided	Disagree	Strongly Disagree	Total Disagree	Percent agree	Total
Protection of environmental resources	485	559	1044	246	269	159	428	60.8%	1718
Preservation open space	456	542	998	296	269	157	426	58.0%	1720
Preservation of historic resources	273	512	785	408	336	181	517	45.9%	1710
Road improvements	451	709	1160	253	180	121	301	67.7%	1714
Public sewer and water improvements	339	524	863	394	274	175	449	50.6%	1706
Promoting economic development	208	401	609	474	368	246	614	35.9%	1697
Parks and recreation	228	575	803	427	316	166	482	46.9%	1712
Biking, hiking, and walking opportunities	220	467	687	437	389	196	585	40.2%	1709
Public transportation improvements	288	487	775	400	341	200	541	45.2%	1716
Improving downtown business districts	148	381	529	501	422	251	673	31.1%	1703
Increased police/public safety	327	702	1029	348	180	150	330	60.3%	1707
Preserving forestland/farmland	466	564	1030	318	219	140	359	60.3%	1707
Assisting small business operations	183	472	655	424	394	229	623	38.5%	1702
Attracting large employers	249	334	583	321	430	391	821	33.8%	1725



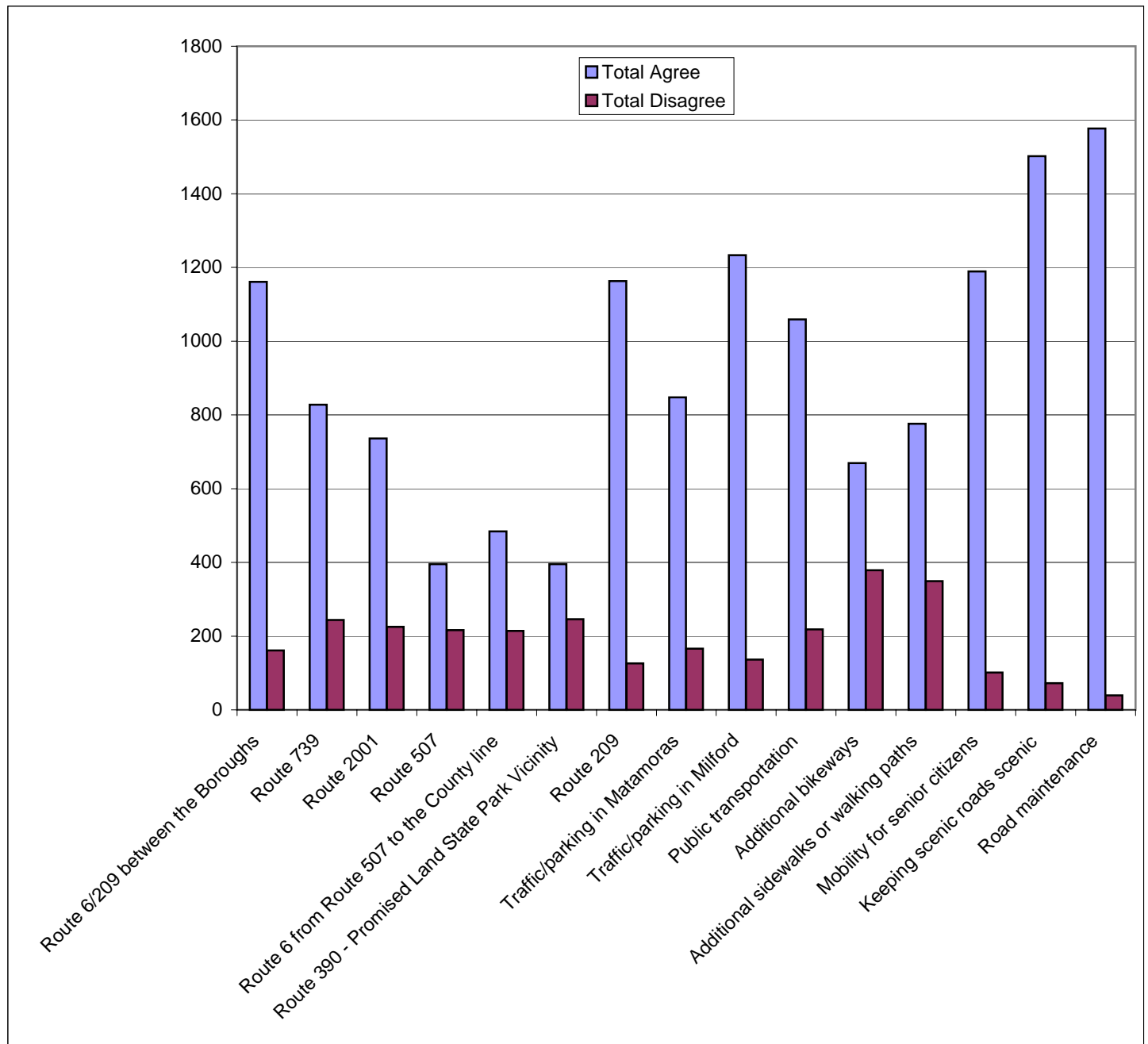
In your opinion, are more of these services desirable in Pike County?

	Strongly Agree	Agree	Total Agree	Neutral Undecided	Disagree	Strongly Disagree	Total Disagree	Percent Agree	Total
Research and development firms	309	558	867	413	285	136	421	40.9%	1701
Light manufacturing	243	717	960	351	262	134	396	45.6%	1707
Tourism attractions	247	546	793	421	344	147	491	36.1%	1705
Health services	563	800	1363	234	83	41	124	73.9%	1721
Legal and financial services	140	460	600	615	346	132	478	27.6%	1693
Warehousing and distribution	104	367	471	516	475	227	702	19.7%	1689
Restaurants	229	695	924	391	318	93	411	43.2%	1726
Personal services	145	569	714	643	235	87	322	35.7%	1679
Big box retail	69	248	317	501	481	381	862	12.5%	1680
Specialty retail	122	547	669	514	325	181	506	30.5%	1689
Outlet stores/wholesale trade	128	398	526	392	445	341	786	21.1%	1704
Business support services	119	505	624	655	254	139	393	30.2%	1672
Technology based firms	292	680	972	395	202	131	333	47.8%	1700
Cultural facilities	248	633	881	477	211	121	332	43.6%	1690
Medium to heavy manufacturing	67	294	361	391	526	410	936	13.8%	1688
Professional service firms	146	591	737	559	255	132	387	35.6%	1683
Corporate offices	201	606	807	422	279	181	460	37.6%	1689
Convenience stores	86	365	451	477	530	236	766	18.3%	1694
Business parks	128	470	598	461	369	255	624	25.9%	1683
Shopping centers	165	371	536	344	472	355	827	21.2%	1707
Strip malls	94	199	293	338	563	504	1067	10.6%	1698
Residential development	69	327	396	427	527	321	848	15.7%	1671
Preservation of forestland/farmland	769	600	1369	217	73	41	114	75.5%	1700
Telecommuting	367	539	906	517	156	90	246	47.3%	1669
Assistance/incentives for business	211	438	649	569	298	172	470	30.1%	1688
Recreational opportunities	316	686	1002	443	183	87	270	50.5%	1715



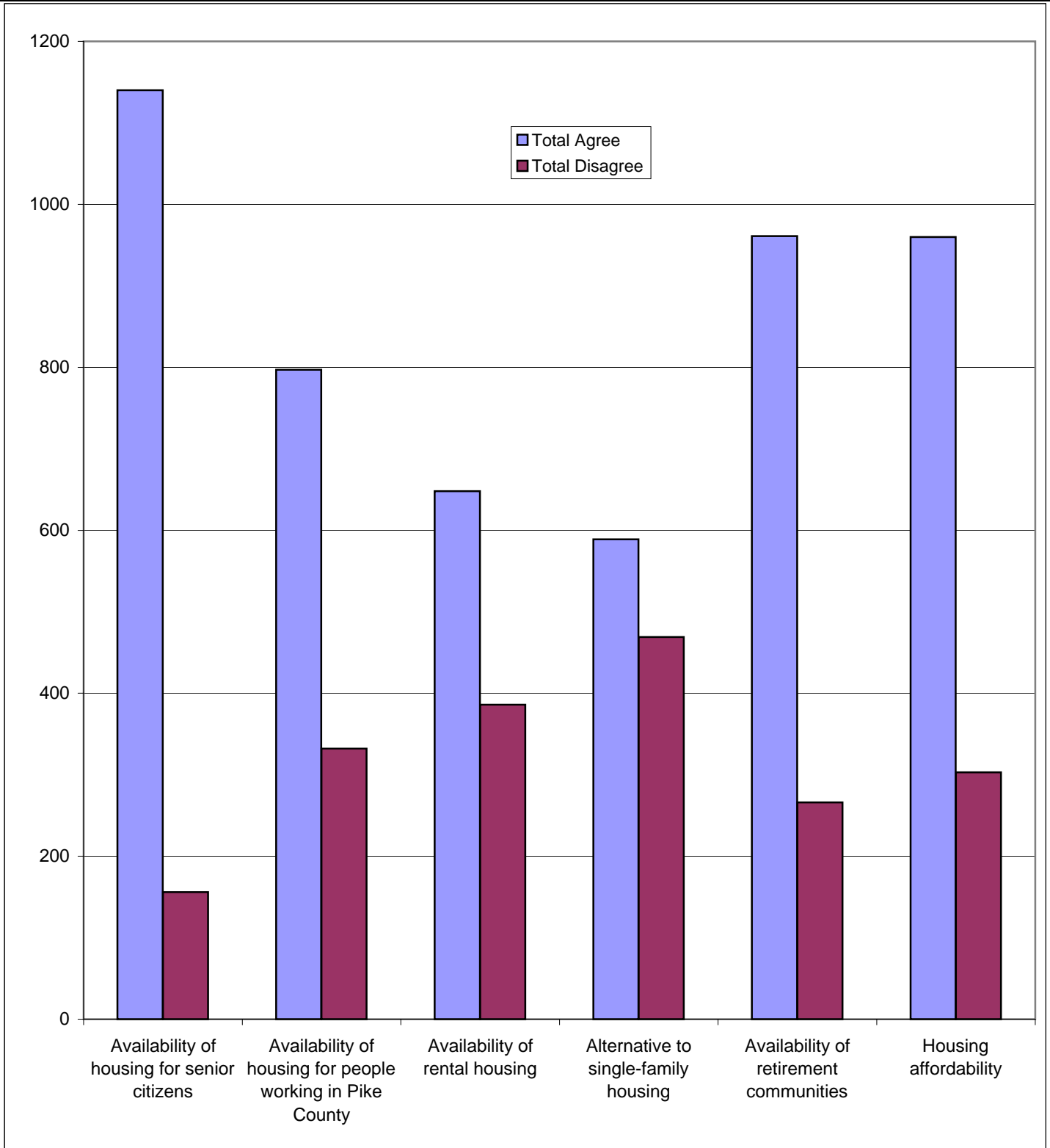
Do you agree or disagree that the following are serious transportation issues in Pike County?

	Strongly Agree	Agree	Total Agree	Neutral Undecided	Disagree	Strongly Disagree	Total Disagree	Percent Agree	Total
Route 6/209 between the Boroughs	692	469	1161	357	133	28	161	69.1%	1679
Route 739	382	446	828	567	203	41	244	50.5%	1639
Route 2001	373	363	736	652	186	39	225	45.6%	1613
Route 507	156	239	395	946	173	43	216	25.4%	1557
Route 6 from Route 507 to the County line	177	307	484	900	177	37	214	30.3%	1598
Route 390 - Promised Land State Park Vicinity	143	252	395	940	198	48	246	25.0%	1581
Route 209	737	426	1163	345	95	31	126	71.2%	1634
Traffic/parking in Matamoras	459	389	848	628	127	39	166	51.6%	1642
Traffic/parking in Milford	726	507	1233	342	99	37	136	72.1%	1711
Public transportation	576	483	1059	413	145	73	218	62.7%	1690
Additional bikeways	260	409	669	615	256	123	379	40.2%	1663
Additional sidewalks or walking paths	315	461	776	530	249	100	349	46.9%	1655
Mobility for senior citizens	506	683	1189	391	67	34	101	70.7%	1681
Keeping scenic roads scenic	930	572	1502	147	53	19	72	87.3%	1721
Road maintenance	978	599	1577	125	29	10	39	90.6%	1741



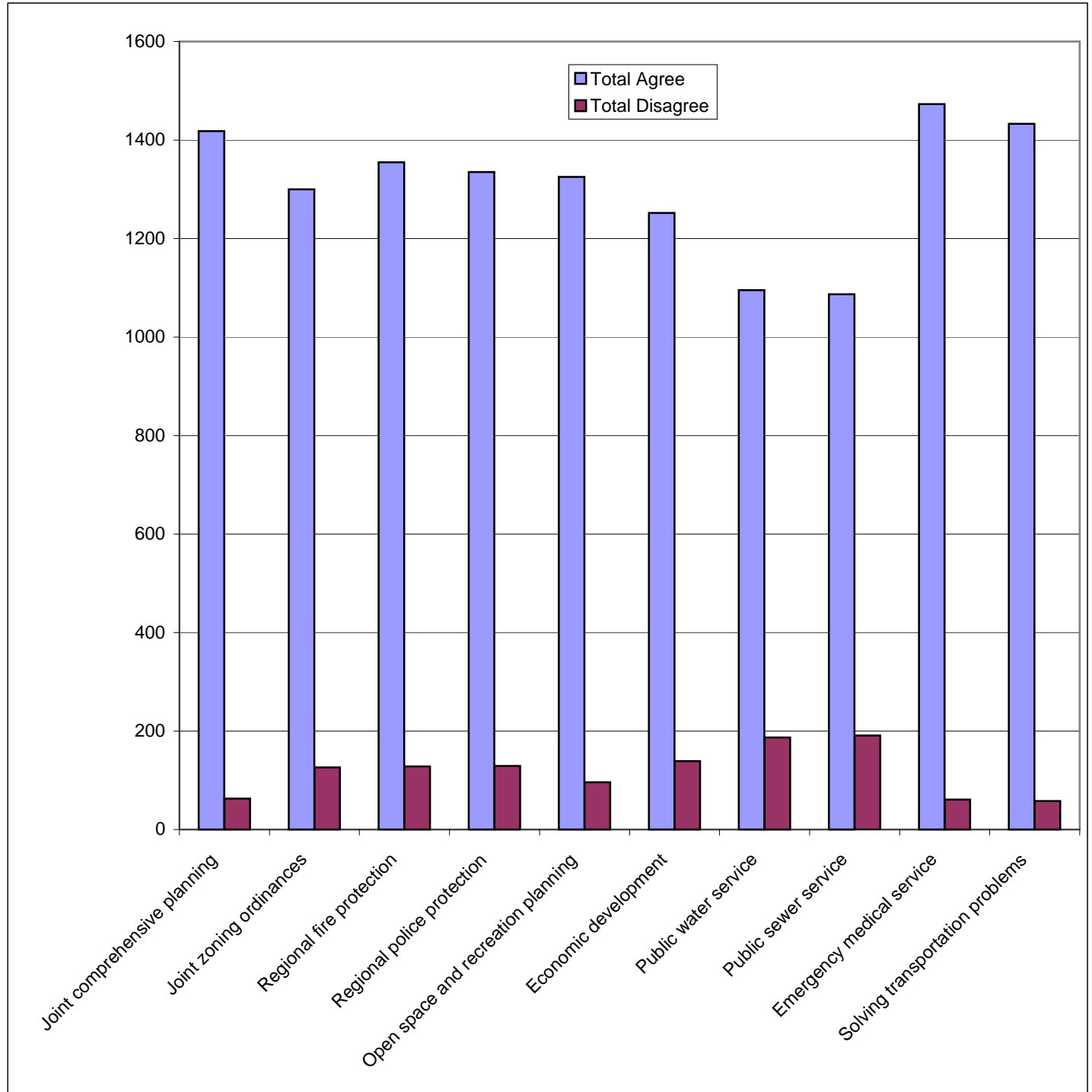
Do you agree or disagree that the following are serious housing issues in Pike County?

	Strongly Agree	Agree	Total Agree	Neutral Undecided	Disagree	Strongly Disagree	Total Disagree	Percent Agree	Total
Availability of housing for senior citizens	557	583	1140	451	107	49	156	65.3%	1747
Availability of housing for people working in Pike County	302	495	797	587	245	87	332	46.4%	1716
Availability of rental housing	239	409	648	683	277	109	386	37.7%	1717
Alternative to single-family housing	190	399	589	631	296	173	469	34.9%	1689
Availability of retirement communities	378	583	961	500	187	79	266	55.6%	1727
Housing affordability	416	544	960	461	221	82	303	55.7%	1724



Would you agree or disagree that there should be more cooperation among the Townships and Boroughs in Pike County in the following areas?

	Strongly Agree	Agree	Total Agree	Neutral Undecided	Disagree	Strongly Disagree	Total Disagree	Percent agree	Total
Joint comprehensive planning	741	677	1418	227	31	32	63	83.0%	1708
Joint zoning ordinances	648	652	1300	279	85	41	126	76.2%	1705
Regional fire protection	693	662	1355	237	87	41	128	78.8%	1720
Regional police protection	728	607	1335	248	81	48	129	78.0%	1712
Open space and recreation planning	680	645	1325	281	61	35	96	77.8%	1702
Economic development	582	670	1252	311	89	50	139	73.6%	1702
Public water service	549	546	1095	416	123	64	187	64.5%	1698
Public sewer service	576	511	1087	422	120	71	191	63.9%	1700
Emergency medical service	791	682	1473	184	34	27	61	85.7%	1718
Solving transportation problems	819	614	1433	233	35	23	58	83.1%	1724



APPENDIX 2

SYNOPSIS OF SURVEY OF MUNICIPAL OFFICIALS

MUNICIPAL OFFICIALS SURVEY

Pike County Comprehensive Plan

Total 56 respondents (sent to 224 officials)

Synopsis as of 9/1/04

1. What do you feel are the most important Planning issues facing your municipality over the next 10 years?

BLOOMING GROVE (5)

- Not enough jobs (2) how do we bring decent paying jobs into the Township without interfering with “quality of life” as it now exists
- Crime, lack of quality people moving into area
- Population growth (2) controlling inevitable growth to preserve rural base of municipality
- The proper land development for both residential and commercial properties that will be in the best interest in the health and welfare of its residence and community; Continual land use developing
- Road infrastructure and congestion due to growth
- Highway updating to handle increased traffic
- Secondary effects with increased county utilization of county complex & future business park completion

DELAWARE (7)

- Overbuilding, stormwater runoff, wellheads threatened, lack of funding for HOA’s, erosion control, building in wetlands, septic systems less than 50 ft from streams
- Planning for growth & associated problems such as loss of rural character – road system then water and sewer; land should be set aside for future water and sewer systems
- Increase of population
- Infrastructure – ROADS (2)

DINGMAN (6)

- Green areas – like to see Township increase lot size to 3 acres in future subdivisions
- Commercial development
- Economic Development
- Rapid Growth (3)
- Transportation infrastructure
- Infrastructure for rural lifestyle not being up geared; roads will be a big problem especially in Milford
- Roads need upgrading and maintenance; sub par for the volume of traffic
- Try to prevent over-development
- Preserve water supply
- Emergency services

GREENE (4)

- Environmental Issues – protecting the environment and education on importance of water supply, septage
- Economic Development
- Communications
- Overcrowding with house & septic systems; central sewage
- Influx of people moving to Greene Twp. lack of zoning, police force
- Controlled development
- Roads
- Affordable housing

LACKAWAXEN (3)

- More Small businesses (2); more jobs; on brink of being a “retirement” township, a township to live in but not work
- Control or slow growth
- Clearing way eliminating red tape so small businesses can get underway
- No issues facing this municipality; we have a hard time just getting a cell tower.
- Preserving individual property rights so one can enjoy and exploit their own property to their own uses

LEHMAN (3)

- While we have been proactive in planning and rewriting our ordinances, we have not looked outside our Twp. boundaries. Better planning on a regional basis is needed if we are to effectively deal with the growth that is coming.
- Roads
- Water
- Sewage
- Rapid population growth without a corresponding increase in infrastructure, especially roads and water.
- Increasing school enrollment causing higher school taxes.
- Lack of commercial development and quality jobs.

MATAMORAS (7)

- Sewer system (5) --- as opposed to septic systems
- Through traffic (4) on Pennsylvania Avenue; traffic lights?
- Resurfacing of streets (3); maintenance
- Uncontrolled growth, real estate taxes, maintaining quality of life in the midst of the above.
- Central water; demand for water
- Parking
- Airport Park use (recently passed master plan for the park)
- Need to improve curb/sidewalk landscaping of Rt. 6 and 209(Penna Ave.)
- Police protection

MILFORD BOROUGH (4)

- Proper Growth management while maintaining rural atmosphere
- Balanced Growth – preserve rural nature while fulfilling need for affordable housing without straining schools & infrastructure
- Developing tax ratable without creating a congestion of retail glut (county issue)
- Maintaining integrity of residential areas, upgrading service sewer & water (Borough issue)
- Public sewer service (2)
- Parking, traffic and speed limits
- Property owner compliance with codes and ordinances/cost of building code compliance/thorough handling of ordinance & code compliance/ updating of outdated ordinances

MILFORD TWP. (1)

- Central sewage

PALMYRA (6)

- Inadequacy of road systems in 10 years
- Land Use
- Need for central sewage for restaurants and businesses (in-ground inadequate for these business types) (2); protection of Lake Wallenpaupack water quality; we are trying to address the problem before it is serious; DEP too slow & burdensome
- Benefits of “so-called” light industry in county business park
- Volunteer services; sewage disposal (preventing additional water supply development i.e.. high capacity wells)
- Conversion of second homes to retirement homes(population age)
- Keeping development at a minimum; population control
- Benefits of “so-called” light industry in county business park
- Traffic growth
- Building and development

PORTER (5)

- Transportation
- Traffic control – roadways
- Police force
- Staying on top of land development (2) monitoring increased residential growth
- Planning of population growth (2); growth and its effect on residents including taxes (unaffordable due to school construction); infrastructure (mainly highways/roads especially secondary roads which are now speedways); emergency services (police, fire, ambulance – the number of crises continues to rise); garbage (our rural area is literally being dumped on)
- Maintaining townships clean waters
- Limiting residential, commercial, industrial development

SHOHOLA (1)

- Land preservation, water quality, scenic preservation, zoning & subdivision revisions to better protect the good of the community

WESTFALL (4)

- Deforestation, population growth, strip mall growth control, water supply and pollution
- Commercial District, residential housing
- Landscaping, traffic flow, water & sewer, fire & police protection
- Traffic build-up along the Rt. 6 & 209 corridor from Milford Twp to the Borough (3) - traffic lights at every opening
- Loss of green space due to increased residential & commercial uses
- How to preserve our environment and allow people to inhabit it without destroying it – pertains both to residential and commercial.
- Being able to tell people “no” and then enforce it.

2. What are your municipality's most important assets?

BLOOMING GROVE

- Beauty, center of county
- Active citizenry (2)
- Good leadership by Township supervisors
- Performance zoning with 2 acre minimum for years
- Protected green space
- Clean streams, water, lakes (2)
- Large percentage of state forest/game land in township (4)
- Blooming Grove H & F Club ownership of considerable land in Twp. (2)both keep growth down

DELAWARE

- Natural resources & beauty, threatened & endangered species, wetlands
- Rural Character and open space of the area
- The main thoroughfares – Rt. 739, Dingmans Bridge and Milford Road

DINGMAN

- Federal & state owned land that cannot be subdivided and recently purchased township land – I would like to see more land acquired
- Rural character, open space, clean air, sufficient water
- Good schools, fairly low taxes, low crime
- It encompasses both rural & community neighborhoods
- Our residents

GREENE

- Volunteerism, geographic location, past municipal officials that made many of our ordinances, natural resources
- Land
- Open space (2), rural area, scenic roads
- Low taxes

LACKAWAXEN

- Not quite as many ordinance restrictions as other municipalities, less crime and lower taxes as other areas, state land
- Rivers, lakes and beautiful scenery; river access
- Library, park, fire companies, ambulance service

LEHMAN

- Our citizens (Supervisors, Planning Commission and the public that actively supports planning for our future); people that are willing to get involved and make a difference
- Natural Resources (ev and hq streams, forest land, wildlife and scenery) (2)
- Open Space (NPS lands, state forest, hunting clubs, Bushkill falls, scout camps) (2)
- Semi-rural atmosphere
- State and Federal Parklands
- Bushkill Falls (2)
- Pike County Fairgrounds property (soon to be owned by Township) (2)
- Mt. Laurel Center (2)

MATAMORAS

- Tri-state location/major highways; citizen pride in community; small close knit community; river access for recreation; airport park
- Single family homes – view of river and mountains
- Its buildings and grounds especially airport park (2)
- Its people
- The commercial zone to offset taxes

MILFORD BOROUGH

- Charm and vitality (2)
- Location (3) ... river bluff
- People, historicity
- Desirable residential areas, potential to be a shopping & service area for nearby rural areas; mix of businesses
- Tourist attraction, next to recreation areas
- Architecture
- Trees; surrounding mountain scenery

MILFORD TOWNSHIP

- Large areas of government land

PALMYRA TOWNSHIP

- Lakes since they bring in tourism; our zoning efforts they keep the area appealing to tourists
- Lake Wallenpaupack (3)
- Interstate 84
- Ball field and public beach
- Minimum development
- Scenic rural residential community
- Promised Land State Park

PORTER

- Open Space – State Forest District #19 and many large hunting clubs (2)
- The extent of forestry (3) – 65% of Township is State Forest Land
- 30% of Twp is comprised of private hunting/ fishing clubs most opted into forest legacy and clean & green programs
- Our staff/Board of Supervisors and long-term residents who are able to recall the past, see the future & guide the community through changes diplomatically
- Clean air & water (2)
- Clean and green programs
- Small size

SHOHOLA

- Residents and state forest and gamelands

WESTFALL

- Lakes, clean air, green forests and good schools
- Delaware River, Ridgeline, conservation district; commercial district is about 2% of our township which is confined to one area (6&209)
- Open space & access to the Delaware River to draw tourist \$
- Multiple services: 2 fire companies, ambulance service, full time police dept., central sewerage in areas, central water (both municipally owned), state owned game and forest land, an exceptionally valued stream, low population, successful commercial area

3. What are the biggest challenges facing your municipality, both now and anticipated in the future?

BLOOMING GROVE

- Making sure of keeping a healthy watershed in supporting our growing community for our natural resources
- Lack of community, transient atmosphere, no one puts down roots or invests themselves
- Division between Hemlock Farms and outside
- No ballpark for children
- Increasing demand on emergency services
- Road infrastructure – main traffic corridors dangerous with increased use specifically Rt. 739 north of I84 towards Rt. 6 as county complex and future business park develop, also Rt. 739 south of I84 as commercialization increases (2)
- Population growth
- Controlling school taxes without destroying middle-low income families
- Traffic speeding and excessive littering
- Sewage contamination

DELAWARE

- Build out; overbuilding, stormwater runoff, wellheads, wear & tear on roads, lack of funding for HOA's
- Getting ordinances in-line before its too late for them to be effective so not to lose our rural character
- Controlling growth and maintaining the ruralness

DINGMAN

- Growth and how it affects purity of groundwater, etc.
- Growth (2) and associated impacts
- Keeping and using commercial properties (it always seems to be an issue for commercial properties to be utilized. It's okay if it is not by me attitude!) A firm stand should be taken on properly zoned commercial uses.
- Extreme growth; infrastructure for rural lifestyle not being upgraded; roads will be a problem.
- To prevent growth from getting out of control; we need to be careful with subdivisions
- Coping with state mandates such as the Uniform Construction Code

GREENE

- Economic issues – creating jobs to keep our youth here; some more assistance from state govt on issues they control (animals, debris)
- Legal issues are too cumbersome on municipality – (need reform on enforcement);
- Cap on insurance claims
- Help with bridge maintenance
- Building code
- Growth (2), urban sprawl, lack of police force
- Recreational facilities
- Communication infrastructure
- Affordable housing
- Municipal services

LACKAWAXEN

- Control or slow growth; eliminate red tape so small businesses can get underway; control taxes; contain ordinances; keeping open space; getting rid of the UPDE Council control on the river; getting NPS to control boats on river; eliminating need to go to county planning board
- Need for more small business; allowing some growth so we do not pay the high price for fire protection & ambulance services, majority of residents cannot afford this
- Cleaning up of personal properties; how can we have challenges when we have nothing to begin with?

LEHMAN

- In fill growth in old poorly designed subdivisions is and will continue to add significantly to our population. Primarily involving private wells and on-site septs on tiny lots, the quantity and quality of our water resources will be severely stressed. Programs which address ways to ease these pressures would be extremely valuable to community associations.
- Growth – proper management of (2)
- Water and sewer (2)
- Roads

MATAMORAS

- Sewer system
- Better police protection
- Trying to maintain quality of life in the face of traffic that makes getting around town difficult (3) Westfall traffic congestion
- Spiraling growth in and around us – rising taxes.
- Construction on 3 lane – no one seems to care
- Fast growth
- Tax relief for elderly; keep retired people in their homes by giving needed tax breaks
- Trying to get back streets improved
- Traffic caused by the increase in businesses in Westfall Twp.; traffic because of the location of the Borough
- Borough needs to upgrade its water supply system by replacing old waterlines

MILFORD BOROUGH

- Overgrowth
- Traffic (3) flow through, trucks, commercial sprawl (retail)
- Declining quality of schools
- Non-business friendly environment
- Need for public sewers
- Tax burdens on a shrinking source of rateables (school & county tax burdens)
- Preservation of single family housing stock – impact of development on the 3-lane & up Rt. 6
- Politically to balance the need to adapt to new forces while keeping the old town charm
- Police protection
- Growing litter problem

MILFORD TOWNSHIP

- Central sewage

PALMYRA

- Provide jobs for our full-time residents but still maintain that vacation appeal
- Growing disparity between the means of long-term residents and recent arrivals and the expectations for services by the two groups
- Excessive growth of population
- Ability to handle increased population and economic growth

PORTER

- Growth & although 75% of Porter is State Land & large clubs the potential for development of any large club such as Porters Lake exists & we need to review our zoning & comprehensive plan frequently.
- Monitoring increased growth and enforcing township ordinances and updating as needed
- Also, we are a gateway to the new arts center should it ever open as planned.
- Increasing traffic loads on state roadways/highways that intersect our township – roads were never designed for such heavy traffic use (2)
- Too many people; more people moving into the area for what we have & then wanting to make it like where they came from.
- Implementing Act 45

SHOHOLA

- Budgetary restraints and the foresight to zone effectively to prevent chaos and over development

WESTFALL

- Over development, traffic nightmares, population growth, student population causing higher taxation
- Housing, fire protection
- Commercial district
- Developers building on our ridgelines and CD Districts
- Protecting local officials from lawsuits
- Growth coupled with reduction of commercial zoned properties
- Managing commercial growth around residential uses in commercial zones
- Staying out of court and dealing with people who “think” they know more.
- Providing services that we never needed and doing so in a cost effective manner.

4. What do you want your municipality to be like in the future?**BLOOMING GROVE**

- Happy healthy community where my children can live and earn a living – safe, clean, friendly
- Twp contains a great deal of “green” or “open space”; desirable to maintain and encourage this enviable position.
- The way it is today.
- A municipality governed fairly but not over governed
- Working with the community to insure good quality of life and a model to other municipalities

DELAWARE

- Protected from the developers for the environment
- To remain rural or as close as possible to rural character
- Trying to keep it as it is now – rural (that is why most people come to this area)

DINGMAN

- Rural, unpaved, protected by ordinances prohibiting too many houses/apartment bldgs/condos
- Balanced, clean, diverse
- Environmentally sound with controlled residential growth – every acre in Pike does not need a house on it.
- Like it is now! (2)
- To maintain its rural character educating people to respect the land

GREENE

- Happy, healthy community free of environmental problems having good quality resources, better communications and employment to maintain population
- Neat, clean, safe
- Open space, development in only certain areas not all over the Township, not a lot of crime
- A vibrant township which provides its citizens all the opportunities to move forth in this century

LACKAWAXEN

- Less tourists, less attractions, less services so taxes stay low, less restrictions on property rights, less govt, if more developments start up have them build & maintain their own sewage so Twp, doesn't have to get involved
- Like our Twp. to grow w/smaller business so that young sons & daughters can remain in our area
- More business & job opportunities
- Public transportation; train station

LEHMAN

- To have accommodated the growth that is inevitable while having saved a significant portion of the natural resources, scenery, clean streams, semi -rural atmosphere and history of our Township that made this a special place to begin with.
- A well planned and rounded community (i.e. recreation, a bank, a supermarket, etc)
- I would like to retain its rural character with more services and sufficient clean water.

MATAMORAS

- As was
- Orderly safe community with controlled growth, reasonable taxes, good quality of life, a good place for children and our children's children.
- A few mom and pop stores along the avenue, better curbs & sidewalks and a red light so we can get out of the side streets
- Get rid of the cigarette stores
- Nice single family homes well kept
- A safe bedroom community (2) with a few small needed businesses (mom and pop stores)
- Airport park to be the hub of visitors and recreation
- Clean and quiet

MILFORD BOROUGH

- A safe kind place
- As similar as possible to status quo, people in the town like the town the way it is.
- A functioning business & residential center with district areas of single family residential & commercial; healthy downtown services, a gem, clean water, clean air, a cultural center art & theatre groups
- Visitor friendly; ordinance friendly; litter free;
- more enlightened police to saving old trees; enhanced streetscape up & down Broad and Harford

MILFORD TOWNSHIP

No responses

PALMYRA

- Practically everyone would like to see our area remain as it is, but realistically it will continue to grow, vacant land will be developed. Best we can hope for is some industry & seasonal homes taxes with low impact
- Much the same, except a population with more young people and improved volunteer services
- (3) As near as possible to present characteristics --- I am happy with the way it is now! --- same character as we currently have now that is why people want to live here; however, we must realize there will be more people moving in all the time.
- Residential with several economic based developed areas

PORTER

- Stay rural with open space as it is now (2)
- Due to vast area of Township owned by the state, Porter is unlikely to change much in the future
- Would like to see Porter remain rural with large forested areas. And properly zoned residential growth (2)
- Highways kept in good repair & clean
- No signage including billboards
- Small, clean, friendly

SHOHOLA

- Love it if we could remain rural but it looks like we may have already passed that point to urban – would like to preserve the small village I fell in love with.

WESTFALL

- Ability to keep control over expenses; keep taxation at a reasonable level. Open meetings to keep public informed of what's going on. Public apathy will, hopefully, get involved in community activities.
- Not to change or build on our ridgelines, riverbanks, river sites, not to overdevelop the area with residential housing without open space
- Maintain the rural nature of the community
- Vacant farmland! I would like our municipality to be an area where residents, commercial ventures and the environment can survive in harmony. A tax base that would allow the town to provide the services & amenities needed.

5. Have there been missed opportunities for your municipality due to lack of resources or staff? If so, please list.

BLOOMING GROVE

- Ball field, recycling center
- Uncertain (1); no (1); not to my knowledge (2)

DELAWARE

- Conservation, EAC, planning, lack of communication between agencies & HOA's all at fault
- Yes, poor planning due to the non-completion of anticipated planning (209 relocation) caused a lack of a town center for Del Twp.

DINGMAN

- DNG Twp Supervisors very forward looking & always have been. They don't allow inferior building and do enforce codes.
- No, our staff has met every challenge (2)
- Dingman Twp building and zoning depts. Totally inadequate
- Initial planning due to rapid growth

GREENE

- We do not have the resources to give our bridges the attention they need.
- More help on communications is needed from county, state & federal govt. share & give a frequency just for our township.
- Certainly need more funds; we need funds to enforce our ordinances

LACKAWAXEN

- Business park at Intersection 434 & 6; I am sure there have been others

LEHMAN

- Our municipality has a combination of willing skilled volunteers plus an administration that is willing to spend what is necessary to deal with planning and other issues. Add to that a public that expects nothing less, but gives its support.
- Not sure – new supervisor

MATAMORAS

- Staff
- Poorly elected officials
- Numerous grants not applied for; crumbling roads due to lack of funds & lack of proper planning. Trees not being replanted (no tree commission)
- Yes, we need to get grants and people that can help us get them (3); Getting grants – sewage, water (we are part-time); a grant person or someone from county to make municipalities aware of grants
- Matamoras is a nice community, but we seem to be the lost community. Everyone forgets where we are.
- Sewage disposal system is a necessary addition

MILFORD BOROUGH

- Staunch supporter of free enterprise & economic determination, could have been more to reduce number of auto body shops in downtown; air & water pollution issues not addressed; stricter & more even-handed enforcement of zoning and now building code issues; yes, missed opportunities due to the status quo attitude toward ordinance application by elected and appointed officials
- Stop burning leaves
- Public sewers

PALMYRA

- (3) none --- there are always ways to spend more money if you have it.
- The development of the 84 corridor and the loss of small businesses & tourism

PORTER

- Our resources are usually adequate for general funding projects but very lacking for road projects. In the past a road project could deplete the entire road fund and may need to be put off due to lack of funds.
- Getting government grants
- In regard to emergency preparedness we lack the appropriate equipment

SHOHOLA

- Absolutely, if we had the resources to amend our zoning and subdivision ordinances with the assistance of a staff planner we would not always be playing catch-up. We would be able to plan ahead instead of behind. The county may have the resources to provide this service to the municipalities in the future.

WESTFALL

- Absolutely not!! Service by our municipal workers & staff are always there to help.; Lack of interest & apathy is VERY prevalent – “Let the other guy do the job seems to be widespread.”
- Our communities do not work together; funding for fire & police protection; lack of grants to keep our area as beautiful as it is.
- Missed Opportunities include lack of resources to finance a new road structure to all roads, money for central sewer and water, inability to control and enforce ordinances, lack of staff to educate those coming as to how to deal with what is already here, leaving those who think we need more.

6. Should there be more cooperation among municipalities in Pike County in regard to the following?

	# responding to date-56	YES	NO	Not Sure
Regional Comprehensive Planning		41	4	7
Regional Zoning Ordinances		31	15	7
Regional Fire Protection		35	9	8

Regional Police Protection	31	8	14
Regional Open Space & Recreation Planning	44	4	6
Economic Development	44	2	7
Public Water Supply	34	10	7
Public Sewer Service	38	8	7
Emergency Medical Service	45	4	5
Equipment Sharing	33	4	15
Solving Transportation Problems	43	3	3
Stormwater Management Planning	33	7	9
Water Resources Planning	37	6	7
Other <u>environmental protection</u>	1	-----	-----
Other <u>only after recognizing individual needs</u>	1	-----	-----
Other: <u>cross communication between Twps. to enhance probability “united we stand, divided we fall”</u>	1	-----	-----
Other <u>mass transit</u>	1		
Other <u>cell towers</u>	1		
Other heavy traffic management	1		

7. In what programs would you consider Pike County Office of Community Planning Assistance for your municipality?

	# responding to date – 56	YES	NO	Not Sure
Funding Regional Comprehensive Planning among Municipalities	31	11	10	
Funding Regional Zoning Ordinances among Municipalities	23	16	10	
Providing Model Zoning Ordinance Provisions	38	8	4	
Providing Model Subdivision and Land Development Ordinance Provisions	37	7	6	
Providing Model Resource Protection Ordinances	41	5	4	
Funding Regional Open Space and Recreation Planning	34	12	6	
Providing Technical Assistance through County Planning Staff	40	6	5	
Funding Growing Greener (Conservation Development) Audits of Ordinances	29	15	8	
Funding Growing Greener (Conservation Development) Ordinances	32	14	7	
Funding Zoning Ordinance Updates to Implement Regional or County Plans	31	12	9	
Funding Subdivision and Land Development Ordinance Updates to Implement Regional or County Plans	27	15	4	
Stormwater Management Planning	40	5	7	
Water Resources Planning	39	7	5	
Other: <u>Keep County & State out of here</u>	1	-----	-----	
Other: <u>Realistic Commercial Planning</u>	1	-----	-----	

8. Please list any additional comments you have or any other issues in Pike County that you feel are important to address. Attach additional pages if necessary.

BLOOMING GROVE

- Emergency services training and staffing
- Real estate tax reform – school funding without gambling
- A fire control center at the county complex site to coordinate fire houses. Emergency management and local & city law enforcement

DELAWARE

- 100 ft buffer of all watersheds, lakes, wetlands, streams
- Tree ordinances, stormwater control, erosion & sediment control, stricter environmentally
- We have a big problem here with developers

DINGMAN

- There should be tons of cooperation but individual townships should shape their own future & manage their own resources
- Reasonable and realistic commercial planning
- Fireworks sales & storage more closely monitored (some sold within 50 ft of gas pumps in 2 locations and 50 ft of commercial bldg)
- Vigilance on drug problems within our county; big city problems now here; unfortunately we cannot legislate good manners
- County needs to take a more aggressive approach to economic development (promoting area to suitable businesses, lobbying at state level) we need to rely less on tourism.
- County needs to provide support (including financial) of a county-wide paramedic agency (non-profit) such as ALS.

GREENE

- Support HB1216 to allow gaming in local license so some money comes back to the local Twp.
- Do not want gambling in the Poconos and our township; do not need the elements or the additional people, buses that gambling brings

LACKAWAXEN

- Eliminate anything that uses tax money such as grants; large private developments should provide their own sewer, water so it is not a burden on taxpayers in future; the problem with question 6&7 is that it is big brother at its worst spending money and telling people what is best for them
- The area continues to grow in population now it needs to expand in opportunities ie. Stores, business, jobs, industrial parks. We need to move ahead not stay the same.

MATAMORAS

- Sewer system for Matamoras
- Traffic in Matamoras is a big problem (2)
- Help with grant writing
- Tax relief for local people; influx of urban people cause property taxes to go up, people are caught in the bind of selling because of taxes or doing without comforts to stay & pay taxes
- Control of school budget & spending to reduce tax burden

MILFORD BOROUGH

- Zoning ordinances are essential to remain at the most local level because of the vast differences among municipalities. Fire, police etc are things that make more sense to share.
- The Commissioners need to take more of a leadership role in protecting its county from over development (supporting open space)

MILFORD TOWNSHIP

PALMYRA

- Palmyra has most of its ordinances in place but keeping surrounding communities in tune with each other creates a more harmonious environment.
- County govt. needs to become more involved with the actual development concerns of the central and western parts of the county. The county doesn't start and end in Milford. The center of the County is more like the Blooming Grove prison site.

PORTER

- Planning for population growth most important issues; with growth comes water/sewage impacts, traffic and existing road conditions issues, education costs, community services (hospitals) etc
- Involvement of DCNR and DWGNPS in planning
- Further development of all systems at a faster pace

WESTFALL

- Public apathy, volunteerism is done. The only time people attend meetings is when they are directly affected by an issue (it's a sad state of affairs)
- Lawsuit against municipal officials, this should be looked into; if you want to keep good leaders they need to be protected
- Each municipality has unique issues, based on geography, topography and location and those issues should be dealt with locally; however, each municipality has state and federal roads & lands and yet no municipality has the ability to know what their thought process is or input until they had already made their decisions. "What people don't know can hurt them"

APPENDIX 3

PUBLIC COMMENTS
FROM OCTOBER, 2004 PUBLIC MEETINGS

Public Comments
Recorded from “Brainstorming Concerns”
Comprehensive Plan Public Meetings – October 25 and 26, 2004

County Comprehensive Plan and Implementation

Need an intelligent county plan

Need buy-in from municipalities; need to provide some type of incentives for implementation and adoption

The plan needs to be an intelligent plan with a citizen group to help direct and achieve implementation and incentives for municipalities to adopt and implement.

Development Performance Standards

Leave “natural” buffers around buildings instead of taking trees down and then trying to replant

Need bonding of developers to be sure they complete the work and do it correctly

Restrictions on development such as preserving “natural” vegetation and leaving buffers

Stress the development standards

Economic Development

Job opportunities in the county

Keeping youth in the county

Tax Incentives for attracting industries

Pike’s industry is tourism

Use power of internet to attract smokeless industry

Imbalance between residential and commercial/industrial development in county

Land Use Concepts

Waivers of existing regulations (concern over obtaining township waivers in order to complete a “clustered” development)

Traditional Neighborhood Development with appropriate green space

Mixed use using higher density and conservation design

Larger lot sizes

Small town centers like Milford

Need a place for a variety of land use techniques – cluster, large lots (4 acres)

Could the county business park be a new town?

Need a “model” traditional town or good conservation design subdivision to show others

Sustainability of cluster design developments – must be built to standards to sustain infrastructure over the long-term

Cluster may not be the panacea

Difficulty of developers to use the conservation design or cluster options (many times these are conditional use and require longer review and approval procedures)

Medical Services

More “ALS” Advanced Life Support Services in Pike County

Medical Facility (hospital)

Emergency Services

Satellite Health Facilities

County needs to lobby in regard to malpractice insurance issues – try to keep doctors here

Natural Areas/Open Space/Greenways

Greenways connections for wildlife

Do not locate commercial zones on environmentally sensitive areas

Buy land to protect it – referendum

Wetland protection

Keep Pike Green

Natural Environment

Planning

More multi-municipal planning and municipal/county planning (mentioned twice)

Authority formed by county to do sewage and water planning

Present General Authority only looks at trash

Need Planned growth

Looking at municipal ordinances

Age of plans – need to look at age of municipal comp plans, saldo and zoning – old technology

Visit to places like Staten Island where poor planning and waivers have ruined the place

Property Owners Associations

Encourage POA's to consider lot preservation/consolidation programs

Community Associations are another level/player in the landscape

Transportation

Transportation – road system inadequate

Public Transportation (mentioned twice)

Scenic byway – Rt. 6 from Honesdale east

Utilities & Telecommunications

Need Telecommunications and need more towers

Additional power

Need to increase number of cable companies in county to break monopoly

Water Resources and Water Resource Planning

Stormwater runoff (mentioned twice)

Groundwater supply

Many exceptional value watersheds in county

Protect groundwater

On-lot septic maintenance and monitoring

Other Comments

Attract more senior citizens – no children in schools

Higher Education

People need to be involved in local government

**Pike County Comprehensive Plan Public Meetings
October 25 and 26, 2004
RESIDENTIAL DEVELOPMENT PATTERNS AND TECHNIQUES**

	<u>Favor</u>	<u>Do Not Favor</u>	<u>Priority (If Favor) (High, Medium, Low)</u>
2 acre lots for Single family homes	15	8	8H, 2M, 1L
1 acre lots for Single family homes	6	16	3H, 1M, 1L
Conservation Development (Special natural and historic features of a tract are preserved as open space; houses are located to maximize views of open space; and road systems and lot lines are established to conform to open space and house locations)	28	1	16H, 5M, 0L
Mixed Use (Development contains a mix of residential uses and limited commercial uses to serve the day-to-day needs of residents)	26	3	11H, 12M, 2L
Traditional Neighborhood Development (New neighborhoods are created with a similar grid pattern of development as towns had decades ago)	19	7	9H, 5M, 2L
Borough/Village Extension (Extending borough and village patterns of development into adjoining areas of Townships)	20	6	3H, 12M, 3L
Infill Development (Existing lots in residential subdivisions are developed when physically feasible)	17	10	4H, 8M, 3L
More strict design and performance standards and infrastructure requirements for development	29	1	20H, 1M, 0L
Transfer of Development Rights (A property owner in an area intended for conservation sells the rights to develop his/her property to another property owner located in an area designated for future development)	13	12	4H, 5M, 3L

Pike County Comprehensive Plan Public Meetings
October 25 and 26, 2004
Potential Conservation Areas

<u>Resource</u>	<u>Priority (High, Medium, Low)</u>
Floodplains	19H, 7M, 1L
Wetlands	21H, 2M, 2L
Hydric Soils (Potential Wetlands)	17H, 4M, 4L
Slopes Steeper than 25%	17H, 4M, 3L
Natural Areas Identified in Natural Areas Inventory	21H, 3M, 1L
Woodlands	14H, 10M, 1L
Wetland Buffers	17H, 7M, 1L
Slopes 15 to 25%	8H, 14M, 2L
Streams	25H, 0M, 0L
Stream Buffers	24H, 1M, 1L
Lakes	24H, 1M, 0L
Lake Buffers	19H, 6M, 0L
Hunting Clubs	9H, 6M, 8L
Camps	10H, 8M, 6L

Additional General or Specific Resources:

Priority of woodlands as potential conservation areas depends on size of woodland and other values.

Stream buffers outside floodplain – low.

Hunting Clubs and camps as potential conservation areas based on natural features more than land use.

Hunting Clubs and camps high priority for conservation easements.

Hunting Clubs and camps should remain as such forever.

APPENDIX 4

MULTI-MUNICIPAL PLANNING

Benefits of Multi-Municipal Planning

- Provides a regional planning approach and allocation of land uses
 - Where
 - How much to accommodate population projections
 - Patterns of development
- Establishes growth areas and future growth areas regionally
 - Coordination with infrastructure
 - Opportunities for infill
- Provides coordinated planning along the common boundaries of the municipalities
- Supports existing centers rather than weaken them
- Coordinates road corridor planning, standards, and management
- Provides for linkages between municipalities
- The Plan and implementing ordinances are considered by state agencies in permitting decisions
- Addresses review of “developments of regional impact”
- Identifies opportunities for future joint efforts
- Promotes common land use designations and definitions
- Establish goals for economic character over the entire Region
- Provides support for municipalities in zoning challenges
- Enables Transportation Impact Fees across municipal boundaries
- Enables Transfer of Development Rights across municipal boundaries
- Enables priority consideration in state funding programs
- Provides opportunity to learn from neighbors’ shared experiences
- Enhances the Region’s attractiveness to quality development
- Enables developing a “specific plan” for an area designated for non-residential development, preparing regulations for that area, and streamlining the approval process

The Pennsylvania Municipalities Planning Code (MPC) and Multimunicipal Planning

Objectives:

Intergovernmental cooperation is encouraged in order to accomplish the following objectives:

- To provide for development that is compatible with surrounding land uses and that will complement existing land development with a balance of commercial, industrial and residential uses.
- To protect and maintain the separate identity of Pennsylvania's communities and to prevent the unnecessary conversion of valuable and limited agricultural land.
- To encourage cooperation and coordinated planning among adjoining municipalities so that each municipality accommodates its share of the multimunicipal growth burden and does not induce unnecessary or premature development of rural lands.
- To minimize disruption of the economy and environment of existing communities.
- To complement the economic and transportation needs of the region and this Commonwealth.
- To provide for the continuation of historic community patterns.
- To provide for coordinated highways, public services and development.
- To ensure that new public water and wastewater treatment systems are constructed in areas that will result in the efficient utilization of existing systems, prior to the development and construction of new systems.
- To ensure that new or major extension of existing public water and wastewater treatment systems are constructed only in those areas within which anticipated growth and development can adequately be sustained within the financial and environmental resources of the area.
- To identify those areas where growth and development will occur so that a full range of public infrastructure services including sewer, water, highways, police and fire protection, public schools, parks, open space and other services can be adequately planned and provided as needed to accommodate the growth that occurs.
- To encourage innovations in residential, commercial and industrial development to meet growing population demands by an increased variety in type, design and layout of structures and by the conservation and more efficient use of open space ancillary to such structures.
- To facilitate the development of affordable and other types of housing in numbers consistent with the need for such housing as shown by existing and projected population and employment data for the region.

Governing bodies of municipalities are authorized to enter into intergovernmental cooperative agreements for the purpose of developing, adopting and implementing a comprehensive plan. Such agreements may also be entered into between and among counties and municipalities for areas that include municipalities in more than one county, and between and among counties, municipalities, authorities and special districts providing water and sewer facilities, transportation planning or other services within the area of a plan and with the opportunity for the active participation of State agencies and school districts.

Contents: The multimunicipal plan is to include all required elements for comprehensive plans specified in the MPC. The plan may:

1. Designate growth areas where:
 - a. Orderly and efficient development to accommodate the projected growth of the area within the next 20 years is planned for residential and mixed use densities of one unit or more per acre.
 - b. Commercial, industrial and institutional uses to provide for the economic and employment needs of the area and to insure that the area has an adequate tax base are planned for.
 - c. Services to serve such development are provided or planned for.
2. Designate potential future growth areas where future development is planned for densities to accompany the orderly extension and provision of services.
3. Designate rural resource areas, if applicable, where:
 - a. Rural resource uses are planned for.
 - b. Development at densities that is compatible with rural resource uses are or may be permitted.
 - c. Infrastructure extensions or improvements are not intended to be publicly financed by municipalities except in villages, unless the participating or affected municipalities agree that such service should be provided to an area for health or safety reasons or to accomplish one or more of the purposes set forth above.
4. Plan for the accommodation of all categories of uses within the area of the plan, provided, however, that all uses need not be provided in every municipality, but shall be planned and provided for within a reasonable geographic area of the plan.
5. Plan for developments of area wide significance and impact.
6. Plan for the conservation and enhancement of the natural, scenic, historic and aesthetic resources within the area of the plan.

Implementation Agreements:

In order to implement multimunicipal comprehensive plans, counties and municipalities shall have authority to enter into intergovernmental cooperative agreements.

Cooperative implementation agreements between a county and one or more municipalities shall:

- (1) Establish the process that the participating municipalities will use to achieve general consistency between the county or multimunicipal comprehensive plan and zoning ordinances, subdivision and land development and capital improvement plans within participating municipalities, including adoption of conforming ordinances by participating municipalities within two years and a mechanism for resolving disputes over the interpretation of the multimunicipal comprehensive plan and the consistency of implementing plans and ordinances.
- (2) Establish a process for review and approval of developments of regional significance and impact that are proposed within any participating municipality. Subdivision and land development approval powers under this act shall only be exercised by the municipality in which the property where the approval is sought. Under no circumstances shall a subdivision or land development applicant be required to undergo more than one approval process.
- (3) Establish the role and responsibilities of participating municipalities with respect to implementation of the plan, including the provision of public infrastructure services within participating municipalities, the provision of affordable housing, and purchase of real property, including rights-of-way and easements.
- (4) Require a yearly report by participating municipalities to the county planning agency and by the county planning agency to the participating municipalities concerning activities carried out pursuant to the agreement during the previous year. Such reports shall include summaries of public infrastructure needs in growth areas and progress toward meeting those needs through capital improvement plans and implementing actions, and reports on development applications and dispositions for residential, commercial, and industrial development in each participating municipality for the purpose of evaluating the extent of provision for all categories of use and housing for all income levels within the region of the plan.
- (5) Describe any other duties and responsibilities as may be agreed upon by the parties.

Cooperative implementation agreements may designate growth areas, future growth areas and rural resource areas within the plan. The agreement shall also provide a process for amending the multimunicipal comprehensive plan and redefining the designated growth area, future growth area and rural resource area within the plan.

Legal Effect:

Where municipalities have adopted a county plan or a multimunicipal plan is adopted under this article and the participating municipalities have conformed their local plans and ordinances to

the county or multimunicipal plan by implementing cooperative agreements and adopting appropriate resolutions and ordinances, the following shall apply:

1. Where municipalities have adopted a multimunicipal comprehensive plan pursuant to Article XI but have not adopted a joint municipal ordinance pursuant to Article VIII-A and all municipalities participating in the multimunicipal comprehensive plan have adopted and are administering zoning ordinances generally consistent with the provisions of the multimunicipal comprehensive plan, and a challenge is brought to the validity of a zoning ordinance of a participating municipality involving a proposed use, then the zoning hearing board or governing body, as the case may be, shall consider the availability of uses under zoning ordinances within the municipalities participating in the multimunicipal comprehensive plan within a reasonable geographic area and shall not limit its consideration to the application of the zoning ordinance on the municipality whose zoning ordinance is being challenged.
2. Where municipalities have adopted a joint municipal comprehensive plan and enacted a zoning ordinance or ordinances consistent with the joint municipal comprehensive plan within a region pursuant to Articles VIII-A and XI, the court, when determining the validity of a challenge to such a municipality's zoning ordinance, shall consider the zoning ordinance or ordinances as they apply to the entire region and shall not limit its consideration to the application of the zoning ordinance within the boundaries of the respective municipalities.
3. Where municipalities have adopted a multimunicipal comprehensive plan pursuant to Article XI but have not adopted a joint municipal ordinance pursuant to Article VIII-A and all municipalities participating in the multimunicipal comprehensive plan have adopted and are administering zoning ordinances generally consistent with the provisions of the multimunicipal comprehensive plan, and a challenge is brought to the validity of a zoning ordinance of a participating municipality involving a proposed use, then the court shall consider the availability of uses under zoning ordinances within the municipalities participating in the multimunicipal comprehensive plan within a reasonable geographic area and shall not limit its consideration to the application of the zoning ordinance on the municipality whose zoning ordinance is being challenged.
4. State agencies shall consider and may rely upon comprehensive plans and zoning ordinances when reviewing applications for the funding or permitting of infrastructure or facilities.
5. State agencies shall consider and may give priority consideration to applications for financial or technical assistance for projects consistent with the county or multimunicipal plan.

Participating municipalities that have entered into implementation agreements to carry out a county or multimunicipal plan as described in this article shall have the following additional powers:

1. To provide by cooperative agreement for the sharing of tax revenues and fees by municipalities within the region of the plan.

2. To adopt a transfer of development rights program by adoption of an ordinance applicable to the region of the plan so as to enable development rights to be transferred from rural resource areas in any municipality within the plan to designated growth areas in any municipality within the plan.

Specific Plans:

Participating municipalities shall have authority to adopt a specific plan for the systematic implementation of a county or multimunicipal comprehensive plan for any nonresidential part of the area covered by the plan. Such specific plan shall include a text and a diagram or diagrams and implementing ordinances which specify all of the following in detail:

1. The distribution, location, extent of area and standards for land uses and facilities, including design of sewage, water, drainage and other essential facilities needed to support the land uses.
2. The location, classification and design of all transportation facilities, including, but not limited to, streets and roads needed to serve the land uses described in the specific plan.
3. Standards for population density, land coverage, building intensity and supporting services, including utilities.
4. Standards for the preservation, conservation, development and use of natural resources, including the protection of significant open spaces, resource lands and agricultural lands within or adjacent to the area covered by the specific plan.
5. A program of implementation including regulations, financing of the capital improvements and provisions for repealing or amending the specific plan. Regulations may include zoning, storm water, subdivision and land development, highway access and any other provisions for which municipalities are authorized by law to enact. The regulations may be amended into the county or municipal ordinances or adopted as separate ordinances. If enacted as separate ordinances for the area covered by the specific plan, the ordinances shall repeal and replace any county or municipal ordinances in effect within the area covered by the specific plan and ordinances shall conform to the provisions of the specific plan.

APPENDIX 5

TRANSPORTATION IMPACT FEES

TRAFFIC IMPACT FEE BASICS

- Allows collecting dollars for “off site” roadway improvements from developers
- Will ultimately require matching PENNDOT or municipal funds for improvements, based on the proportionate share of traffic
- Municipality sets study area, which may ultimately be broken up into one or more Transportation Service Areas (TSA); some of the study area can be eliminated
- Each TSA must be less than 7 square miles
- First step is to determine the study area and appoint an advisory committee
- Advisory committee to be at least 7 members with 40% representation of the builder/realtor community
 - Must be residents or those doing business in the municipality
 - Cannot be municipal officials or employees
- After committee appointed, study must be done within 18 months, but all development plans filed in that period are subject to the fee
- Background studies include
 - Land Use Assumptions
 - Roadway Sufficiency Analysis
 - Capital Improvements Plan
- Collected monies must be used within certain timeframe, set by Capital Improvements Plan
- Partial cost of the Roadway Sufficiency Analysis can be recouped through the collected fees

SUMMARY OF THE STEPS ASSOCIATED WITH IMPLEMENTING A TRAFFIC IMPACT FEE ORDINANCE

<u>Task</u>	<u>Responsible Entity</u>
1. Establish Transportation Service Area and appoint an advisory committee. <i>Note: Committee must be at least 7 members, and can be the <u>entire</u> Planning Commission, with ad hoc members if necessary to meet the 40% builder/realtor requirement.</i>	Governing Body
2. Public Notice of Intent to implement a Traffic Impact Fee Ordinance. <i>Note: This allows for fees to start being collected <u>and</u> starts an 18 month clock, by which time the Ordinance must be adopted.</i>	Governing Body
3. Committee oversees preparation of Land Use Assumptions plan, holds public hearing, forwards to Governing Body for adoption.	Impact Fee Advisory Committee
4. Committee oversees preparation of Roadway Sufficiency Analysis and forwards to Governing Body for approval.	Impact Fee Advisory Committee
5. Committee oversees preparation of Capital Improvements Plan, holds public hearing, forwards to Governing Body for approval.	Impact Fee Advisory Committee
6. Impact Fee Ordinance text developed and Ordinance adopted.	Governing Body

ADOPTION PROCESS
FOR A
TRANSPORTATION IMPACT FEE ORDINANCE

1. Upon completion of the draft Land Use Assumptions report, the Advisory Committee must forward copies to the Pike County Planning Commission, the School District, and each of the adjoining municipalities. Each of these entities has a minimum of thirty (30) days to review the document and submit comments to the municipality.
2. At the conclusion of the review period, the Advisory Committee must conduct a hearing (advertised in compliance with the MPC) to present the assumptions and receive comments from municipal residents and the general public. Comments received from the other review entities (those listed above) must be addressed at this hearing.
3. Following the public hearing, the Governing Body must pass a resolution that approves, approves with specific modifications, or disapproves the report. Unless the resolution disapproves the report, it must include a provision stating that the report is adopted as an official policy of the municipality.
4. Upon adoption of the Land Use Assumptions report, the Advisory Committee shall develop a Roadway Sufficiency Analysis to establish the existing level of infrastructure sufficiency and preferred levels of services within the Transportation Service Area (TSA) established by the Land Use Assumptions report. The Roadway Sufficiency Analysis must address every road where there is an anticipated need for improvements due to projected future development. *Roads not addressed by the Roadway Sufficiency Analysis are deemed to be unaffected by future development; impact fees collected pursuant to this Analysis may only be spent to improve roads addressed in the Analysis.*
5. At the completion of the Roadway Sufficiency Analysis, the Advisory Committee shall submit it to the Governing Body. The Governing Body must pass a resolution that approves, approves with specific modifications, or disapproves the Analysis. No public hearing or review by outside agencies is required at this stage, although the resolution must be presented and voted upon at a duly advertised public meeting, such as any regular Governing Body meeting.
6. Based upon the Land Use Assumptions report and the Roadway Sufficiency Analysis, the Advisory Committee shall identify specific capital projects for inclusion in the municipality's Transportation Capital Improvements Plan for the Transportation Service Area. The plan must include a projected timetable and budget for the identified projects in addition to the other elements required by the MPC.
7. The completed draft of the Transportation Capital Improvements Plan must be made available for public inspection for a period of not less than ten (10) working days. Following this inspection period, the Advisory Committee must hold at least one (1) public hearing to present the Plan formally to the public and to receive comments from them. This hearing must be advertised as required by the MPC.
8. After the public hearing(s), the Governing Body may make revisions to the draft Plan that are consistent with comments received at the hearing(s). The Governing Body must then adopt the

Plan pursuant to municipal procedures.¹ If the Plan proposes improvements to be funded at least in part by impact fees for Federal aid or state highways, the Plan must be approved by PENNDOT and, if necessary, the U.S. Dept. of Transportation.

9. Once the Plan is adopted, the municipality may establish an Impact Fee Ordinance meeting the requirements of the MPC. The Ordinance must establish the boundaries of the Transportation Service Area and a fee schedule. The draft Ordinance must be available for public inspection for not less than ten (10) working days prior to the adoption date. The collection of fees may be retroactive for a period of up to eighteen (18) months prior to the date of enactment of the Ordinance.

¹ The MPC specifically requires that the Land Use Assumptions report and the Roadway Sufficiency Analysis be approved and adopted by resolution. The MPC provisions addressing the adoption of the Transportation Capital Improvements Plan make no reference to the means of adoption.

TRAFFIC IMPACT FEE ADVISORY COMMITTEE FUNCTIONS

- Develop Land Use Assumptions Report
 - Describe existing land uses
 - Project land use changes within the next 5 to 10 years
 - Project development densities and population growth rates
 - Submit to County Planning Commission for review
 - Hold public hearing
 - Forward to Governing Body for approval
- Develop Roadway Sufficiency Analysis
 - Identify intersections and/or roads that will be affected by development
 - Collect traffic data
 - Analyze existing conditions [Level of Service (LOS)]
 - Identify preferred LOS
 - Identify existing deficiencies and required improvements
 - Project conditions with “pass-through” trips
 - Identify deficiencies and required improvements
 - Project conditions with new development trips
 - Identify deficiencies and required improvements
 - Forward to Governing Body for approval
- Develop Capital Improvements Plan
 - Identify needed improvements and proportionate costs according to:
 - Needed for existing conditions
 - Needed to accommodate pass-through traffic
 - Needed to accommodate development generated traffic
 - Identify time frame for construction
 - Identify other funding sources (e.g., PENNDOT, Federal funds)
- Hold public hearing
 - Forward to Governing Body for approval

APPENDIX 6

GROWING GREENER WORKBOOK

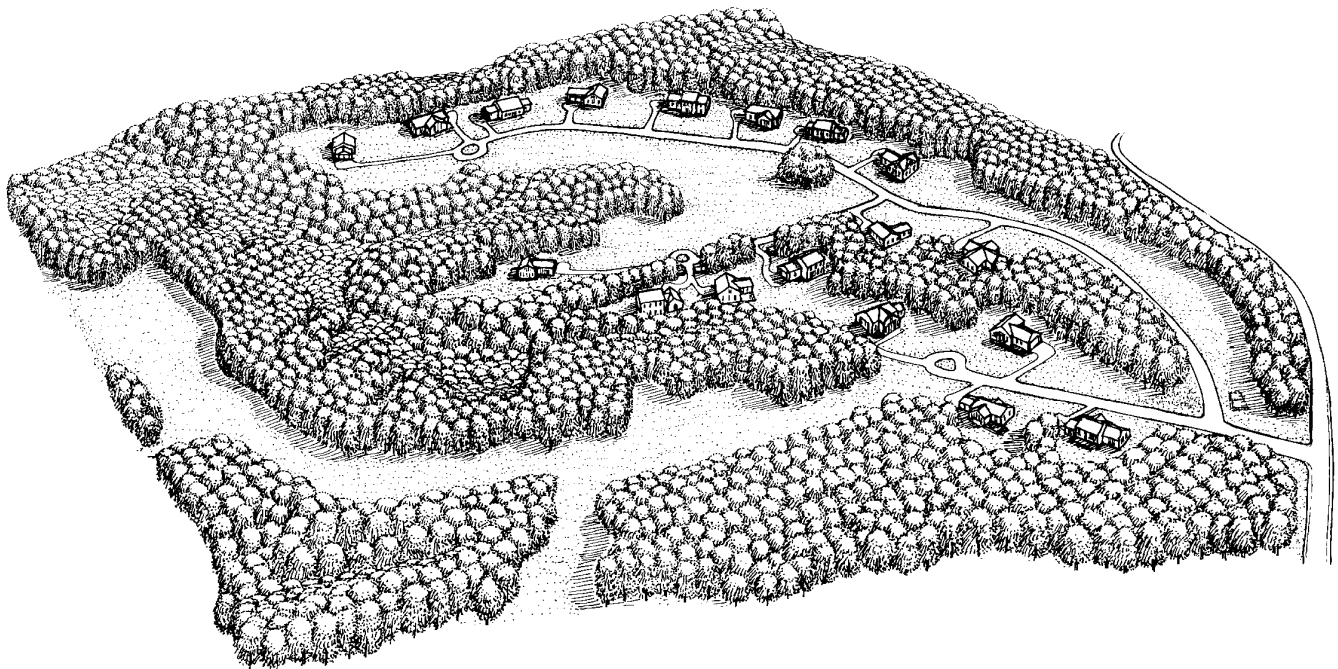
**Model comprehensive plan language describing ordinance improvements needed to
implement conservation planning objectives**

**Prepared for the
Pennsylvania Department of Conservation and Natural Resources
by the
Natural Lands Trust**

Growing Greener

PUTTING CONSERVATION INTO LOCAL CODES

Communities across Pennsylvania are realizing that they can conserve their special open spaces and natural resources **at the same time** they achieve their development objectives. The tools? Conservation zoning and conservation subdivision design, an approach we're calling *Growing Greener*.



These *Growing Greener* tools are illustrated in the above subdivision, where the developer builds the maximum number of homes permitted under the municipality's zoning, while at the same time permanently protecting over half of the property. The open space is then added to an interconnected network of community greenspaces.

If you want your community to take control of its destiny and ensure that new development creates more livable communities in the process, the *Growing Greener* approach might be right for you.

Introduction

This booklet summarizes how municipalities can use the development process to their advantage to protect interconnected networks of open space: natural areas, greenways, trails and recreational land. Communities **can** take control of their destinies so that their conservation goals are achieved in a manner fair to all parties concerned. All that is needed are some relatively straight-forward amendments to municipal comprehensive plans, zoning ordinances, and subdivision ordinances. These steps are described in the sections that follow.

Growing Greener is a collaborative effort of the Pennsylvania Department of Conservation and Natural Resources, Natural Lands Trust, Pennsylvania State University Cooperative Extension and an advisory committee comprised of officials from the Department of Community and Economic Development, Center for Rural Pennsylvania, Lycoming County Planning Commission, Pennsylvania Environmental Council, Pennsylvania Planning Association and Department of Environmental Protection.

During 1997, Natural Lands Trust conducted

three *Growing Greener* pilot workshops hosted by the Centre County Planning Commission, Centre Region Planning Agency, Tri-County Regional Planning Commission and the Union County Planning Commission. Our focus during 1998 will be helping county planning agencies and other planning organizations build their capacity to help the communities they work with realize their conservation goals. In order to assist them, Natural Lands Trust has developed multi-media educational materials available for use by community planners across the state. We invite county planning agencies and interested planning consultants and conservancies to join us as *Growing Greener* partners.

How do I learn more?

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The Conservation Design Concept

Each time a property is developed into a residential subdivision, an opportunity exists for adding land to a community-wide network of open space. Although such opportunities are seldom taken in many municipalities, this situation could be reversed fairly easily by making several small but significant changes to three basic local land-use documents—the comprehensive plan, the zoning ordinance and the subdivision and land development ordinance. Simply stated, Conservation Design rearranges the development on each parcel as it is being planned so that half (or more) of the buildable land is set aside as open space. Without controversial “down zoning,” the same number of homes can be built in a less land-consumptive manner, allowing the balance of the property to be permanently protected and added to an interconnected network of community green spaces. This “density-neutral” approach provides a fair and equitable way to balance conservation and development objectives.

Four Keys to Conservation

Communities protect open space because it protects streams and water quality, provides habitat for plants and animals, preserves rural “atmosphere,” provides recreational areas, protects home values and reduces costs of municipal services. In short, land conservation makes your community a better place to live. Four basic actions underlie the *Growing Greener* process:

1 Envision the Future: Performing “community audits.” Successful communities have a realistic understanding of their future. The audit projects past and current development trends into the future so that officials and residents may easily see the long-term results of con-

tinuing with current ordinance provisions. Communities use this knowledge to periodically review and adjust their goals and strategies for conservation and development.

2 Protect Open Space Networks Through Conservation Planning. Successful communities have a good understanding of their natural and cultural resources. They establish reasonable goals for conservation and development—goals that reflect their special resources, existing land use patterns and anticipated growth. Their comprehensive plans document these resources, goals and policies. The plan contains language about the kinds of

ordinance updating and conservation programs necessary for those goals to be realized. A key part of the Comprehensive Plan is a *Map of Potential Conservation Lands* that is intended to guide the location of open space in each new subdivision as it is being laid out.

3 Conservation Zoning: A “Menu of Choices.” Successful communities have legally defensible, well-written zoning regulations that meet their “fair share” of future growth and provide for a logical balance between community goals and private landowner interests. They incorporate resource suitabilities, flexibility, and incentives to require the

inclusion of permanent conservation lands into new subdivisions. The five zoning options summarized in this publication and described in detail in the *Growing Greener* manual respect the private property rights of developers without unduly impacting the remaining natural areas that make our communities such special places in which to live, work, recreate and invest in.

4 Conservation Subdivision Design: A Four-Step Process. Successful communities recognize that both design standards and the design process play an important part in conserving community resources. Such communities adopt subdivision codes which require detailed site surveys

and analyses identifying the special features of each property, and introduce a simple methodology showing how to lay out new development so that the majority of those special features will be permanently protected in designated conservation areas or preserves. To a

considerable extent, those preserves within new subdivisions can be pre-identified in the Comprehensive Plan so that each such area will form an integral part of a community-wide network of protected open space, as noted above.



Figure 2

A matching pair of graphics, taken from an actual "build-out map," showing existing conditions (mostly undeveloped land) contrasted with the potential development pattern of "checkerboard suburbia" created through conventional zoning and subdivision regulations.

1 Envisioning the Future Performing "Community Audits"

The "community audit" visioning process helps local officials and residents see the ultimate result of continuing to implement current land-use policies.

The process helps start discussions about how current trends can be modified so that a greener future is ensured.

Sad but true, the future that faces most communities with standard zoning and subdivision codes is to witness the systematic conversion of every unprotected acre of buildable land into developed uses.

Most local ordinances allow or encourage standardized layouts of "wall-to-wall houselots." Over a period of decades this process produces a broader pattern of "wall-to-wall subdivisions" (see Figure 1). No community actively plans to become a bland suburb without open space. However, most zoning codes program exactly this outcome.

Municipalities can perform audits to see the future before it happens, so that they will be able to judge whether a mid-course correction is needed. A community audit entails:

Numerical Analysis of Development Trends.

The first step involves a numerical analysis of growth projections, both in terms of the number of dwelling units and the number of acres that will probably be converted into houselots and streets under present codes.

Regulatory Evaluation.

The second step consists of an evaluation of the land-use regulations that are currently on the books, identifying their strengths and weaknesses and offering constructive recommendations about how they can incorporate the conservation techniques described in this booklet. It should also include a realistic appraisal of the extent to which private conservation efforts are likely to succeed in protecting lands from development through various nonregulatory approaches such as purchases or donations of easements or fee title interests.

"Build-Out" Maps.

The third step entails mapping future development patterns on a map of the entire municipality (see Figure 2). Alternatively, the "build-out" map could focus only on selected areas in the municipality where development is of the greatest immediate concern, perhaps due to the presence of special features identified in the comprehensive plan or vulnerability due to development pressures.

The following parts of this booklet describe practical ways in which communities can take control of their destinies so that conservation goals will be achieved simultaneously with development objectives, in a manner that is fair to all parties concerned. Three interrelated documents—the Comprehensive Plan, Zoning Code and Subdivision and Land Development Code, stand together like a three-legged stool providing a balanced footing for achieving a municipality's conservation goals.

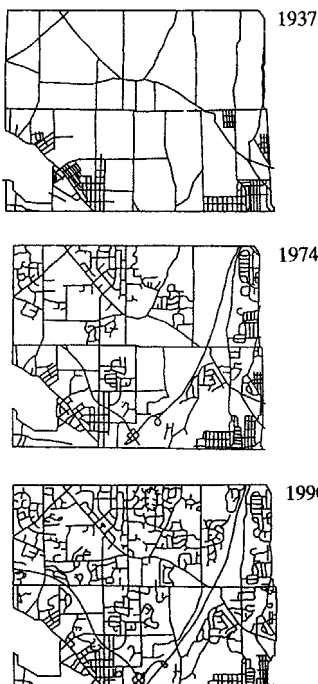


Figure 1

The pattern of "wall-to-wall subdivisions" that evolves over time with zoning and subdivision ordinances which require developers to provide nothing more than houselots and streets.

2 Protecting Open Space Networks Through Conservation Planning

Although many communities have adopted either Comprehensive Plans or Open Space Plans containing detailed inventories of their natural and historic resources, very few have taken the next logical step of pulling together all that information and creating a *Map of Potential Conservation Lands*.

Such a map is vitally important to any community interested in conserving an interconnected network of open space. The map serves as the tool which guides decisions regarding which land to protect in order for the network to eventually take form and have substance.

A *Map of Potential Conservation Lands* starts with information contained in the community's existing planning documents. The next task is to identify two kinds of resource areas. *Primary Conservation Areas* comprise only the most severely constrained lands, where development is typically restricted under current codes and laws (such as wetlands, floodplains, and slopes exceeding 25%). *Secondary Conservation Areas* include all other locally noteworthy or significant features of the natural or cultural landscape—such as mature

woodlands, wildlife habitats and travel corridors, prime farmland, groundwater recharge areas, greenways and trails, river and stream corridors, historic sites and buildings, and scenic viewsheds. These *Secondary Conservation Areas* are often best understood by the local residents who may be directly involved in their identification. Usually these resource areas are totally unprotected and are simply zoned for one kind of development or another.

A base map is then prepared on which the *Primary Conservation Areas* have been added to an inventory of lands which are already protected (such as parks, land trust preserves, and properties under conservation easement). Clear acetate sheets showing each kind of *Secondary Conservation Area* are then laid on top of the base map in an order reflecting the community's preservation priorities (as determined through public discussion).

This overlay process will reveal certain situations where two or more conservation features appear together (such as woodlands and wildlife habitats, or farmland and scenic

viewsheds). It will also reveal gaps where no features appear.

Although this exercise is not an exact science, it frequently helps local officials and residents visualize how various kinds of resource areas are connected to one another, and enables them to tentatively identify both broad swaths and narrow corridors of resource land that could be protected in a variety of ways.

Figure 3 shows a portion of a map prepared for one Chester County township which has followed this approach.

The planning techniques which can best implement

the community-wide *Map of Potential Conservation Lands* are *Conservation Zoning* and *Conservation Subdivision Design*. These techniques which work hand in hand are described in detail below. Briefly stated, conservation zoning expands the range of development choices available to landowners and developers. Just as importantly, it also eliminates the option of creating full-density "checkerboard" layouts that convert all land within new subdivisions into houselots and streets.

The second technique, "conservation subdivision design," devotes half or

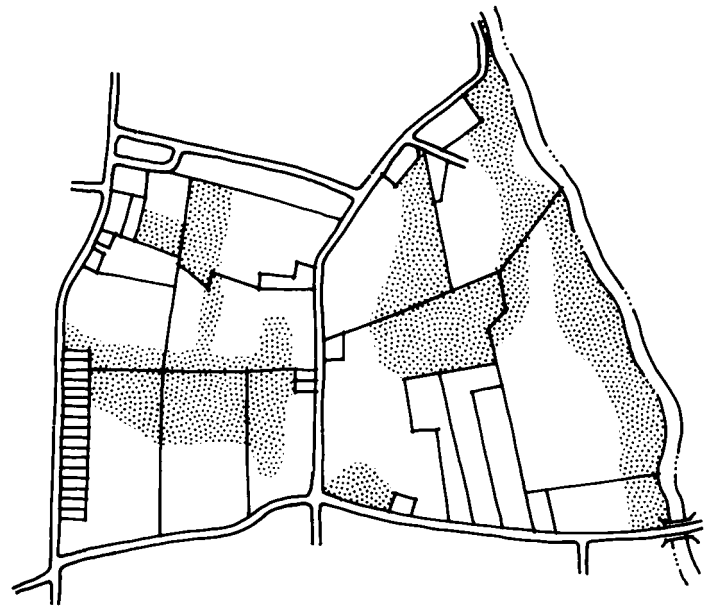


Figure 3

Part of a *Map of Potential Conservation Lands* for West Manchester Township, York County. West Manchester's map gives clear guidance to landowners and developers as to where new development is encouraged on their properties. Township officials engaged a consultant to draw, on the official tax parcel maps, boundaries of the new conservation lands network as it crossed various properties, showing how areas required to be preserved in each new development could be located so they would ultimately connect with each other. In this formerly agricultural municipality the hedgerows, woodland remnants, and the riparian buffer along the creek were identified as core elements of the conservation network.

more of the buildable land area within a residential development as undivided permanent open space. Not surprisingly, the most important step in designing a conservation subdivision is to identify the land that is to be preserved. By using the community-wide Map

of Potential Conservation Lands as a template for the layout and design of conservation areas within new subdivisions, these developments help to create an interconnected network of open space spanning the entire municipality.

Figure 4 shows how the open space in three adjoining subdivisions has been designed to connect, and illustrates the way in which the Map of Potential Conservation Lands can become a reality.

Figure 5 provides a bird's-eye view of a landscape where an interconnected network of conservation lands has been gradually protected through the steady application of conservation zoning techniques and conservation subdivision design standards.

3 Conservation Zoning A "Menu" of Choices

The main reason subdivisions typically consist of nothing more than houselots and streets is that most local land-use ordinances ask little, if anything, with respect to conserving open space or providing neighborhood amenities (see Figure 6).

Communities wishing to break the cycle of "wall-to-wall houselots" need to consider modifying their zoning to actively and legally encourage subdivisions that set aside at least 50 percent of the land as permanently protected open space and to incorporate substantial density disincentives for developers who do not conserve any significant percentage of land.

Following this approach, a municipality would first calculate a site's yield using traditional zoning. A developer would then be permitted full density *only* if at least 50 percent of the buildable land is maintained as undivided open space (illustrated in

Figure 7: "Option 1"). Another full-density option could include a 25 percent density bonus for preserving 60 percent of the unconstrained land (Figure 8: "Option 2"). Municipalities might also consider offering as much as a 100 percent density bonus for protecting 70 percent of that land (Figure 11: "Option 5").

It is noteworthy that the 36 village-like lots in Option 5 occupy less land than the 18 lots in Option 1, and that Option 5 therefore contributes more significantly to the goal of creating community-wide networks of open space. The village-scale lots in Option 5 are particularly popular with empty-nesters, single-parent households, and couples with young children. Its traditional layout is based on that of historic hamlets and villages in the region, and new developments in this category could be controlled as Conditional

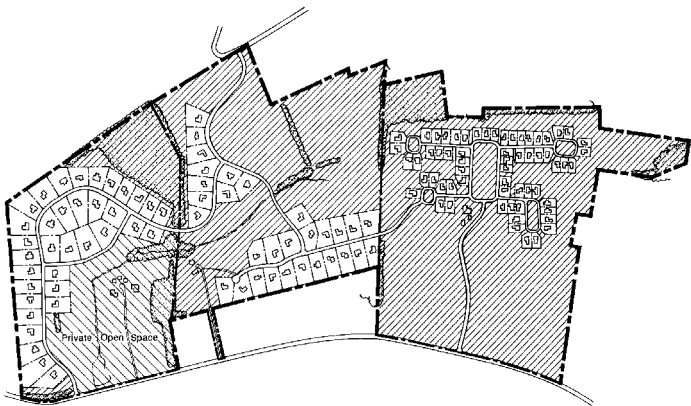


Figure 4
The conservation lands (shown in gray) were deliberately laid out to form part of an interconnected network of open space in these three adjoining subdivisions.

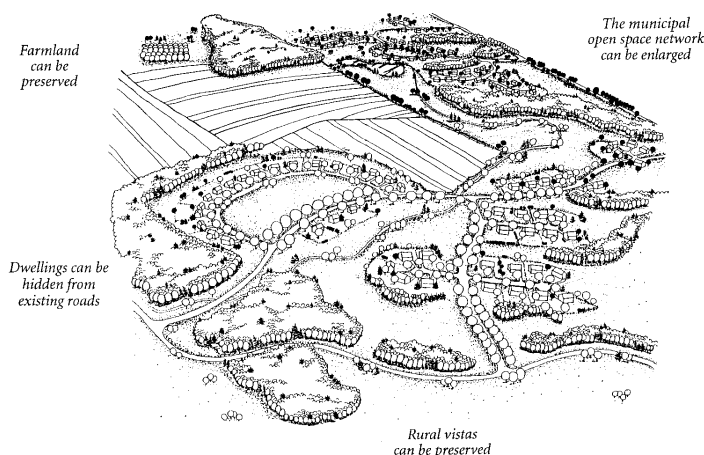


Figure 5
This sketch shows how you can apply the techniques described in this booklet to set aside open space which preserves rural character, expands community parkland and creates privacy for residences. (Source: Montgomery County Planning Commission)

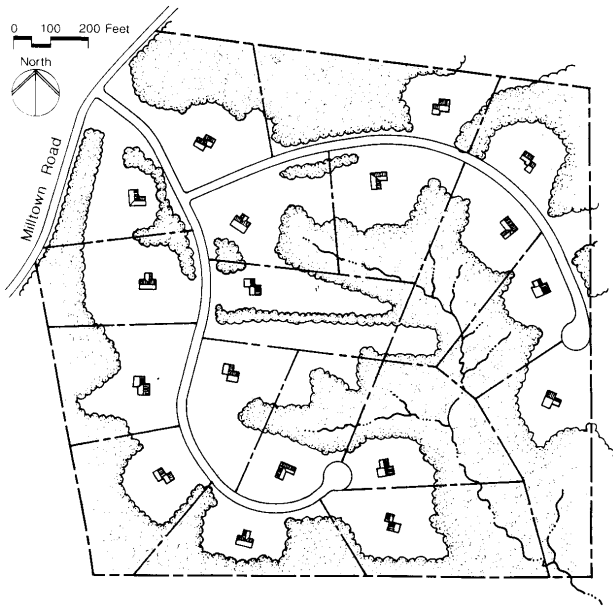


Figure 6 YIELD PLAN

The kind of subdivision most frequently created in Pennsylvania is the type which blankets the development parcel with houselots, and which pays little if any attention to designing around the special features of the property. In this example, the house placement avoids the primary conservation areas, but disregards the secondary conservation features. However, such a sketch can provide a useful estimate of a site's capacity to accommodate new houses at the base density allowed under zoning—and is therefore known as a "Yield Plan."

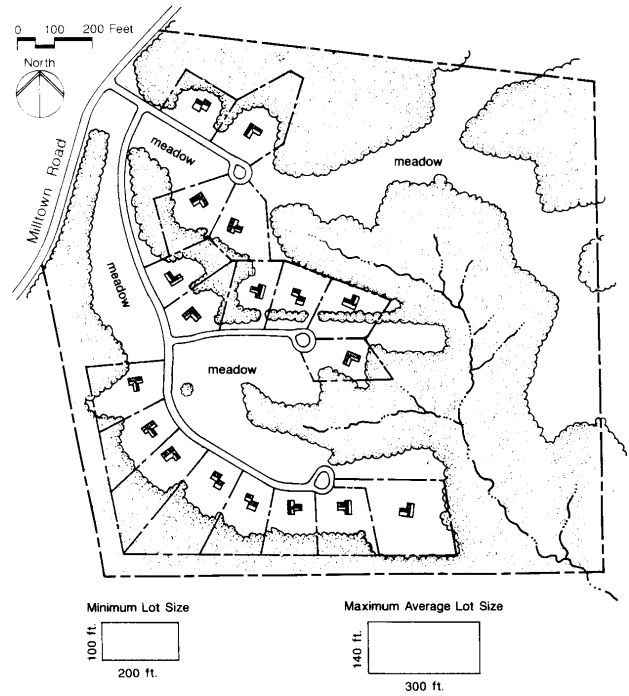


Figure 7 OPTION 1

Density-neutral with Pre-existing Zoning
18 lots
Lot Size Range: 20,000 to 40,000 sq. ft.
50% undivided open space

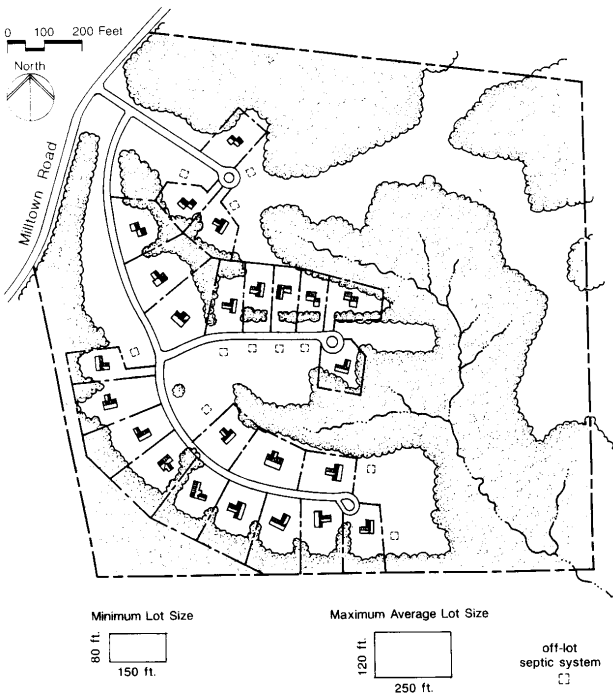


Figure 8 OPTION 2

Enhanced Conservation and Density
24 Lots
Lot Size Range: 12,000 to 24,000 sq. ft.
60% undivided open space

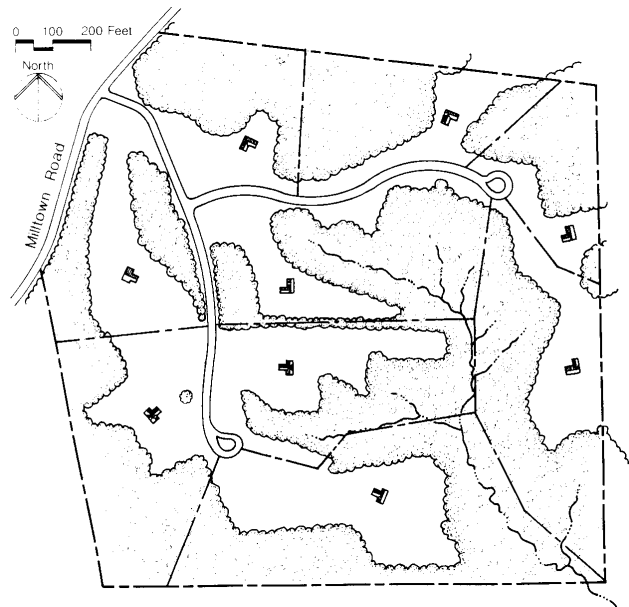


Figure 9 OPTION 3

50% Density Reduction
9 Lots
Typical Lot Size: 160,000 sq. ft. (4 acres)
Estate Lots

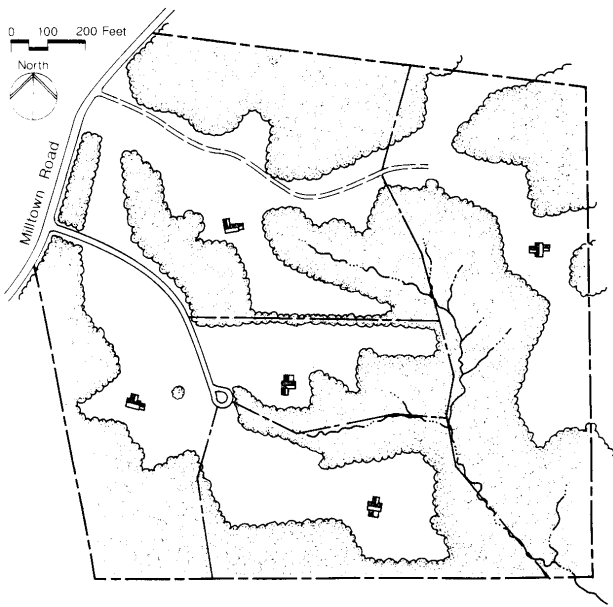


Figure 10 OPTION 4
Country Properties
5 Lots
Maximum Density: 10 acres per principal dwelling
70% density reduction

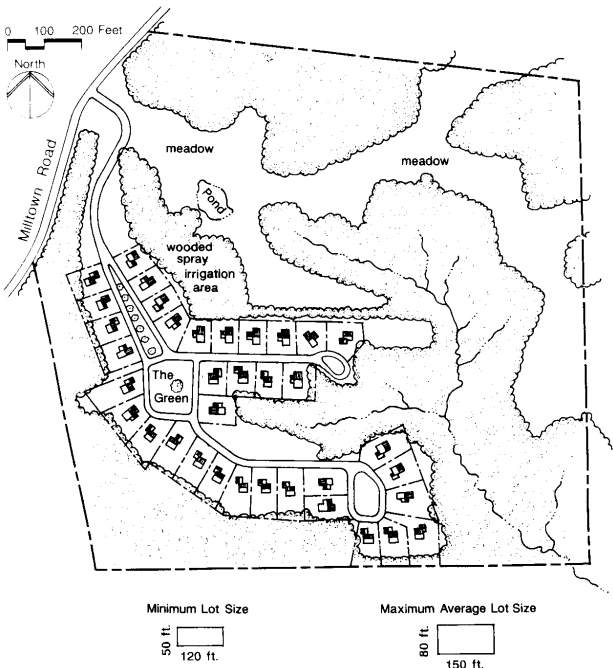


Figure 11 OPTION 5
Hamlet or Village
36 Lots
Lot Size Range: 6,000 to 12,000 sq. ft.
70% undivided open space

Uses subject to a set of extensively illustrated design standards.

Developers wishing to serve the “estate lot” market have two additional options. One involves lots containing at least four acres of unconstrained land (Figure 9: “Option 3”). The other is comprised of “country properties” of at least 10 acres, which may be accessed by gravel drives built to new township standards for very low-volume rural lanes (Figure 10: “Option 4”). An additional incentive to encourage developers to choose this fourth option would typically be permission to build up to two accessory dwellings on these properties. Those units would normally be limited in size, subject to architectural design standards to resemble traditional estate buildings, and restricted from further lot division.

Two or more of these options could be combined on a single large property. One logical approach

would combine Options 4 and 5, with the Option 4 “country properties” comprising part of the required greenbelt open space around an Option 5 village (see Figure 12).

Conspicuously absent from this menu of choices is the conventional full-density subdivision providing no unfragmented open space (Figure 6). Because that kind of development causes the largest loss of resource land and poses the greatest obstacle to conservation efforts, it is not included as an option under this approach.

For illustrative purposes, this booklet uses a one dwelling unit per two acre density. However, conservation zoning is equally applicable to higher density zoning districts of three or four units per acre. Such densities typically occur in villages, boroughs, urban growth boundary areas and TDR receiving areas where open space setbacks are critical to the residents’ quality of life.

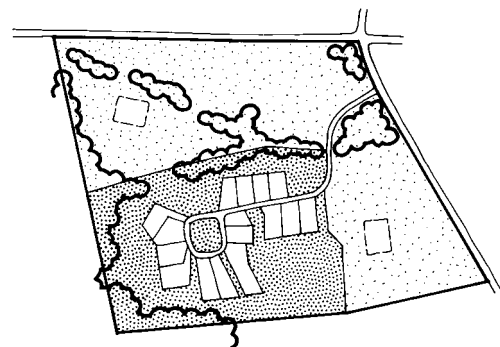


Figure 12
An Option 5 village surrounded by its own open space and buffered from the township road by two “country properties” (Option 4).

4 Conservation Subdivision Design

A Four-Step Process

Designing subdivisions around the central organizing principle of land conservation is not difficult. However, it is essential that ordinances contain clear standards to guide the conservation design process. The four-step approach described below has been proven to be effective in laying out new full-density developments where all the significant natural and cultural features have been preserved.

Step One consists of identifying the land that should be permanently protected. The developer incorporates areas pre-identified on the community-wide *Map of Potential Conservation Lands* and then performs a detailed site analysis in order to precisely locate features to be conserved. The developer first identifies all the constrained lands (wet, floodprone, and steep), called *Primary Conservation Areas* (Figure 13). He then identifies *Secondary Conservation Areas* (Figure 14) which comprise noteworthy features of the property that are typically unprotected under current codes: mature woodlands, greenways and trails, river and stream corridors, prime farmland, hedgerows and

individual free-standing trees or tree groups, wildlife habitats and travel corridors, historic sites and structures, scenic viewsheds, etc. After “greenlining” these conservation elements, the remaining part of the property becomes the *Potential Development Area* (Figure 15).

Step Two involves locating sites of individual houses within the Potential Development Area so that their views of the open space are maximized (Figure 16). The number of houses is a function of the density permitted within the zoning district, as shown on a *Yield Plan* (Figure 6). (In unsewered areas officials should require a 10 percent sample of the most questionable lots—which they would select—to be tested for septic suitability. Any lots that fail would be deducted and the applicant would have to perform a second 10 percent sample, etc.)

Step Three simply involves “connecting the dots” with streets and informal trails (Figure 17), while **Step Four** consists of drawing in the lot lines (Figure 18).

This approach reverses the sequence of steps in laying out conventional subdivisions, where the

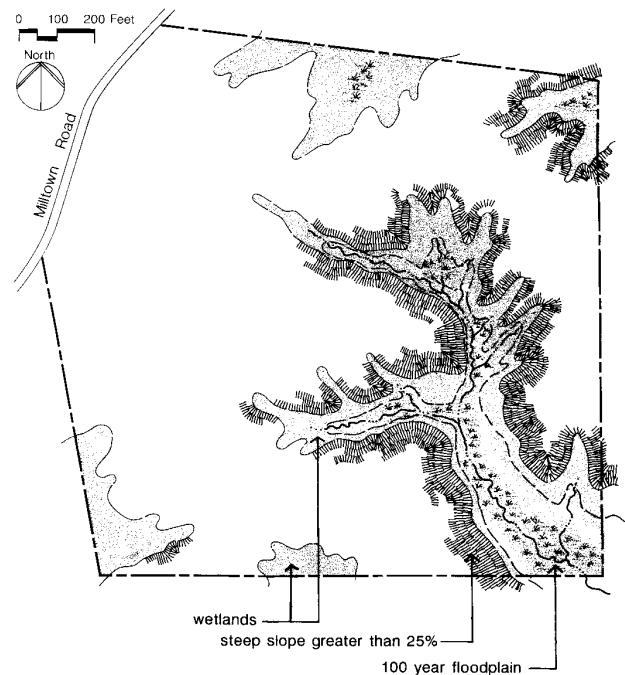


Figure 13 STEP ONE, Part One
Identifying Primary Conservation Areas

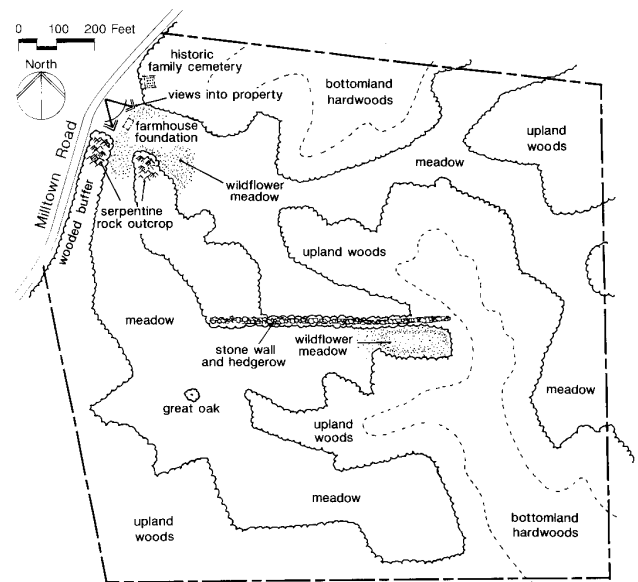


Figure 14 STEP ONE, Part Two
Identifying Secondary Conservation Areas

Typically unprotected under local codes, these special features constitute a significant asset to the property value and neighborhood character. Secondary conservation areas are the most vulnerable to change, but can easily be retained by following this simple four-step process.

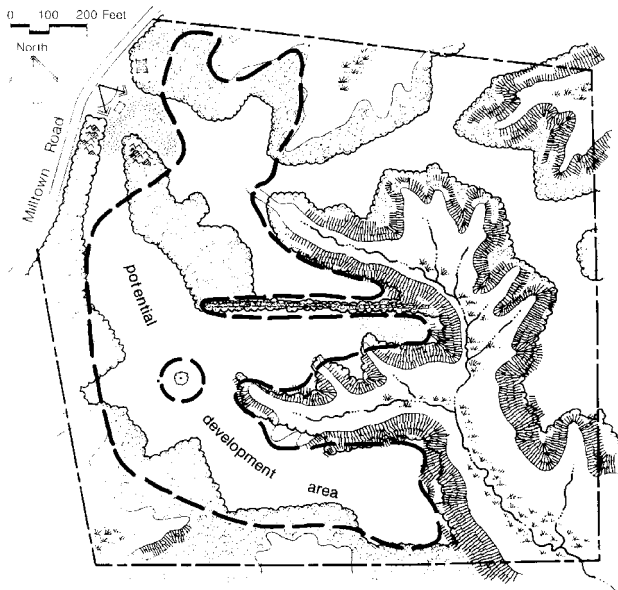


Figure 15 STEP ONE, *Part Three*
Potential Development Areas
for Options 1, 2, and 5

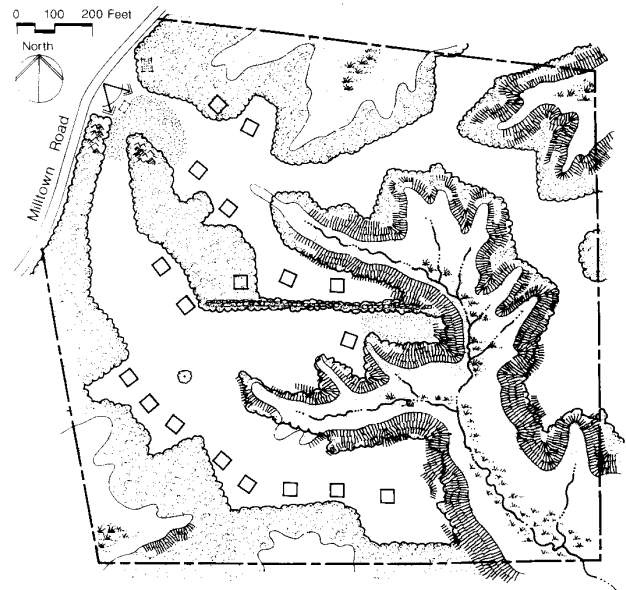


Figure 16 STEP TWO
Locating House Sites

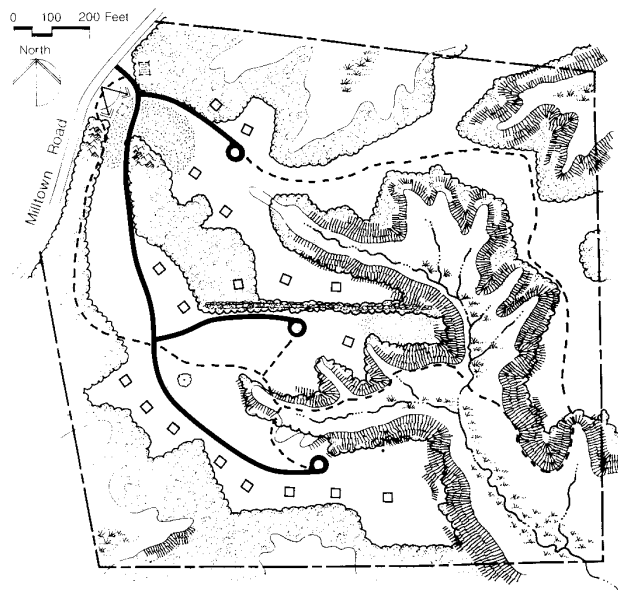


Figure 17 STEP THREE
Aligning Streets and Trails

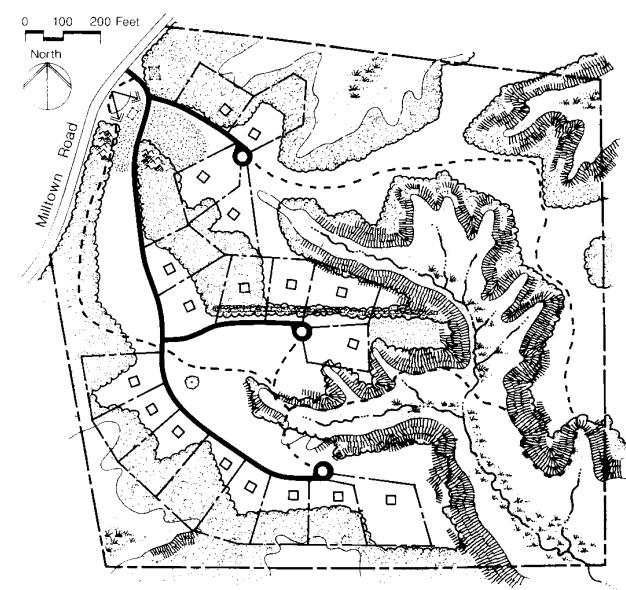


Figure 18 STEP FOUR
Drawing in the Lot Lines

street system is the first thing to be identified, followed by lot lines fanning out to encompass every square foot of ground into houselots. When municipalities require nothing more than "houselots and streets," that is all they receive. But by setting community standards higher and requiring 50 to 70 percent

open space as a precondition for achieving full density, officials can effectively encourage conservation subdivision design. The protected land in each new subdivision would then become building blocks that add new acreage to community-wide networks of interconnected open space each time a property is developed.

landowner or developer wants it to be. In the vast majority of situations, municipalities themselves have no desire to own and manage such conservation land, which they generally feel should be a neighborhood responsibility. In cases where local officials wish to provide township recreational facilities (such as ballfields or trails) within conservation subdivisions, the municipality must negotiate with the developer for the purchase of that land on a "willing seller/willing buyer" basis. To facilitate such negotiations, conservation zoning ordinances can be written to include density incentives to encourage developers to designate specific parts of their conservation land for public ownership or for public access and use.

A legal analysis of the *Growing Greener* workbook, by Harrisburg land use attorney Charles E. Zaleski, Esq., is reprinted on the last page of this booklet.

How can a community ensure permanent protection for conservation lands?

The most effective way to ensure that conservation land in a new subdivision will remain undeveloped forever is to place a permanent conservation ease-

ment on it. Such easements run with the chain of title, in perpetuity, and specify the various conservation uses that may occur on the property. These restrictions are separate from zoning ordinances and continue in force even if legal densities rise in future years. Easements are typically held by land trusts and units of government. Since political leadership can change over time, land trusts are the most reliable holder of easements, as their mission never varies. Deed restrictions and covenants are, by comparison, not as effective as easements, and are not recommended for this purpose. Easements can be modified only within the spirit of the original agreement, and only if the co-holders agree. In practice, while a proposal to erect another house or a country club building on the open space would typically be denied, permission to create a small ballfield or a single tennis court in a corner of a large conservation meadow or former field might well be granted.

What are the ownership, maintenance, tax and liability issues?

Among the most commonly expressed concerns about subdivisions which conserve open space are questions about who will

Frequently Asked Questions About Conservation Subdivision Design

Does this conservation-based approach involve a "taking"?

No. People who do not fully understand this conservation-based approach to subdivision design may mistakenly believe that it constitutes "a taking of land without compensation." This misunderstanding may stem from the fact that conservation subdivisions, as described in this booklet, involve either large percentages of undivided open space or lower overall building densities.

There are two reasons why this approach does not constitute a "taking."

First, no density is taken away. Conservation zoning is fundamentally fair because it allows landown-

ers and developers to achieve full density under the municipality's current zoning—and even to increase that density significantly—through several different "as-of-right" options. Of the five options permitted under conservation zoning, three provide for either full or enhanced densities. The other two options offer the developer the choice to lower densities and increase lot sizes. Although conservation zoning precludes full-density layouts that do not conserve open space, this is legal because there is no constitutional "right to sprawl."

Second, no land is taken for public use. None of the land which is required to be designated for conservation purposes becomes public (or even publicly accessible) unless the

own and maintain the conservation land, and who will be responsible for the potential liability and payment of property taxes. The short answer is that whoever owns the conservation land is responsible for all of the above. But who owns this land?

Ownership Choices.

There are basically four options, which may be combined within the same subdivision where that makes the most sense.

- *Individual Landowner*

At its simplest level, the original landowner (a farmer, for example) can retain ownership to as much as 80 percent of the conservation land to keep it in the family. (At least 20 percent of the open space should be reserved for common neighborhood use by subdivision residents.) That landowner can also pass this property on to sons or daughters, or sell it to other individual landowners, with permanent conservation easements running with the land and protecting it from development under future owners. The open space should not, however, be divided among all of the individual subdivision lots as land management and access difficulties are likely to arise.

- *Homeowners' Associations*

Most conservation land within subdivisions is owned and managed by homeowners' associations

(HOAs). A few basic ground rules encourage a good performance record. First, membership must be automatic, a precondition of property purchase in the development. Second, zoning should require that bylaws give such associations the legal right to place liens on properties of members who fail to pay their dues. Third, facilities should be minimal (ball fields and trails rather than clubhouses and swimming pools) to keep annual dues low. And fourth, detailed maintenance plans for conservation areas should be required by the municipality as a condition of approval. The municipality has enforcement rights and may place a lien on the property should the HOA fail to perform their obligations to maintain the conservation land.

- *Land Trusts*

Although homeowners' associations are generally the most logical recipients of conservation land within subdivisions, occasionally situations arise where such ownership most appropriately resides with a land trust (such as when a particularly rare or significant natural area is involved). Land trusts are private, charitable groups whose principal purpose is to protect land under its stewardship from inappropriate change. Their most common role is to hold easements or fee simple title on conservation lands

within new developments and elsewhere in the community, to ensure that all restrictions are observed. To cover their costs in maintaining land they own or in monitoring land they hold easements on, land trusts typically require some endowment funding. When conservation zoning offers a density bonus, developers can donate the proceeds from the additional "endowment lots" to such trusts for maintenance or monitoring.

- *Municipality or Other Public Agency*

In special situations a local government might desire to own part of the conservation land within a new subdivision, such as when that land has been identified in a municipal open space plan as a good location for a neighborhood park or for a link in a community trail network. Developers can be encouraged to sell or donate certain acreage to municipalities through additional density incentives, although the final decision would remain the developer's.

- *Combinations of the Above*

As illustrated in Figure 19, the conservation land within new subdivisions could involve multiple ownerships, including (1) "non-common" open space such as cropland retained by the original farmer, (2) common open space such as ballfields owned by an HOA, and (3) a trail

corridor owned by either a land trust or by the municipality.

Maintenance Issues.

Local officials should require conservation area management plans to be submitted and approved prior to granting final subdivision approval. In Lower Merion Township, Montgomery County, the community's "model" management plan is typically adopted by reference by each subdivision applicant. That document identifies a dozen different kinds of conservation areas (from woodlands and pastures to ballfields and abandoned farmland that is reforesting) and describes recommended management practices for each one. Farmland is typically leased by HOAs and land trusts to local farmers, who often agree to modify some of their agricultural practices

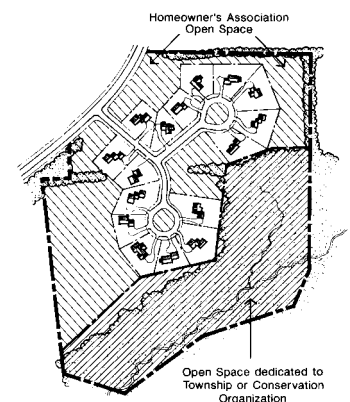


Figure 19
Various private and public entities can own different parts of the open space within conservation subdivisions, as illustrated above.

to minimize impacts on nearby residents. Although ballfields and village greens require weekly mowing, conservation meadows typically need only annual mowing. Woodlands generally require the least maintenance: trimming bushes along walking trails, and removing invasive vines around the outer edges where greater sunlight penetration favors their growth.

Tax Concerns. Property tax assessments on conservation subdivisions should not differ, in total, from those on conventional developments. This is because the same number of houses and acres of land are involved in both cases (except when part of the open space is owned by a public entity, which is uncommon). Although the open space in conservation subdivisions is taxed low because easements prevent it from being developed, the rate is similar to that applied to land in conventional subdivisions where the larger houselots are not big enough to be further subdivided. (For example, the undeveloped back half of a one-acre lot in a one-acre zoning district is subject to minimal taxation because it has no further development value.)

Liability Questions. The Pennsylvania Recreation Use of Land and Water Act protects owners of undevel-

oped land from liability for negligence if the landowner does not charge a fee to recreational users. A tree root or rock outcropping along a trail that trips a hiker will not constitute landowner negligence. To be sued successfully in Pennsylvania, landowners must be found to have "willfully or maliciously failed to guard against a dangerous condition." This is a much more difficult case for plaintiffs to make. Even so, to cover themselves against such situations, owners of conservation lands routinely purchase liability insurance policies similar to those that most homeowners maintain.

How can on-site sewage disposal work with conservation subdivisions?

The conventional view is that the smaller lots in conservation subdivisions make them more difficult to develop in areas without sewers. However, the reverse is true. The flexibility inherent in the design of conservation subdivisions makes them superior to conventional layouts in their ability to provide for adequate sewage disposal. Here are two examples:

Utilizing the best soils. Conservation design requires the most suitable soils on the property to be identified at the outset, enabling houselots to be arranged to take the best advantage of them. If one end of a property has deeper, better drained soils, it makes more sense to site the homes in that part of the property rather than to spread them out, with some lots located entirely on mediocre soils that barely manage to meet minimal standards for septic approval.

Locating individual systems within the open space. Conventional wisdom also holds that when lots become smaller, central water or sewage disposal is required. That view overlooks the practical alternative of locating individual wells and/or individual septic systems within the permanent open space adjacent to the more compact lots typical of conservation subdivisions, as shown in Figure 20. There is no engineering reason to require that septic filter beds must be located within each houselot. However, it is essential that the final approved subdivision plan clearly indicate which parts of the undivided open space are designated for septic disposal, with each lot's disposal area graphically indicated through dotted lines extending out

into the conservation land. These filter beds can be located under playing fields, or conservation meadows in the same way they typically occupy positions under suburban lawns. (If mound systems are required due to marginal soil conditions, they are best located in passive use areas such as conservation meadows where the grass is cut only once a year. Such mounds should also be required to be contoured with gently sloping sides to blend into the surrounding landscape wherever possible.)

Although maintenance and repair of these septic systems remains the responsibility of individual lot owners, it is recommended that HOAs be authorized to pump individual septic tanks on a

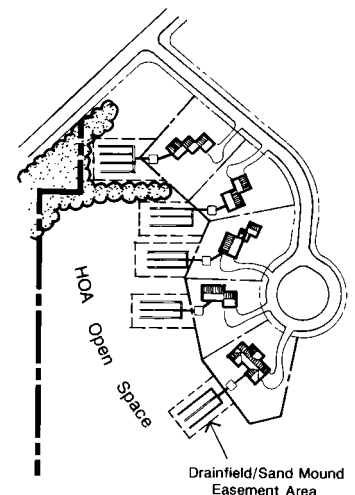


Figure 20
A practical alternative to central water or sewage disposal facilities are individually-owned wells and/or septic systems located within conservation areas, in places specifically designated for them on the final plan.

regular basis (every three or four years) to ensure that the accumulated sludge never rises to a level where it can flow into and clog the filter beds. This inexpensive, preventive maintenance greatly extends the life of filter beds.

How does this conservation approach differ from “clustering”?

The *Growing Greener* conservation approach described here differs dramatically from the kind of “clustering” that has occurred in many communities over the past several decades. The principal points of difference are as follows:

Higher Percentage and Quality of Open Space.

In contrast with typical cluster codes, conservation zoning establishes higher standards for both the quantity and quality of open space that is to be preserved. Under conservation zoning, 50 to 70 percent of the unconstrained land is permanently set aside. This compares with cluster provisions that frequently require only 25 to 30 of the gross land area be conserved. That minimal open space often includes all of the most unusable land as open space, and sometimes also includes undesirable, left-over areas such as

stormwater management facilities and land under high-tension power lines.

Open Space Pre-Determined to Form Community-wide Conservation Network.

Although clustering has at best typically produced a few small “green islands” here and there in any municipality, conservation zoning can protect blocks and corridors of permanent open space. These areas can be pre-identified on a comprehensive plan *Map of Potential Conservation Lands* so that each new development will add to—rather than subtract from—the community’s open space acreage.

Eliminates the Standard Practice of Full-Density with No Open Space.

Under this new system, full density is achievable for layouts in which 50 percent or more of the unconstrained land is conserved as permanent, undivided open space. By contrast, cluster zoning provisions are typically only optional alternatives within ordinances that permit full density, by right, for standard “cookie-cutter” designs with no open space.

Simply put, the differences between clustering and conservation zoning are like the differences between a Model T and a Taurus.

How do residential values in conservation subdivisions compare to conventional subdivisions?

Another concern of many people is that homes in conservation subdivisions will differ in value from those in the rest of the community. Some believe that because so much land is set aside as open space, the homes in a conservation subdivision will be prohibitively priced and the municipality will become a series of elitist enclaves. Other people

take the opposite view, fearing that these homes will be smaller and less expensive than their own because of the more compact lot sizes offered in conservation subdivisions.

Both concerns are understandable but they miss the mark. Developers will build what the market is seeking at any given time, and they often base their decision about selling price on the character of surrounding neighborhoods and the amount they must pay for the land.

In conservation subdivisions with substantial open space, there is little or no correlation between lot size and price. These developments have sometimes been described as “golf

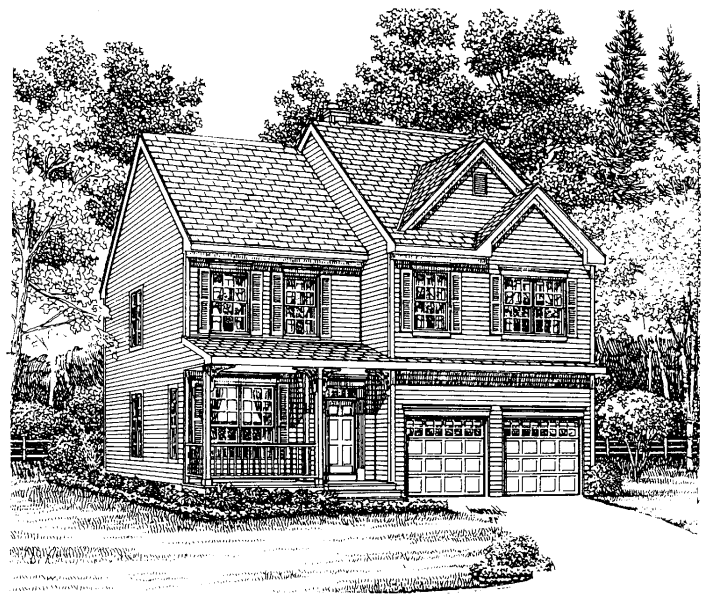


Figure 21

This house design fits comfortably on lots 45 to 50 feet wide, demonstrating that homes with 2,400 sq. ft. of floorspace and a two-car garage can be built within the village-scale lots featured in the “Option 5” zoning alternative. (Courtesy of Hovnanian Homes, Fox Heath subdivision, Perkiomen Township, Montgomery County.)

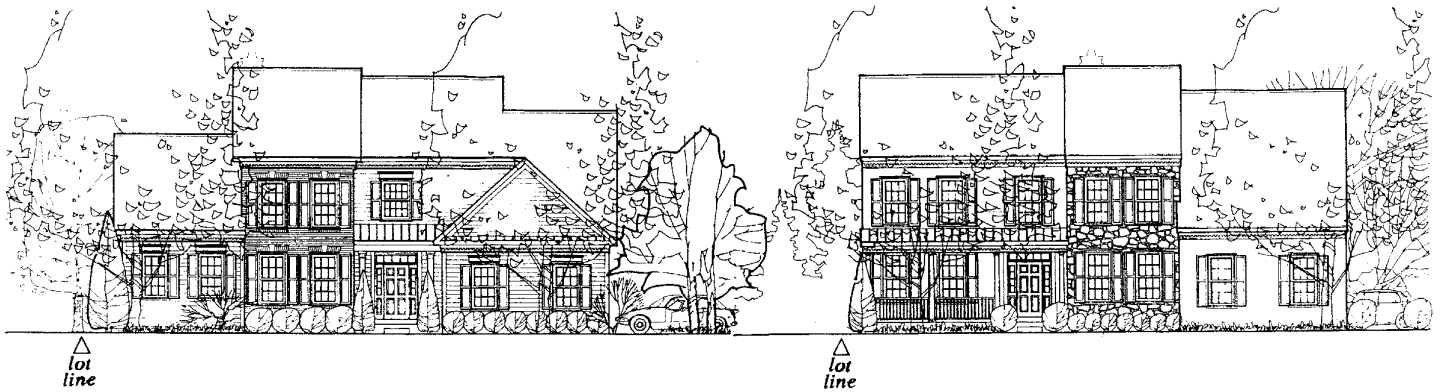


Figure 22

Developers who wish to build larger homes will find this example interesting. Although it contains nearly 3,000 sq. ft. and features an attractive side-loaded garage, it fits onto lots just 100 feet wide. This has been achieved by positioning the homes off-center, with 30 feet of side yard for the driveway and five feet of yard on the opposite side. This ensures 35 feet spacing between homes. (Courtesy of Realen Homes, Ambler)

course communities without the golf course,” underscoring the idea that a house on a small lot with a great view is frequently worth as much or more than the same house on a larger lot which is boxed in on all sides by other houses.

It is a well-established fact of real estate that people pay more for park-like settings, which offset their tendency to pay less for smaller lots. Successful developers know how to

market homes in conservation subdivisions by emphasizing the open space. Rather than describing a house on a half-acre lot as such, the product is described as a house with 20 and one-half acres, the larger figure reflecting the area of conservation land that has been protected in the development. When that conservation area abuts other similar land, as in the township-wide open space network, a further marketing advantage exists.

involving density shifts among contiguous parcels. Other techniques can be effective, but their potential for influencing the “big picture” is limited. The *Growing Greener* approach offers the greatest potential because it:

- does not require public expenditure,
- does not depend upon landowner charity,
- does not involve complicated regulations for shifting rights to other parcels, and
- does not depend upon the cooperation of two or more adjoining landowners to make it work.

Of course, municipalities should continue their efforts to preserve special properties in their entirety whenever possible, such as by working with landowners interested in donating easements or fee title to a local conservation group, purchasing development

rights or fee title with county, state or federal grant money, and transferring development rights to certain “receiving areas” with increased density. However, until such time as more public money becomes available to help with such purchases, and until the Transfer of Development Rights mechanism becomes more operational at the municipal level, most parcels of land in any given community will probably eventually be developed. In that situation, coupling the conservation subdivision design approach with multi-optioned conservation zoning offers communities the most practical, doable way of protecting large acreages of land in a methodical and coordinated manner.

Relationship of the *Growing Greener* Approach to Other Planning Techniques

Successful communities employ a wide array of conservation planning techniques simultaneously, over an extended period of time. Complementary tools which a community should consider adding to its

“toolbox” of techniques include the purchase of development rights; donations of sales to conservancies; the transfer of development rights; and “landowner compacts”

Appendix

Selected Examples of Conservation Subdivisions in Pennsylvania

The two examples shown here demonstrate how conservation design principles can be used to protect different kinds of resources. In *Garnet Oaks*, a woodland wildlife preserve was set aside by the developer, who also constructed extensive walking trails. A well-equipped tot lot and an informal picnic grove provide additional amenities to the residents. At *Farmview*, 137 acres of productive farmland were permanently protected, in addition to most of the woodlands. This subdivision prompted the township to revise its conventional zoning so that the developer's creative design could be approved. Since that time over 500 acres of prime farmland has been preserved in this community through conservation subdivision design representing a \$3.5 million conservation achievement (at an average land value of \$7,000) and these figures continue to grow as further subdivisions are designed. The potential for replicating this and achieving similar results throughout the Commonwealth is enormous.

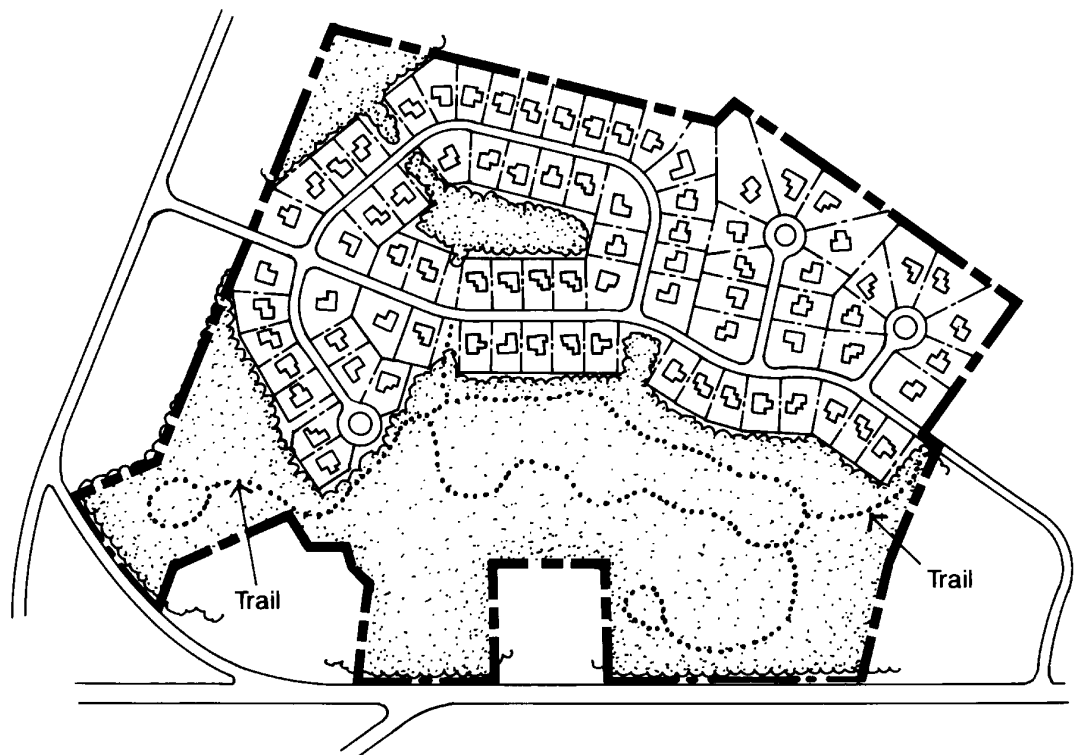
Garnet Oaks

Foulk Road, Bethel Township, Delaware County

Developer: Realen Homes, Ambler

Development Period: 1993–94

Just over half of this 58-acre site has been conserved as permanent privately-owned open space through the simple expedient of reducing lot sizes to the 10,000–12,000 sq. ft. range (approximately 1/4 acre). The developer reports that these lot sizes did not hinder sales because about two-thirds of the lots directly abut the densely wooded open space, which gives them the feel and privacy of larger lots. In fact, the evidence indicates that the open space definitely enhanced sales in two ways: increased absorption rates and higher



prices (through premiums added to the prices of lots which abut the conservation areas).

The locations of these conservation areas were carefully selected after a comprehensive analysis of the site's natural and historic features had been conducted. Those secondary features that were identified for preservation included a line of mature sycamore trees along an existing farm lane, a stone wall and springhouse, and several areas of healthy deciduous upland woods, in addition to the site's delineated wetlands. Based on information received from post-sales interviews in its previous developments, Realen's staff learned that today's

homebuyers are considerably more discerning than they were 10 and 20 years ago, and now look for extra amenities not only in the houses but also in the neighborhood setting. This knowledge led Realen to take special measures to protect trees on individual houselots and within the street right-of-way. Their approach included collaborating with the Morris Arboretum in preparing a training manual for subcontractors and conducting training sessions in tree conservation practices, attendance at which was required of all subcontractors.

The centerpiece of Garnet Oaks' open space is the near mile-long wood-

land trail which winds its way through the 24-acre conservation area, connecting a well-equipped playground and a quiet picnic grove to the street system in three locations. Where the trail traverses areas of wet soils it is elevated on a low wooden boardwalk. This trail, which was cleared with assistance from a local Boy Scout Troop, features numerous small signs identifying the common and botanical names of the various plants and trees along the trail. Realen's staff also designed and produced an attractive eight-page trail brochure that illustrates and de-

scribes the flora, fauna, environmental areas, and historic features along the trail. The guide also explains the developer's creative use of low-lying woods as a temporary detention area for storm-water runoff, a naturalistic design that helped avoid a more conventional approach in which many trees within the preserve would have been removed to provide for a conventionally engineered basin. Realen's sales staff reported that prospective buyers who picked up a copy of the trail brochure and ventured out onto the trail typically decided to make their home purchase in Garnet Oaks.

Farmview

Woodside Road and Dolington Road, Lower Makefield Township, Bucks County

Developer: Realen Homes, Ambler

Development Period: 1990-96

Located on a 418-acre site, Farmview is a 322-lot "density-neutral" subdivision whose layout was designed to conserve 213 acres of land (51 percent of the property), including 145 acres of cropland and 68 acres of mature woods. While 59 percent of the original farmland was needed for development, 41 percent categorized as prime agricultural and farmland of statewide importance was able to be

preserved in addition to nearly all of the wooded areas.

The 145 acres of farmland that have been saved were donated by the developer to the Lower Makefield Farmland Preservation Corporation, a local conservation organization whose members include local farmers, township residents and an elected official liaison. This cropland is leased to farmers in the community through multi-year agree-

ments that encourage adaption of traditional farming practices to minimize impacts on the residents, whose yards are separated from their operations by a 75-foot deep hedgerow area thickly planted with native species trees and shrubs.

Realen Homes also donated the 68 acres of woodland to the township to support local conservation efforts in creating an extended network of forest

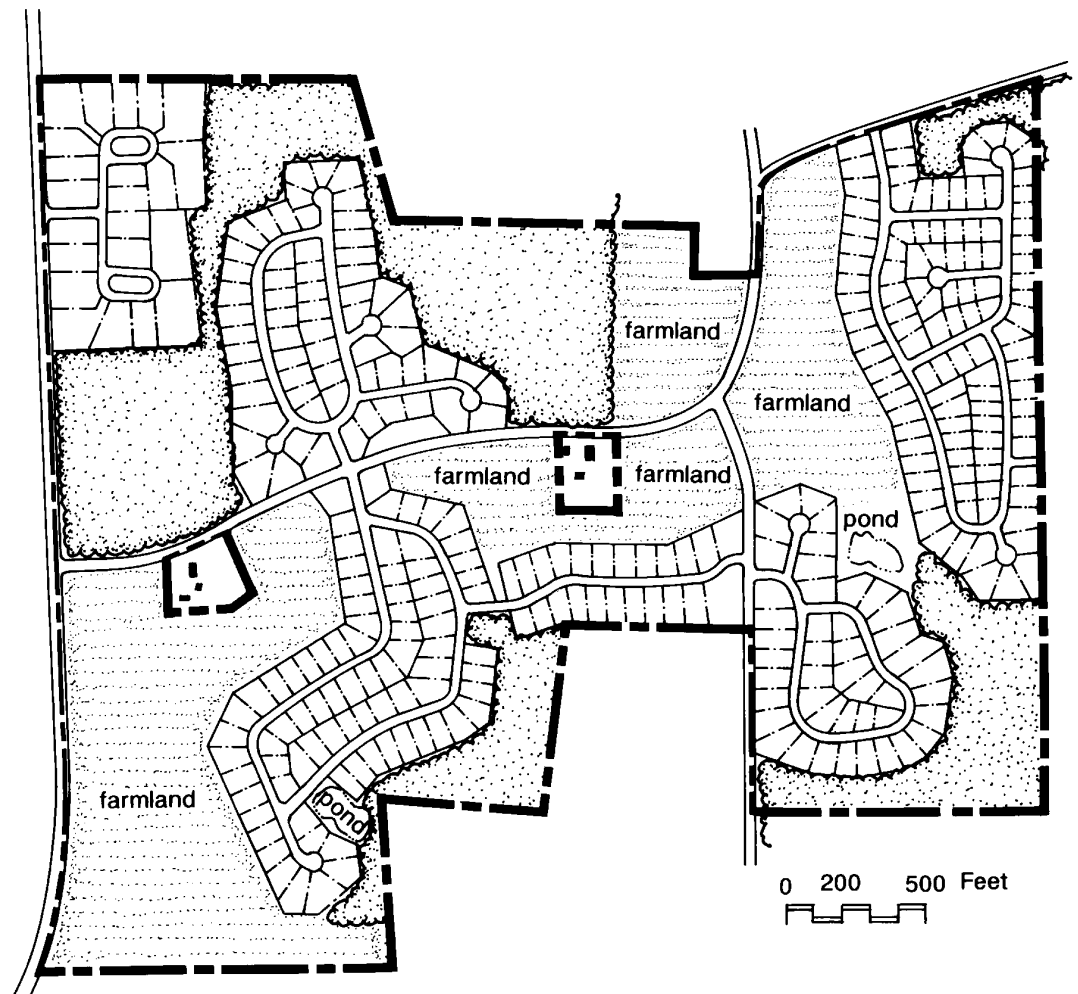
habitat and wildlife travel corridors. These areas also offer potential for an informal neighborhood trail system in future years. (The developer's offer to construct such trails was declined by the supervisors, citing liability concerns, despite the fact that other townships in the region actively encourage such trails in new subdivisions and also on township conservation lands.)

Had it not been for the developer's initiative and continued interest, this subdivision would have been developed into the same number of standard-sized one-acre lots, which was the only option permitted under the township's zoning ordinance in 1986 when Realen purchased the property. After 18 months of discussing the pros and cons of allowing smaller lots in exchange for serious land conservation benefits, the supervisors adopted new zoning provisions permitting such layouts specifically to preserve farmland when at least 51

percent of a property would be conserved. These regulations target the most productive soils as those which should be "designed around."

Although other developers were at first skeptical of Realen's proposal to build large homes (2,600–3,700 sq. ft.) on lots which were typically less than a half an acre in a marketplace consisting primarily of one acre zoning, the high absorption rate helped

convince them that this approach was sound. Contributing to the project's benefits to both the developer and the township were reduced infrastructure costs (for streets, water, and sewer lines). Premiums added to "view lots" abutting the protected fields or woods also contributed to the project's profitability.



ECKERT SEAMANS CHERIN & MELLOTT, LLC

ATTORNEYS AT LAW

October 16, 1997

One South Market Sq. Building
213 Market Street
Post Office Box 1248
Harrisburg, PA 17108

Randall G. Arendt, Vice President
Conservation Planning
Natural Lands Trust, Inc.
1031 Palmers Mill Road
Media, PA 19063

Re: Conservation Planning Documents and
Growing Greener Workbook

Dear Mr. Arendt:

I have had the opportunity to review the *Growing Greener* workbook and the proposed conservation planning concepts set forth in that workbook for compliance with the provisions of the United States Constitution, the Pennsylvania Constitution, and the Pennsylvania Municipalities Planning Code (the "MPC"). In my opinion, the conservation planning concepts as set forth in the *Growing Greener* workbook are constitutional land use control concepts and the provisions comport with the requirements of the Pennsylvania Municipalities Planning Code.

The subdivision concept which provides for a conceptual preliminary plan and standards for that plan is authorized specifically under the MPC as part of the two-stage planning process allowed by Section 503(1) of the MPC. The Zoning Ordinance concept utilizes a multi-tiered zoning system with options available to the landowner under the Zoning Ordinance. Such a device is specifically authorized under Section 605 of the MPC which specifically encourages innovation and promotion of flexibility, economy and ingenuity in development based upon express standards and criteria. The proposed ordinances contained in the workbook satisfy that specific requirement.

The provisions of both the United States Constitution and the Pennsylvania Constitution require that the land use regulations be reasonable and be intended to benefit the public health, safety and welfare. The concept of providing a variety of options for choices by the landowner meets both the reasonableness and public purpose tests of constitutionality. The benefit of the *Growing Greener* concept is that there will be a greater amount of usable open space, while at the same time the landowners will be able to make reasonable use of their property under the options available as proposed in the workbook.

Individual municipalities within the Commonwealth of Pennsylvania will have to apply the concepts and will have to establish their own densities based upon the unique circumstances in each particular municipality. There can be no guarantee that all such ordinances will be constitutional unless they satisfy the requirements of being reasonable with regard to the locational circumstances of the particular property and community in question. However, it is my opinion that if the concepts and procedures set forth in the *Growing Greener* workbook are followed and that the densities and requirements reflect the unique circumstances of the individual municipality, that the *Growing Greener* concept is lawful and constitutional in the Commonwealth. The concepts set forth in the *Growing Greener* workbook provide a new method of addressing the pressures of growth and development throughout both the urban and rural portions of the Commonwealth of Pennsylvania, and I urge the municipal officials to give full consideration to these exciting new concepts.

Very truly yours,



Charles E. Zaleski

CEZ/ljr

Harrisburg
Pittsburgh
Allentown
Philadelphia
Boston
Fort Lauderdale
Boca Raton
Miami
Tallahassee
Washington, D.C.

APPENDIX 7

NATIONAL AND STATE EFFORTS AND LEGISLATION FOR HISTORIC PRESERVATION

NATIONAL AND STATE EFFORTS AND LEGISLATION FOR HISTORIC PRESERVATION

Federal programs encouraging historic preservation include:

- Maintenance of the National Register of Historic Places.
- Section 106 Review of federally funded or assisted projects that impact historic resources.
- Historic Preservation Tax Credits on federal income tax for qualifying rehabilitation and adaptive reuse of historic buildings used for income-producing purposes.
- The Certified Local Government Program was created to facilitate historic preservation at the local level.

The earliest Federal preservation statute was the Antiquities Act of 1906, which authorized the President to set aside historic landmarks, structures, and objects located on lands controlled by the United States as national monuments. It required permits for archeological activities on Federal lands, and established criminal and civil penalties for violation of the act.

The Historic Sites Act of 1935 was the second major piece of Federal historic preservation legislation. This act declared it national policy to preserve for public use historic sites, buildings, and objects of national significance and directed the Secretary of the Interior to conduct various programs with respect to historic preservation.

In 1964, The United States Conference of Mayors undertook a study of historic preservation in the United States. The resulting report, "With Heritage So Rich," revealed a growing public interest in preservation and the need for a unified approach to the protection of historic resources. This report influenced Congress to enact a strong new statute establishing a nationwide preservation policy: The National Historic Preservation Act of 1966.

National Historic Preservation Act of 1966 (NHPA)

The National Historic Preservation Act (1966) and its subsequent amendments established a legal basis for the protection and preservation of historic and cultural resources. Historic resources are defined as *"any prehistoric or historic district, site, building, structures or object included in, or eligible for inclusion in the National Register; the term includes artifacts, records, and remains which are related to such a district, site, building, structure or object."*

The Act promoted the use of historic properties to meet the contemporary needs of society. It directed the Federal Government, in cooperation with State and local

governments, Native Americans, and the public, to take a leadership role in preservation. First, the Act authorized the Secretary of the Interior to expand and maintain the National Register of Historic Places. This is an inventory of districts, sites, buildings, structures, and objects significant on a national, State, or local level in American history, architecture, archeology, engineering, and culture. Once a property is eligible to be placed on the list, the property, site, or object can be qualified for Federal grants, loans, and tax incentives.

Second, NHPA encourages State and local preservation programs. States may prepare and submit for approval, programs for historic preservation to the Secretary of the Interior. Approval can be granted if they provide for the designation of a State Historic Preservation Officer (SHPO) to administer the State preservation program; establish a State historic preservation review board; and provide for adequate public participation in the State program. The SHPO must identify and inventory historic properties in the State; nominate eligible properties to the National Register; prepare and implement a statewide historic preservation plan; serve as a liaison with Federal agencies on preservation matters; and provide public information, education, and technical assistance. The NHPA also authorized a grant program, supported by the Historic Preservation Fund, to provide monies to States for historic preservation projects and to individuals for the preservation of properties listed in the National Register.

Since 1966, Congress has strengthened national preservation policy further by recognizing the importance of preserving historic aspects of the Nation's heritage in several other statutes, among them the National Environmental Policy Act and several transportation acts, and by enacting statutes directed toward the protection and preservation of archeological resources. These laws require Federal agencies to consider historic resources in their planning and decision-making and overlap with provisions of NHPA.

Section 106 Review

Section 106 of the NHPA requires Federal agencies to consider the effects of their actions on historic properties and provide the Council an opportunity to comment on Federal projects prior to implementation. Section 106 review encourages, but does not mandate, preservation.

To successfully complete Section 106 review, Federal agencies must:

- Determine if Section 106 of NHPA applies to a given project and, if so, initiate the review;
- Gather information to decide which properties in the project area are listed on or eligible for the National Register of Historic Places;
- Determine how historic properties might be affected;
- Explore alternatives to avoid or reduce harm to historic properties; and

- Reach agreement with the SHPO/tribe (and the Council in some cases) on measures to deal with any adverse effects or obtain advisory comments from the Council, which are sent to the head of the agency.

The Executive Branch has also expressed support for preservation through several Executive Orders. Examples include Executive Order No. 11593 that President Nixon signed in 1971, which instituted procedures Federal agencies must follow in their property management activities. In 1996, President Clinton signed another important Executive Order No. 13006, which put forth support for locating Federal offices and facilities in historic districts and properties in the Nation's inner cities. Executive Order No. 13006 also directs Federal agencies to use and rehabilitate properties in such areas wherever feasible and reaffirms the commitment to Federal leadership in the preservation of historic properties set forth in NHPA. Another 1996 Executive Order, No. 13007, expresses support for the protection of Native American sacred sites.

Federal Tax Incentives for Historic Buildings

According to the Tax Reform Act of 1986, a property owner is eligible for a 20% tax credit, along with a 27.5 to 31.5% straight-line depreciation for the substantial rehabilitation of historic buildings for commercial, industrial, and rental residential purposes (but not owner-occupied buildings), and a 10% tax credit for the substantial rehabilitation of nonresidential buildings built before 1936. The 10% tax credit is not available for rehabilitations of certified structures.

Two Federal Tax Incentive Programs currently apply to preservation activities in Pennsylvania: the rehabilitation investment tax credit and the charitable contribution deduction.

Rehabilitation investment tax credits are the most widely used incentive program. Certain expenses incurred in connection with the rehabilitation of an old building are eligible for a tax credit. Rehabilitation investment tax credits are available to owners and certain long-term leases of income-producing properties that are listed on the National Register of Historic Places. There are two rates: 20% for historic buildings and 10% for nonresidential, nonhistoric buildings built before 1936.

The **charitable contribution deduction** is taken in the form of a conservation easement and enables the owner of a "certified historic structure" to receive a one-time tax deduction. A conservation easement usually involves the preservation of a building's facade by restricting the right to alter its appearance.

The Federal Tax Incentive Programs are coordinated through the State Historic Preservation Office, Bureau for Historic Preservation, Pennsylvania Historical and

Museum Commission in conjunction with the National Park Service. Federal Historic Preservation Certification Applications are available on-line.

The National Park Service “Certified Local Government” (CLG) Program

This program was created in 1980 under the National Historic Preservation Act and administered in the Commonwealth by the Pennsylvania Historical and Museum Commission; the Certified Local Government Program provides additional benefits to municipalities interested in historic preservation. Once certified, the local government is then eligible to:

- Participate directly in the federal historic preservation program;
- Have greater access to Historic Preservation Funds;
- Have greater level of information exchange with the State Historic Preservation Office (SHPO);
- Get technical assistance and training from the SHPO; and
- Have a higher degree of participation in statewide preservation programs and planning.

Several critical requirements for CLG designation are:

- Adopt and enforce appropriate legislation for designation and protection of historic properties;
- Establish a qualified historic preservation commission;
- Enact a system for surveying historic properties;
- Enact a public participation component as part of the local program;
- Adequately perform duties and responsibilities delegated through the certification process;
- Continuing in-service historic preservation training for Historical Architecture Review Board (HARB) and Historical Commission members (8 hrs training annually per member);
- Regular attendance at HARB or Historical Commission meetings;
- A good faith effort by the governing body to appoint HARB members with professional qualifications and historic preservation backgrounds;
- Submittal of an annual report of the municipality’s historic preservation activities;
- Continuing enforcement of the historic district ordinance.

This was established to allow local governments to participate directly in the national historic preservation program and to provide funding to local governments to carry out its historic preservation responsibilities (survey, inventory, designation, and protection of their historic resources). To achieve “certified local government” status in Pennsylvania a municipality applies to the Pennsylvania Historical and Museum Commission’s Bureau for Historic Preservation.

All states are required to set aside 10% of its Federal historic preservation grant funds to CLGs. These grants are presently offered as a ratio of 60% funding from the Pennsylvania Historical and Museum Commission (PHMC) and 40% match from the CLG.

Pennsylvania State Legislative Response to Historic Preservation: Historical and Museum Commission Act 1945

Act No. 446, approved June 6, 1945, amending the Administrative Code to consolidate the functions of the Pennsylvania Historical Commission, The State Museum and the State Archives, created the Pennsylvania Historical and Museum Commission. The Pennsylvania Historical and Museum Commission is responsible for the following historic preservation activities in the Commonwealth:

- State Historic Preservation Office for *Determination of Eligibility* and nominations to the National Register, of Historic Places;
- Section 106 Review;
- Administering Historic Preservation Grants; and
- Assisting local governments with the Certified Local Government Program.

The Commission is an independent administrative board, consisting of nine citizens of the Commonwealth appointed by the Governor, the Secretary of Education ex officio, two members of the Senate appointed by the President Pro Tempore and Minority Leader, and two members of the House of Representatives appointed by the Speaker and Minority Leader. The Executive Director, appointed by the Commission to serve at its pleasure, is an ex officio member of the Environmental Quality Board, County Records Committee and the Local Government Records Committee.

As the official agency of the Commonwealth for the conservation of Pennsylvania's historic heritage, the powers and duties of the Commission fall into these principal fields: care of historical manuscripts, public records, and objects of historic interest; museums; archaeology; publications; historic sites and properties; historic preservation; geographic names; and the promotion of public interest in Pennsylvania history.

The Commission is funded partially through an annual legislative appropriation, various grants provided by Federal programs, and private donations. Officially recognized local historical organizations may benefit financially through the Commission's eligibility to receive matching funds from various federal programs. The PHMC is active in many phases of historic preservation. The PHMC also conducts a landmark identification program, presenting identification plaques to property owners for attachment on structures included in the PA Inventory of Historical Places. The landmark identification program also includes the placement of roadside historical signs at various sites and locations having statewide and national historic significance. Today nearly 1,900

markers are placed along city roads and highways to represent sites of historical significance in Pennsylvania.

An executive order went into place to require the Office of Historic Preservation of the PHMC to approve all proposals involving the demolition of a state building. The Office of Historic Preservation was also directed to develop and implement a program that will assist the public and private sectors in implementing the Commonwealth's policy to "protect and enhance our irreplaceable resources." The Office has since implemented a five-point program to achieve the executive order as follows:

1. Registering historically or architecturally significant sites and structures on the National Register of Historic Places and on the Pennsylvania Inventory of Historic Places;
2. Advising and guiding individuals and organizations regarding historic preservation and its funding;
3. Reviewing applications for federal preservation grants;
4. Working for legislation at the state level as an effective tool in historic preservation; and
5. Working with other governmental agencies to review the impact of projects, such as highways, on the Commonwealth's historic resources.

The Contact information for the Pennsylvania Historical and Museum Commission is as follows:

Commonwealth Keystone Bldg.
2nd Floor
400 North Street
Harrisburg, PA 17120-0093

(717) 787-3362
fax: (717) 783-9924
www.phmc.state.pa.us

Pennsylvania's Bureau for Historic Preservation (Bureau)

The Bureau is part of the PHMC and serves as the State Historic Preservation Office (SHPO). The PHMC is the Commonwealth's official history agency and the Executive Director is designated as the State Historic Preservation Officer.

The Bureau provides technical assistance for the preservation, rehabilitation and restoration of historic buildings throughout Pennsylvania. The Bureau reviews architectural plans and specifications and provides comments on historic building projects for state and federal compliance. They also assist in code-related issues and accessibility programs in the form of letters of support for variances to historic buildings. In an effort to inform the general public, public agencies, local governments and other stewards of historic properties, the Bureau assists in the development and distribution of material on applying the Secretary of the Interior's *Standards for Rehabilitation*,

preservation planning and the appropriate treatment and repair of historic building materials.

The Bureau also administers the Federal Rehabilitation Investment Tax Credit (RITC) program in partnership with the National Park Service. The tax credit program is one of the most successful and cost-effective programs that encourage private investment in rehabilitating historic properties such as office buildings, rental housing, hotels and retail stores. According to PHMC's website, since its inception in 1976, Pennsylvania has been a national leader in certified tax credit projects, completing over 1,800 projects and generating over \$2.5 billion in qualified rehabilitation expenditures. The Bureau provides technical assistance throughout the application process.

The Bureau can provide property owners with publications and technical assistance that discuss the appropriate treatment of historic buildings according to the Secretary of the Interior's *Standards for Rehabilitation*.

The Bureau administers the state's historic preservation program as authorized by the Pennsylvania History Code and the National Historic Preservation Act of 1966 and is guided by advisory boards and The Pennsylvania Historic Preservation Plan. A board of Commissioners, appointed by the Governor, provides oversight of the Commission.

The Pennsylvania General Assembly is in the process of considering legislation to establish a Historic Homesites Grant Program. Once established, this legislation will provide funds to the Pennsylvania Historical and Museum Commission to support rehabilitation grants (up to \$6,000) to individuals owning and residing in a historic residential building, as well as to individuals intending to purchase and reside in a historic residential building.

The buildings must serve as the owner's principal residence, be listed in the National Register of Historic Places or be determined to be a contributing building in a listed National Register Historic District, or be located in an Act 167 historic district, or be designated as a historic property under the local ordinance or city code in Pittsburgh and Philadelphia. All work on a historic homesite must conform to the U.S. Secretary of Interior's "Standards for the Treatment of Historic Properties."

The Pennsylvania Historic Preservation Plan

The PHMC is gearing up to create a PA Historic Preservation Plan. Stated below is the agenda and goals of the plan:

1. Educate Pennsylvanians About Our Heritage and Its Value
 - Bring Pennsylvania heritage alive for our children
 - Get the preservation message out

- Reach out to elected officials and key professionals in the public and private sectors
2. **Build Better Communities Through Preservation**
 - Strengthen and expand preservation planning at the local and regional levels
 - Expand the use of preservation as an economic development strategy
 - Make technical assistance more available and useful to citizens and local governments
 3. **Provide Strong Leadership At The State Level**
 - Seek increased financial support for historic preservation
 - Lead by example
 - Build strong partnerships

Historic District Designation in Pennsylvania

To establish a designation of a Historic District on the local level requires an assessment of the present status of the community's historic resources, knowledge of past historic preservation efforts, and a list of goals and objectives to be obtained in the future.

Taking advantage of historic preservation incentives available at the national, state, and local governmental levels, such as grants, income tax credits for historic rehabilitation, low-interest loans, and local tax abatements will help in the success and acceptance of preserving historic buildings in the community.

It is useful to relate local historic preservation efforts to state and national programs, which will provide a broader perspective by identifying national, state, and local historic preservation organizations and government agencies as resources.

Act 167- Establishing Historical Districts

Act 167 was adopted in 1961 and amended in 1963. This Act authorizes counties, cities, boroughs, ... and townships to create historic districts within their geographic boundaries; provides for the appointment of Boards of Historical Architectural Review; empowers governing bodies of political subdivisions 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. It provides the necessary authority for municipalities to adopt and implement historic preservation programs.

Pennsylvania Municipalities Planning Code Act 247

The State Legislature enacted Act 247, the Pennsylvania Municipalities Code, in 1969. The Act, as enabling legislation, authorizes local governments (counties, cities, township, and boroughs) to establish by ordinances, local planning commissions, zoning regulations, and subdivision regulations; and, by resolution, adopt a municipal comprehensive plan. In particular, Article VI, Zoning, Section 605, states:

“The provisions of all zoning ordinances may be classified so that different provisions may be applied to different classes of situations, uses and structures... 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 the regulation, restriction, or prohibition of uses and structures at or near... (vi) places having unique historical or patriotic interest of value...”

The combination of Act 167 and Act 247 provides the constitutional authority and legislative framework for local governments to develop, adopt, and implement historic preservation programs, in conjunction with a municipal comprehensive plan based on sound planning and legal principles. The legislative authority is provided, and expert legal and planning advice is available; however, local governments must yet be sold on the necessity and benefits of historic preservation.

Historic Preservation at the Local Level

Two state laws provide the legal foundation for municipalities to adopt historic ordinances and regulatory measures.

1. Act 247 - Pennsylvania Municipalities Planning Code (MPC): In 2000, two new amendments to the MPC, Acts 67 and 68, strengthened the ability of local government to provide for the protection of historic resources in their comprehensive plans, zoning ordinances, and subdivision ordinances.

Multi-municipal Comprehensive Plans may consider the conservation and enhancement of the natural, scenic, historic and aesthetic resources in their municipalities [§1103 (a) (6)].

Zoning ordinances may promote and preserve prime agricultural land, environmentally sensitive areas, and areas of historic significance. [§603 (c) (7)]

Zoning ordinances are required to protect natural and historic features and resources [§603 (g) (2)].

A Historic Overlay Zoning District, unlike the protection offered through the establishment of an Act 167 Historic District, can include individual sites as well as clusters, as long as the resources are well documented and identified on an historic resources map. An historic overlay district could require new buildings to be similar in type and scale to those already existing. Setbacks should be consistent with the common building setback. Requirements to replicate the existing building line, height, and bulk could help to preserve the existing neighborhood character.

2. Act 167 - The Historic District Act (1961): Townships and boroughs may create historic districts within their municipalities to protect the historic character through regulation of the erection, reconstruction, alteration, restoration, demolition or razing of buildings within the district. The Pennsylvania Historical and Museum Commission must certify districts, including a *determination of eligibility* for the National Register of Historic Places. Therefore, historic districts established through Act 167 are afforded the same protection from federal projects associated with National Register Properties. Act 167 requires appointment of an historic architectural review board, or HARB, to advise the local governing body on the appropriateness of building activity in the district.

APPENDIX 8

PA DEP MODEL STORMWATER ORDINANCE (FOR MS4 MUNICIPALITIES)

APPENDIX 8

PA DEP MODEL STORMWATER ORDINANCE (For MS4 Municipalities)

This is a complete model ordinance for use by municipalities that operate “municipal separate storm sewer systems (MS4s).” It is one of three options available to municipalities using the DEP Stormwater Management *Protocol*, or who otherwise wish to follow DEP guidance on implementing the new federal stormwater regulations (which are incorporated into state regulations by reference).

Therefore, this model ordinance contains the requirements under the federal regulations at 40 CFR 122.26 – 123.35.

STORMWATER MANAGEMENT

ORDINANCE

ORDINANCE NO. _____

_____, _____ COUNTY, PENNSYLVANIA

Adopted at a Public Meeting Held on
_____, 2____

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APPENDICES

A: Low Impact Development Practices

B: Operations and Maintenance Agreement

ARTICLE I - GENERAL PROVISIONS

Section 101. Short Title

This Ordinance shall be known and may be cited as the “ _____ Stormwater Management Ordinance.”

Section 102. Statement of Findings

The governing body of the Municipality finds that:

- A. Stormwater runoff from lands modified by human activities threatens public health and safety by causing decreased infiltration of rainwater and increased runoff flows and velocities, which overtax the carrying capacity of existing streams and storm sewers, and greatly increases the cost to the public to manage stormwater.
- B. Inadequate planning and management of stormwater runoff resulting from land development and redevelopment throughout a watershed can also harm surface water resources by changing the natural hydrologic patterns, accelerating stream flows (which increase scour and erosion of stream-beds and stream-banks thereby elevating sedimentation), destroying aquatic habitat and elevating aquatic pollutant concentrations and loadings such as sediments, nutrients, heavy metals and pathogens. Groundwater resources are also impacted through loss of recharge.
- C. A program of stormwater management, including reasonable regulation of land development and redevelopment causing loss of natural infiltration, is fundamental to the public health, safety, welfare, and the protection of the people of the Municipality and all the people of the Commonwealth, their resources, and the environment.
- D. Stormwater can be an important water resource by providing groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.
- E. Public education on the control of pollution from stormwater is an essential component in successfully addressing stormwater.
- F. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).
- G. Non-stormwater discharges to municipal separate storm sewer systems can contribute to pollution of waters of the Commonwealth by the Municipality.

Section 103. Purpose

The purpose of this Ordinance is to promote health, safety, and welfare within the Municipality and its watershed by minimizing the harms and maximizing the benefits described in Section 102 of this Ordinance, through provisions designed to:

- A. Manage stormwater runoff impacts at their source by regulating activities that cause the problems.
- B. Provide review procedures and performance standards for stormwater planning and management.
- C. Utilize and preserve the existing natural drainage systems as much as possible.
- D. Manage stormwater impacts close to the runoff source, which requires a minimum of structures and relies on natural processes.
- E. Focus on infiltration of stormwater, to maintain groundwater recharge, to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Maintain existing flows and quality of streams and watercourses.
- G. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code Chapter 93.4a to protect and maintain “existing uses” and maintain the level of water quality to support those uses in all streams, and to protect and maintain water quality in “special protection” streams.
- H. Prevent scour and erosion of streambanks and streambeds.
- I. Provide for proper operations and maintenance of all permanent stormwater management BMPs that are implemented in the Municipality.
- J. Provide a mechanism to identify controls necessary to meet the NPDES permit requirements.
- K. Implement an illegal discharge detection and elimination program to address non-stormwater discharges into the Municipality’s separate storm sewer system.

Section 104. Statutory Authority

The Municipality is empowered to regulate land use activities that affect stormwater impacts by the authority of the [*cite relevant sections of the applicable municipal code (e.g., 53 P.S. §§ 55101 et seq.—First Class Township Code) and/or the Municipalities Planning Code—confer with municipal solicitor*].

Section 105. Applicability

- A. This Ordinance applies to any Regulated Earth Disturbance activities within the Municipality, and all stormwater runoff entering into the Municipality’s separate storm sewer system from lands within the boundaries of the Municipality.
- B. Earth Disturbance activities and associated stormwater management controls are also regulated under existing state law and implementing regulations. This Ordinance shall operate in coordination with those parallel requirements; the requirements of this Ordinance shall be no less restrictive in meeting the purposes of this Ordinance than state law.

Section 106. Repealer

Any other ordinance provision(s) or regulation of the Municipality inconsistent with any of the provisions of this Ordinance is hereby repealed to the extent of the inconsistency only.

Section 107. Severability

In the event that any section or provision of this Ordinance is declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of any of the remaining provisions of this Ordinance.

Section 108. Compatibility with Other Requirements

- A. Approvals issued and actions taken under this Ordinance do not relieve the Applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance. To the extent that this Ordinance imposes more rigorous or stringent requirements for stormwater management, the specific requirements contained in this Ordinance shall be followed.
- B. Nothing in this Ordinance shall be construed to affect any of the Municipality's requirements regarding stormwater matters which do not conflict with the provisions of this Ordinance, such as local stormwater management design criteria (e.g. inlet spacing, inlet type, collection system design and details, outlet structure design, etc.). Conflicting provisions in other municipal ordinances or regulations shall be construed to retain the requirements of this ordinance addressing State Water Quality Requirements.

ARTICLE II - DEFINITIONS

For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- C. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.

Accelerated Erosion - The removal of the surface of the land through the combined action of human activities and the natural processes, at a rate greater than would occur because of the natural process alone.

Applicant - A landowner, developer or other person who has filed an application for approval to engage in any Regulated Earth Disturbance activity at a project site in the Municipality.

BMP (Best Management Practice) - Activities, facilities, designs, measures or procedures used to manage stormwater impacts from Regulated Earth Disturbance activities, to meet State Water Quality Requirements, to promote groundwater recharge and to otherwise meet the purposes of this Ordinance.

BMPs include but are not limited to infiltration, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, forested buffers, sand filters and detention basins.

Conservation District - The _____ County Conservation District.

DEP - The Pennsylvania Department of Environmental Protection.

Developer - A person that seeks to undertake any Regulated Earth Disturbance activities at a project site in the Municipality.

Development - See “Earth Disturbance Activity.” The term includes redevelopment.

Development Site - The specific tract of land where any Earth Disturbance activities in the Municipality are planned, conducted or maintained.

Earth Disturbance Activity - A construction or other human activity which disturbs the surface of the land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, road maintenance, building construction and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

Erosion - The process by which the surface of the land, including channels, is worn away by water, wind, or chemical action.

Erosion and Sediment Control Plan - A plan for a project site which identifies BMPs to minimize accelerated erosion and sedimentation.

Groundwater Recharge - Replenishment of existing natural underground water supplies.

Impervious Surface - A surface that prevents the infiltration of water into the ground. Impervious surface includes, but is not limited to, any roof, parking or driveway areas, and any new streets and sidewalks. Any surface areas designed to initially be gravel or crushed stone shall be assumed to be impervious surfaces.

Municipality - _____, _____ County, Pennsylvania.

NPDES - National Pollutant Discharge Elimination System, the federal government’s system for issuance of permits under the Clean Water Act, which is delegated to DEP in Pennsylvania.

Outfall - “Point source” as described in 40 CFR § 122.2 at the point where the Municipality’s storm sewer system discharges to surface waters of the Commonwealth.

Person - An individual, partnership, public or private association or corporation, or a governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

Point Source - any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, or conduit from which stormwater is or may be discharged, as defined in State regulations at 25 Pa. Code § 92.1.

Project Site - The specific area of land where any Regulated Earth Disturbance activities in the Municipality are planned, conducted or maintained.

Redevelopment - Earth Disturbance activities on land which has previously been disturbed or developed.

Regulated Earth Disturbance Activity - Earth disturbance activity one acre or more with a point source discharge to surface waters or the Municipality's storm sewer system, or five acres or more regardless of the planned runoff. This includes earth disturbance on any portion of, part, or during any stage of, a larger common plan of development. This only includes road maintenance activities involving 25 acres or more or earth disturbance.

Road Maintenance - earth disturbance activities within the existing road cross-section, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities.

Separate Storm Sewer System - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) primarily used for collecting and conveying stormwater runoff.

State Water Quality Requirements - As defined under state regulations -- protection of *designated* and *existing* uses (See 25 Pa. Code Chapters 93 and 96)--including:

- A. Each stream segment in Pennsylvania has a "designated use," such as "cold water fishery" or "potable water supply," which are listed in Chapter 93. These uses must be protected and maintained, under state regulations.
- B. "Existing uses" are those attained as of November 1975, regardless whether they have been designated in Chapter 93. Regulated Earth Disturbance activities must be designed to protect and maintain existing uses and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in special protection streams.
- C. Water quality involves the chemical, biological and physical characteristics of surface water bodies. After Regulated Earth Disturbance activities are complete, these characteristics can be impacted by addition of pollutants such as sediment, and changes in habitat through increased flow volumes and/or rates as a result of changes in land surface area from those activities. Therefore, permanent discharges to surface waters must be managed to protect the stream bank, streambed and structural integrity of the waterway, to prevent these impacts.

Stormwater - The surface runoff generated by precipitation reaching the ground surface.

Surface Waters of the Commonwealth - Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

Watercourse - A channel or conveyance of surface water, such as a stream or creek, having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

Watershed - Region or area drained by a river, watercourse or other body of water, whether natural or artificial.

ARTICLE III - STORMWATER MANAGEMENT FOR WATER QUALITY

Section 301. General Requirements for Stormwater Management

- A. All Regulated Earth Disturbance activities within the Municipality shall be designed, implemented, operated and maintained to meet the purposes of this Ordinance, through these two elements:
 - 1. Erosion and Sediment control during the earth disturbance activities (e.g., during construction), and
 - 2. Water quality protection measures after completion of earth disturbance activities (e.g., after construction), including operations and maintenance.
- B. No Regulated Earth Disturbance activities within the Municipality shall commence until the requirements of this Ordinance are met.
- C. Erosion and sediment control during Regulated Earth Disturbance activities shall be addressed as required by Section 303.
- D. Post-construction water quality protection shall be addressed as required by Section 304. Operations and maintenance of permanent stormwater BMPs shall be addressed as required by Article IV.
- E. All Best Management Practices (BMPs) used to meet the requirements of this Ordinance shall conform to the State Water Quality Requirements, and any more stringent requirements as determined by the Municipality.
- F. Techniques described in Appendix A (Low Impact Development) of this Ordinance are encouraged, because they reduce the costs of complying with the requirements of this Ordinance and the State Water Quality Requirements.

Section 302. Permit Requirements by Other Government Entities

The following permit requirements may apply to certain Regulated Earth Disturbance activities, and must be met prior to commencement of Regulated Earth Disturbance activities, as applicable:

- A. All Regulated Earth Disturbance activities subject to permit requirements by DEP under regulations at 25 Pa. Code Chapter 102.
- B. Work within natural drainageways subject to permit by DEP under 25 Pa. Code Chapter 105.
- C. Any stormwater management facility that would be located in or adjacent to surface waters of the Commonwealth, including wetlands, subject to permit by DEP under 25 Pa. Code Chapter 105.

- D. Any stormwater management facility that would be located on a State highway right-of-way, or require access from a state highway, shall be subject to approval by the Pennsylvania Department of Transportation (PENNDOT).
- E. Culverts, bridges, storm sewers or any other facilities which must pass or convey flows from the tributary area and any facility which may constitute a dam subject to permit by DEP under 25 Pa. Code Chapter 105.

Section 303. Erosion and Sediment Control During Regulated Earth Disturbance Activities

- A. No Regulated Earth Disturbance activities within the Municipality shall commence until approval by the Municipality of an Erosion and Sediment Control Plan for construction activities.
- B. DEP has regulations that require an Erosion and Sediment Control Plan for any earth disturbance activity of 5,000 square feet or more, under 25 Pa. Code § 102.4(b).
- C. In addition, under 25 Pa. Code Chapter 92, a DEP “NPDES Construction Activities” permit is required for Regulated Earth Disturbance activities.
- D. Evidence of any necessary permit(s) for Regulated Earth Disturbance activities from the appropriate DEP regional office or County Conservation District must be provided to the Municipality. The issuance of an NPDES Construction Permit (or permit coverage under the statewide General Permit (PAG-2) satisfies the requirements subsection 303.A. [*]

[This sentence is optional -- if the municipality has additional or more stringent requirements than those in state regulations, then this sentence should not be used.]*

- E. A copy of the Erosion and Sediment Control plan and any required permit, as required by DEP regulations, shall be available at the project site at all times.

Section 304. Water Quality Requirements After Regulated Earth Disturbance Activities Are Complete

- A. No Regulated Earth Disturbance activities within the Municipality shall commence until approval by the Municipality of a plan which demonstrates compliance with State Water Quality Requirements after construction is complete.
- B. The BMPs must be designed, implemented and maintained to meet State Water Quality Requirements, and any other more stringent requirements as determined by the Municipality.
- C. To control post-construction stormwater impacts from Regulated Earth Disturbance activities, State Water Quality Requirements can be met by BMPs, including site design, which provide for replication of pre-construction stormwater infiltration and runoff conditions, so that post-construction stormwater discharges do not degrade the physical, chemical or biological characteristics of the receiving waters. As described in the DEP Comprehensive Stormwater Management Policy (#392-0300-002, September 28, 2002), this may be achieved by the following:

1. Infiltration: replication of pre-construction stormwater infiltration conditions,
 2. Treatment: use of water quality treatment BMPs to ensure filtering out of the chemical and physical pollutants from the stormwater runoff, and
 3. Streambank and Streambed Protection: management of volume and rate of post-construction stormwater discharges to prevent physical degradation of receiving waters (e.g., from scouring).
- D. DEP has regulations that require municipalities to ensure design, implementation and maintenance of Best Management Practices (“BMPs”) that control runoff from new development and redevelopment after Regulated Earth Disturbance activities are complete. These requirements include the need to implement post-construction stormwater BMPs with assurance of long-term operations and maintenance of those BMPs.
- E. Evidence of any necessary permit(s) for Regulated Earth Disturbance activities from the appropriate DEP regional office must be provided to the Municipality. The issuance of an NPDES Construction Permit (or permit coverage under the statewide General Permit (PAG-2)) satisfies the requirements of subsection 304.A. [*]
- [* This sentence is optional -- if the municipality has additional or more stringent requirements than those in state regulations, then this sentence should not be used.]*
- F. BMP operations and maintenance requirements are described in Article IV of this Ordinance.

ARTICLE IV – STORMWATER BMP OPERATIONS AND MAINTENANCE PLAN REQUIREMENTS

Section 401. General Requirements

- A. No Regulated Earth Disturbance activities within the Municipality shall commence until approval by the Municipality of BMP Operations and Maintenance plan which describes how the permanent (e.g., post-construction) stormwater BMPs will be properly operated and maintained.
- B. The following items shall be included in the BMP Operations and Maintenance Plan:
1. Map(s) of the project area, in a form that meets the requirements for recording at the offices of the Recorder of Deeds of _____ County, and shall be submitted on 24-inch x 36-inch or 30-inch x 42-inch sheets. The contents of the maps(s) shall include, but not be limited to:
 - a. Clear identification of the location and nature of permanent stormwater BMPs,
 - b. The location of the project site relative to highways, municipal boundaries or other identifiable landmarks,
 - c. Existing and final contours at intervals of two feet, or others as appropriate,
 - d. Existing streams, lakes, ponds, or other bodies of water within the project site area,
 - e. Other physical features including flood hazard boundaries, sinkholes, streams, existing drainage courses, and areas of natural vegetation to be preserved,

- f. The locations of all existing and proposed utilities, sanitary sewers, and water lines within 50 feet of property lines of the project site,
 - g. Proposed final changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added,
 - h. Proposed final structures, roads, paved areas, and buildings, and
 - i. A fifteen-foot wide access easement around all stormwater BMPs that would provide ingress to and egress from a public right-of-way.
2. A description of how each permanent stormwater BMP will be operated and maintained, and the identity of the person(s) responsible for operations and maintenance,
3. The name of the project site, the name and address of the owner of the property, and the name of the individual or firm preparing the Plan, and
4. A statement, signed by the landowner, acknowledging that the stormwater BMPs are fixtures that can be altered or removed only after approval by the Municipality.

Section 402. Responsibilities for Operations and Maintenance of BMPs

- A. The BMP Operations and Maintenance Plan for the project site shall establish responsibilities for the continuing operation and maintenance of all permanent stormwater BMPs, as follows:
 1. If a Plan includes structures or lots which are to be separately owned and in which streets, sewers and other public improvements are to be dedicated to the Municipality, stormwater BMPs may also be dedicated to and maintained by the Municipality;
 2. If a Plan includes operations and maintenance by a single ownership, or if sewers and other public improvements are to be privately owned and maintained, then the operation and maintenance of stormwater BMPs shall be the responsibility of the owner or private management entity.
- B. The Municipality shall make the final determination on the continuing operations and maintenance responsibilities. The Municipality reserves the right to accept or reject the operations and maintenance responsibility for any or all of the stormwater BMPs.

Section 403. Municipality Review of BMP Operations and Maintenance Plan

- A. The Municipality shall review the BMP Operations and Maintenance Plan for consistency with the purposes and requirements of this ordinance, and any permits issued by DEP.
- B. The Municipality shall notify the Applicant in writing whether the BMP Operations and Maintenance Plan is approved.
- C. The Municipality may require an "As-Built Survey" of all stormwater BMPs, and an explanation of any discrepancies with the Operations and Maintenance Plan.

Section 404. Adherence to Approved BMP Operations and Maintenance Plan

It shall be unlawful to alter or remove any permanent stormwater BMP required by an approved BMP Operations and Maintenance Plan, or to allow the property to remain in a condition which does not conform to an approved BMP Operations and Maintenance Plan, unless an exception is granted in writing by the Municipality.

Section 405. Operations and Maintenance Agreement for Privately Owned Stormwater BMPs

- A. The property owner shall sign an operations and maintenance agreement with the Municipality covering all stormwater BMPs that are to be privately owned. The agreement shall be substantially the same as the agreement in Appendix B of this Ordinance.
- B. Other items may be included in the agreement where determined necessary to guarantee the satisfactory operation and maintenance of all permanent stormwater BMPs. The agreement shall be subject to the review and approval of the Municipality.

Section 406. Stormwater Management Easements

- A. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Municipal Engineer.
- B. Stormwater management easements shall be provided by the property owner if necessary for (1) access for inspections and maintenance, or (2) preservation of stormwater runoff conveyance, infiltration, and detention areas and other BMPs, by persons other than the property owner. The purpose of the easement shall be specified in any agreement under Section 405.

Section 407. Recording of Approved BMP Operations and Maintenance Plan and Related Agreements

- A. The owner of any land upon which permanent BMPs will be placed, constructed or implemented, as described in the BMP Operations and Maintenance Plan, shall record the following documents in the Office of the Recorder of Deeds for _____ County, within 15 days of approval of the BMP Operations Plan by the Municipality:
 - 1. The Operations and Maintenance Plan, or a summary thereof,
 - 2. Operations and Maintenance Agreements under Section 405, and
 - 3. Easements under Section 406.
- B. The Municipality may suspend or revoke any approvals granted for the project site upon discovery of the failure of the owner to comply with this Section.

Section 408. Municipal Stormwater BMP Operation and Maintenance Fund

- A. If stormwater BMPs are accepted by the municipality for dedication, the Municipality may require persons installing stormwater BMPs to pay a specified amount to the Municipal

Stormwater BMP Operation and Maintenance Fund, to help defray costs of operations and maintenance activities. The amount may be determined as follows:

1. If the BMP is to be owned and maintained by the Municipality, the amount shall cover the estimated costs for operations and maintenance for ten (10) years, as determined by the Municipality.
 2. The amount shall then be converted to present worth of the annual series values.
- B. If a BMP is proposed that also serves as a recreation facility (e.g. ball field, lake), the Municipality may adjust the amount due accordingly.

ARTICLE V-INSPECTIONS AND RIGHT OF ENTRY

Section 501. Inspections

- A. DEP or its designees (e.g., County Conservation Districts) normally ensure compliance with any permits issued, including those for stormwater management. In addition to DEP compliance programs, the Municipality or its designee may inspect all phases of the construction, operations, maintenance and any other implementation of stormwater BMPs.
- B. During any stage of the Regulated Earth Disturbance activities, if the Municipality or its designee determines that any BMPs are not being implemented in accordance with this Ordinance, the Municipality may suspend or revoke any existing permits or other approvals until the deficiencies are corrected.

Section 502. Right of Entry

- A. Upon presentation of proper credentials, duly authorized representatives of the Municipality may enter at reasonable times upon any property within the Municipality to inspect the implementation, condition, or operation and maintenance of the stormwater BMPs in regard to any aspect governed by this Ordinance.
- B. BMP owners and operators shall allow persons working on behalf of the Municipality ready access to all parts of the premises for the purposes of determining compliance with this Ordinance.
- C. Persons working on behalf of the Municipality shall have the right to temporarily locate on any BMP in the Municipality such devices as are necessary to conduct monitoring and/or sampling of the discharges from such BMP.
- D. Unreasonable delays in allowing the Municipality access to a BMP is a violation of this Article.

ARTICLE VI - FEES AND EXPENSES

Section 601. General

The Municipality may charge a reasonable fee for review of BMP Operations and Maintenance Plans to defray review costs incurred by the Municipality. The Applicant shall pay all such fees.

Section 602. Expenses Covered by Fees

The fees required by this Ordinance may cover:

- A. Administrative/clerical Costs.
- B. The review of the BMP Operations and Maintenance Plan by the Municipal Engineer.
- C. The site inspections including, but not limited to, pre-construction meetings, inspections during construction of stormwater BMPs, and final inspection upon completion of the stormwater BMPs.
- D. Any additional work required to monitor and enforce any provisions of this Ordinance, correct violations, and assure proper completion of stipulated remedial actions.

ARTICLE VII- PROHIBITIONS

Section 701. Prohibited Discharges

- A. No person in the Municipality shall allow, or cause to allow, stormwater discharges into the Municipality's separate storm sewer system which are not composed entirely of stormwater, except (1) as provided in subsection B below, and (2) discharges allowed under a state or federal permit.
- B. Discharges which may be allowed, based on a finding by the Municipality that the discharge(s) do not significantly contribute to pollution to surface waters of the Commonwealth, are:

Discharges from fire fighting activities	Uncontaminated water from foundation or from footing drains
Potable water sources including dechlorinated water line and fire hydrant flushings	Flows from riparian habitats and wetlands
Irrigation drainage	Lawn watering
Routine external building washdown (which does not use detergents or other compounds)	Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used
Air conditioning condensate	Dechlorinated swimming pool discharges
Water from individual residential car washing	Uncontaminated groundwater
Springs	
Water from crawl space pumps	

- C. In the event that the Municipality determines that any of the discharges identified in Subsection B significantly contribute to pollution of waters of the Commonwealth, or is so notified by DEP, the Municipality will notify the responsible person to cease the discharge.
- D. Upon notice provided by the Municipality under subsection C, the discharger will have a reasonable time, as determined by the Municipality, to cease the discharge consistent with the degree of pollution caused by the discharge.

- E. Nothing in this Section shall affect a discharger's responsibilities under state law.

Section 702. Prohibited Connections

- A. The following connections are prohibited, except as provided in Section 701.B above:
1. any drain or conveyance, whether on the surface or subsurface, which allows any non-storm water discharge including sewage, process wastewater, and wash water, to enter the separate storm sewer system, and any connections to the storm drain system from indoor drains and sinks; and
 2. Any drain or conveyance connected from a commercial or industrial land use to the separate storm sewer system which has not been documented in plans, maps, or equivalent records, and approved by the Municipality.

Section 703. Roof drains

- A. Roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches, except as provided in Section 703.B.
- B. When it is more advantageous to connect directly to streets or storm sewers, connections of roof drains to streets or roadside ditches may be permitted by the Municipality.
- C. Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

Section 704. Alteration of BMPs

- A. No person shall modify, remove, fill, landscape or alter any existing stormwater BMP, unless it is part of an approved maintenance program, without the written approval of the Municipality.
- B. No person shall place any structure, fill, landscaping or vegetation into a stormwater BMP or within a drainage easement, which would limit or alter the functioning of the BMP, without the written approval of the Municipality.

ARTICLE VIII - ENFORCEMENT AND PENALTIES

Section 801. Public Nuisance

- A. The violation of any provision of this ordinance is hereby deemed a Public Nuisance.
- B. Each day that a violation continues shall constitute a separate violation.

Section 802. Enforcement Generally

- A. Whenever the Municipality finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the Municipality may order compliance by written notice to the responsible person. Such notice may require without limitation:

1. The performance of monitoring, analyses, and reporting;
 2. The elimination of prohibited connections or discharges;
 3. Cessation of any violating discharges, practices, or operations;
 4. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
 5. Payment of a fine to cover administrative and remediation costs;
 6. The implementation of stormwater BMPs; and
 7. Operation and maintenance of stormwater BMPs.
- B. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violations(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the Municipality or designee and the expense thereof shall be charged to the violator.
- C. Failure to comply within the time specified shall also subject such person to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Municipality from pursuing any and all other remedies available in law or equity.

Section 803. Suspension and Revocation of Permits and Approvals

- A. Any building, land development or other permit or approval issued by the Municipality may be suspended or revoked by the Municipality for:
1. Non-compliance with or failure to implement any provision of the permit;
 2. A violation of any provision of this Ordinance; or
 3. The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution or which endangers the life or property of others.
- B. A suspended permit or approval shall be reinstated by the Municipality when:
1. The Municipal Engineer or designee has inspected and approved the corrections to the stormwater BMPs, or the elimination of the hazard or nuisance, and/or;
 2. The Municipality is satisfied that the violation of the Ordinance, law, or rule and regulation has been corrected.
- C. A permit or approval which has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new permit under the procedures outlined in this Ordinance.

Section 804. Penalties

- A. Any person violating the provisions of this ordinance shall be guilty of a misdemeanor, and upon conviction shall be subject to a fine of not more than \$ _____ for each violation, recoverable

with costs, or imprisonment of not more than _____ days, or both. Each day that the violation continues shall be a separate offense.

- B. In addition, the Municipality, through its solicitor, may institute injunctive, mandamus or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief.

Section 805. Appeals

Any person aggrieved by any action of the Municipality or its designee, relevant the provisions of this ordinance, may appeal to the relevant judicial or administrative body according to law, within the time period allowed.

ENACTED and ORDAINED at a regular meeting of the _____
_____ on the _____ of _____, 19___. This Ordinance
shall take effect immediately.

[Name]

[Title]

[Name]

[Title]

[Name]

[Title]

[Name]

[Title]

[Name]

[Title]

ATTEST:

Secretary

I hereby certify that the foregoing Ordinance was advertised in the
_____ on _____, 19__, a newspaper of general
circulation in the municipality and was duly enacted and approved as set forth at a regular meeting of the
municipality's governing body held on _____, 19__.

Secretary

APPENDIX A

LOW IMPACT DEVELOPMENT PRACTICES

ALTERNATIVE APPROACH FOR MANAGING STORMWATER RUNOFF

Natural hydrologic conditions may be altered radically by poorly planned development practices, such as introducing unneeded impervious surfaces, destroying existing drainage swales, constructing unnecessary storm sewers, and changing local topography. A traditional drainage approach of development has been to remove runoff from a site as quickly as possible and capture it in a detention basin. This approach leads ultimately to the degradation of water quality as well as expenditure of additional resources for detaining and managing concentrated runoff at some downstream location.

The recommended alternative approach is to promote practices that will minimize post-development runoff rates and volumes, which will minimize needs for artificial conveyance and storage facilities. To simulate pre-development hydrologic conditions, forced infiltration is often necessary to offset the loss of infiltration by creation of impervious surfaces. The ability of the ground to infiltrate depends upon the soil types and its conditions.

Preserving natural hydrologic conditions requires careful alternative site design considerations. Site design practices include preserving natural drainage features, minimizing impervious surface area, reducing the hydraulic connectivity of impervious surfaces, and protecting natural depression storage. A well-designed site will contain a mix of all those features. The following describes various techniques to achieve the alternative approach:

- **Preserving Natural Drainage Features.** Protecting natural drainage features, particularly vegetated drainage swales and channels, is desirable because of their ability to infiltrate and attenuate flows and to filter pollutants. However, this objective is often not accomplished in land development. In fact, commonly held drainage philosophy encourages just the opposite pattern -- streets and adjacent storm sewers typically are located in the natural headwater valleys and swales, thereby replacing natural drainage functions with a completely impervious system. As a result, runoff and pollutants generated from impervious surfaces flow directly into storm sewers with no opportunity for attenuation, infiltration, or filtration. Developments designed to fit site topography also minimizes the amount of grading on site.
- **Protecting Natural Depression Storage Areas.** Depressional storage areas have no surface outlet, or drain very slowly following a storm event. They can be commonly seen as ponded areas in farm fields during the wet season or after large runoff events. Traditional development practices eliminate these depressions by filling or draining, thereby obliterating their ability to reduce surface runoff volumes and trap pollutants. The volume and release-rate characteristics of depressions should be protected in the design of the development site. The depressions can be protected by simply avoiding the depression or by incorporating its storage as additional capacity in required detention facilities.
- **Avoiding introduction of impervious areas.** Careful site planning should consider reducing impervious coverage to the maximum extent possible. Building footprints, sidewalks, driveways and other features producing impervious surfaces should be evaluated to minimize impacts on

runoff.

- **Reducing the Hydraulic Connectivity of Impervious Surfaces.** Impervious surfaces are significantly less of a problem if they are not directly connected to an impervious conveyance system (such as storm sewer). Two basic ways to reduce hydraulic connectivity are routing of roof runoff over lawns and reducing the use of storm sewers. Site grading should promote increasing travel time of stormwater runoff, and should help reduce concentration of runoff to a single point in the development.
- **Routing Roof Runoff Over Lawns.** Roof runoff can be easily routed over lawns in most site designs. The practice discourages direct connections of downspouts to storm sewers or parking lots. The practice also discourages sloping driveways and parking lots to the street. By routing roof drains and crowning the driveway to run off to the lawn, the lawn is essentially used as a filter strip.
- **Reducing the Use of Storm Sewers.** By reducing use of storm sewers for draining streets, parking lots, and back yards, the potential for accelerating runoff from the development can be greatly reduced. The practice requires greater use of swales and may not be practical for some development sites, especially if there are concerns for areas that do not drain in a “reasonable” time. The practice requires educating local citizens and public works officials, who expect runoff to disappear shortly after a rainfall event.
- **Reducing Street Widths.** Street widths can be reduced by either eliminating on-street parking or by reducing roadway widths. Municipal planners and traffic designers should encourage narrower neighborhood streets which ultimately could lower maintenance.
- **Limiting Sidewalks to One Side of the Street.** A sidewalk on one side of the street may suffice in low-traffic neighborhoods. The lost sidewalk could be replaced with bicycle/recreational trails that follow back-of-lot lines. Where appropriate, backyard trails should be constructed using pervious materials.
- **Using Permeable Paving Materials.** These materials include permeable interlocking concrete paving blocks or porous bituminous concrete. Such materials should be considered as alternatives to conventional pavement surfaces, especially for low use surfaces such as driveways, overflow parking lots, and emergency access roads.
- **Reducing Building Setbacks.** Reducing building setbacks reduces driveway and entry walks and is most readily accomplished along low-traffic streets where traffic noise is not a problem.
- **Constructing Cluster Developments.** Cluster developments can also reduce the amount of impervious area for a given number of lots. The biggest savings is in street length, which also will reduce costs of the development. Cluster development clusters the construction activity onto less-sensitive areas without substantially affecting the gross density of development.

In summary, a careful consideration of the existing topography and implementation of a combination of the above mentioned techniques may avoid construction of costly stormwater control measures. Other benefits include reduced potential of downstream flooding, water quality degradation of receiving streams/water bodies and enhancement of aesthetics and reduction of development costs. Beneficial results include more stable baseflows in receiving streams, improved groundwater recharge, reduced flood flows, reduced pollutant loads, and reduced costs for conveyance and storage.

APPENDIX B

STORMWATER BEST MANAGEMENT PRACTICES OPERATIONS AND MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 200__, by and between _____, (hereinafter the “Landowner”), and _____, _____ County, Pennsylvania, (hereinafter “Municipality”);

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of _____ County, Pennsylvania, Deed Book _____ at Page _____, (hereinafter “Property”).

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the stormwater management BMP Operations and Maintenance Plan approved by the Municipality (hereinafter referred to as the “Plan”) for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of Best Management Practices (BMP’s); and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site stormwater Best Management Practices be constructed and maintained on the Property; and

WHEREAS, for the purposes of this agreement, the following definitions shall apply:

- BMP – “Best Management Practice;” activities, facilities, designs, measures or procedures used to manage stormwater impacts from land development, to protect and maintain water quality and groundwater recharge and to otherwise meet the purposes of the Municipal Stormwater Management Ordinance, including but not limited to infiltration trenches, seepage pits, filter strips, bioretention, wet ponds, permeable paving, rain gardens, grassed swales, forested buffers, sand filters and detention basins.

- Infiltration Trench – A BMP surface structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer,
- Seepage Pit – An underground BMP structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer,
- Rain Garden – A BMP overlain with appropriate mulch and suitable vegetation designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or underground aquifer, and

WHEREAS, the Municipality requires, through the implementation of the Plan, that stormwater management BMP's as required by said Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, his successors and assigns. and

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The BMPs shall be constructed by the Landowner in accordance with the plans and specifications identified in the Plan.
2. The Landowner shall operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality and in accordance with the specific maintenance requirements noted on the Plan.
3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper identification, to inspect the BMP(s) whenever it deems necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). This provision shall not be construed to allow the Municipality to erect any permanent structure

on the land of the Landowner. It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.

5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMP(s) by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality's employees and designated representatives from all damages, accidents, casualties, occurrences or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality. In the event that a claim is asserted against the Municipality, its designated representatives or employees, the Municipality shall promptly notify the Landowner and the Landowner shall defend, at his own expense, any suit based on the claim. If any judgment or claims against the Municipality's employees or designated representatives shall be allowed, the Landowner shall pay all costs and expenses regarding said judgment or claim.
8. The Municipality shall inspect the BMP(s) at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of _____ County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

(SEAL)

For the Landowner:

ATTEST:

_____ (City, Borough, Township)

County of _____, Pennsylvania

I, _____, a Notary Public in and for the County and State
aforesaid, whose commission expires on the _____ day of _____, 20__, do hereby
certify that _____ whose name(s) is/are signed to the
foregoing Agreement bearing date of the _____ day of _____, 20__, has
acknowledged the same before me in my said County and State.

GIVEN UNDER MY HAND THIS _____ day of _____, 200_.

NOTARY PUBLIC

(SEAL)

APPENDIX 9

NATURAL AREAS INVENTORY SITES

The following information is derived from the Pike County Natural Areas Inventory of 1990 (1995 update). The plan was created by the Pennsylvania Science Office of the Nature Conservancy and adopted by the Pike County Board of Commissioners via Resolution 93-08 on May 20, 1993.

Please refer to the full document for more in-depth information.

PENNSYLVANIA NATURAL DIVERSITY INVENTORY DATA SYSTEM

In order to plan the wise use of Pike County's natural features, the Pennsylvania Science Office (PSO) of The Nature Conservancy (TNC) was contracted by Pike County to provide environmental data for use in site evaluations throughout the county. The Pennsylvania Natural Diversity Inventory (PNDI) data base was established in 1982 as a joint venture of PSO/TNC, the Pennsylvania Department of Environmental Resources, and the Western Pennsylvania Conservancy. In its eight years of operation, the PNDI data base has become Pennsylvania's chief storehouse of information on outstanding natural habitat types (called natural communities in PNDI terminology), sensitive plant and animal species, heron rookeries, and several other noteworthy natural features. Over 7,000 detailed occurrence records, largely the result of field surveys, are stored in computer files and denoted on topographic maps. Additional data are stored in extensive manual files set up for over 150 natural community types, over 800 plant and animal species, about 650 managed areas, and for each of Pennsylvania's 881 7.5-minute USGS quadrangle maps.

Beginning in 1982, PSO collected primarily existing data on occurrences of elements of concern, drawing from publications, herbarium and museum specimens, and the knowledge of expert botanists, zoologists, ecologists, and naturalists. From this foundation, PSO has focused its efforts on, and begun systematic inventories for, the best occurrences of the priority elements.

The PSO has used this systematic inventory approach to identify the areas of highest natural integrity in Pike County. These areas, comprised of natural communities with their characteristic species, represent an estimated 85-90 percent of the biological diversity of an area (The Nature Conservancy 1988); the other 10-15 percent consists of sensitive plant and animal species which occur both within and outside these natural communities. The full range of biological diversity in Pike County can be conserved by protecting sites with the best occurrences of the county's natural communities and by protecting populations of the county's sensitive plants and animal species. The natural community and sensitive species data are the basis for judging the biological values of sites within the county.

SUMMARY AND RECOMMENDATIONS

A meeting of TNC personnel was held to discuss the most important sites for protection in Pennsylvania; the following Pike County sites are regarded as being significant for natural

communities and species of special concern and contain some of the best natural areas in the state.

The following seven sites (see Figure 1 for locations) from Table 1 are the most critical sites in Pike County for receiving protection or ensuring continued protection in the future. Each site is followed by its USGS topographic quadrangle map name. Figure 1 shows the locations of the seven sites within the county.

MILLRIFT CLIFFS (Port Jervis North). 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 has begun to pursue conservation easements in this area and the county and township should encourage conservation among the various landowners.

MILLRIFT FLATS (Port Jervis North). 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.

TWELVEMILE POND (Twelvemile Pond). This large Glacial Lake is relatively undisturbed and contains excellent populations of a state-endangered and a state-rare plant. The lake and surrounding uplands are privately owned and appear to be under no threat at the present time. The county should work with the landowners to ensure that it is always protected and continues to harbor the plants of special concern. Conservation easements are recommended now and purchase as a nature preserve if the owners ever wish to sell.

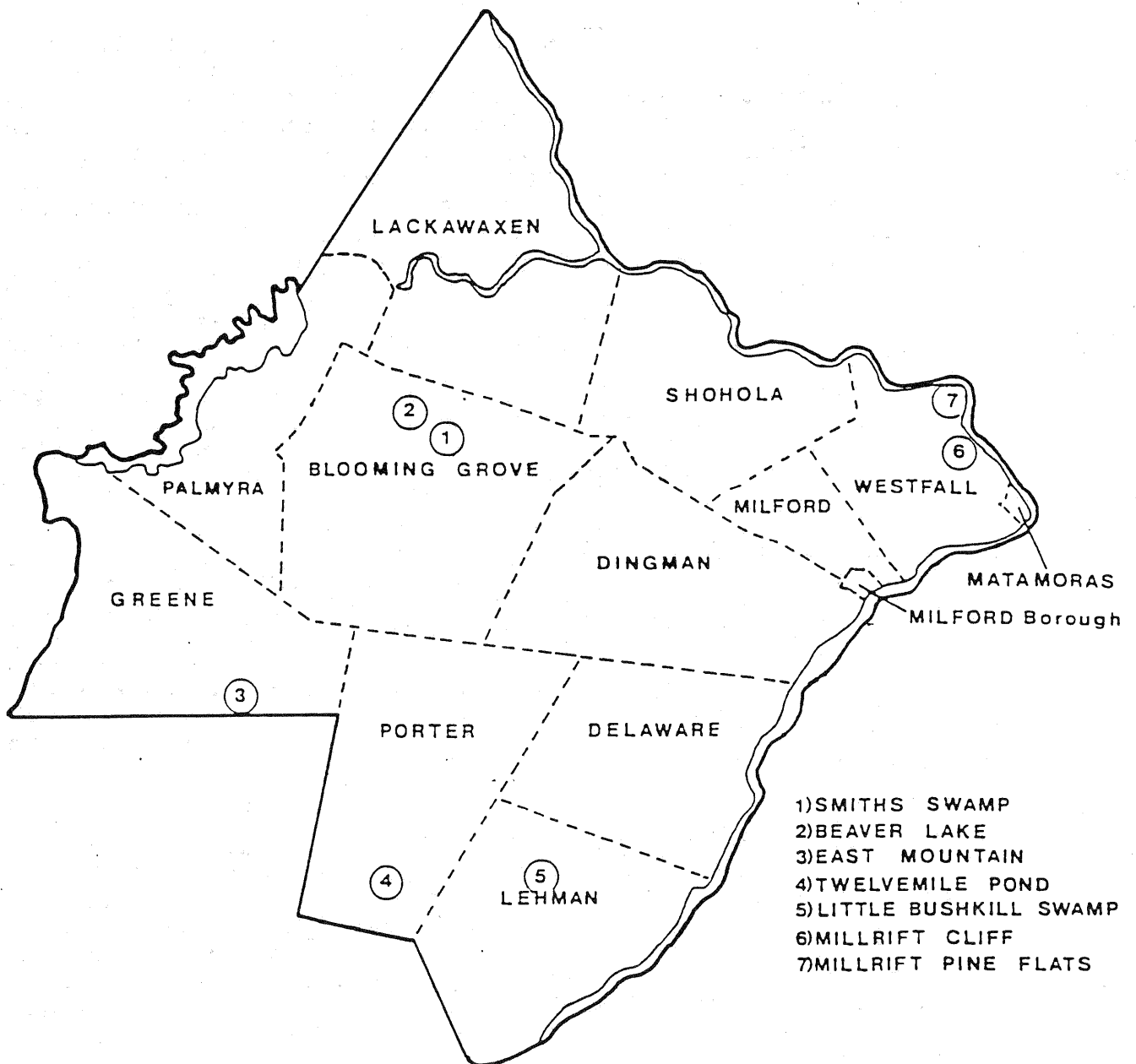


Figure 1. Top priority sites in Pike County. See Table 1 and text for descriptions.

BEAVER LAKE (Rowland). This excellent Glacial Bog at the northern end of Beaver Lake provides habitat for at least four plants of special concern. The site is on private fish and game club property and is currently being protected; protection can be enhanced through a conservation easement that restricts development and logging in the watershed.

EAST MOUNTAIN (Promised Land). This excellent Ridgetop-Dwarf-tree Forest is entirely on private land and appears to be secure from development. This mountain top and the valley (Mud Pond Swamp and Run area) to the east form part of the largest undeveloped, privately-owned tract in Pike County. The natural community on the mountain is likely to yield rare species and eagles make use of the valley during the winter. Conservation easements on the mountain and valley or some form of tax incentives are ways to ensure that this area remains excellent wildlife habitat and open space.

SP521/Little Bush Kill Swamp (Lake Maskenozha). This swamp contains only one of five populations in Pennsylvania of a state-endangered plant. The swamp is partially within the Delaware State Forest but the plant population is located outside the state forest boundary. Housing development is occurring near the southern edge of the swamp and may pose a threat if a protective buffer zone is not placed around the swamp. A conservation easement on the swamp and about 500-foot wide upland buffer around the swamp should ensure the species survival here.

SMITH'S SWAMP (Rowland). This wetland contains the only known state population of a state-endangered plant species and three other plant species of special concern. Although the site is on state game land and state forest land, it is important that water quality and quantity entering the swamp remain unchanged. Any proposals for housing or commercial development within the watershed should be given close scrutiny to be sure that there are no direct or indirect impacts on the swamp. Beaver have flooded and killed vegetation at the southern end of Smith's Swamp and it is recommended that they be removed to stop further degradation.

General Summary and Recommendations

Pike County is lucky to have so many important sites for biological diversity that are already protected from development as state or federal lands. In addition, many more sites are protected as part of private lake associations or fish and game clubs. Private clubs with large land holdings will come under greater pressure to sell off land to developers to generate revenue. These private lands should be the focus of the county's and townships' efforts to protect biological diversity, open space, and the quality of life in Pike County.

Since there is only limited money and personnel time that can be devoted to the pursuit of land conservation, two tables are presented to direct protection efforts towards the most important sites first. Table 1 lists all the known sites where exemplary natural communities and species of special concern are located in approximate order of importance for the protection of biological diversity. The table also summarizes their significance, any potential threats, and some recommendations for protection. Table 2 is a list of secondary sites that may be acceptable for county or township parks and passive recreation. The sites in Table 1 should be actively pursued for protection in order of importance while those in the second table might be targeted once protection of the Table 1 sites has been accomplished or as opportunities arise.

All privately-owned sites that are described above (also see Figure 1) and given a priority rank of 1 or 2 should be targeted immediately for protection of the site and the surrounding lands through a combination of acquisition and conservation easements. All sites with good to excellent populations of species of special concern or good natural communities should receive protection too, but conservation easement or some type of tax incentive may be more appropriate until the highest priority sites have been protected. Sites that may be high in terms of biological diversity but are on government land are given lower priority because they are not currently in need of protection. Some of these protected sites may be in need of management, however.

There are sites in the county (Table 2) that do not have rare species or good natural communities but could be excellent sites for county or township parks or natural areas, especially those that can serve more than one purpose - recreation, wildlife habitat, flood and sediment control, watersupply, etc. Two important areas for protection and ideal for parks are the Delaware River corridor and the Mud Pond Region. Natural communities and species of special concern found in these areas will fit into any plan for a county park or preserve. Creating county or township natural areas around municipal water supply watersheds can serve the purposes of providing an additional protective buffer around the water supply and provide low-impact recreation opportunities. In addition, larger open-space areas are created for wildlife than could be achieved through either the watershed land or the natural area alone. Fee title, easements, tax incentives, and agreements with and among landowners are all tools that can be used to create these conservation lands.

The importance of waterbodies to biodiversity is illustrated by the number of rare species in the county associated with water. Protection of the wetlands, natural lakes, rivers, and creeks of Pike County is vital, especially those that protect

biodiversity, supply drinking water, and are attractive recreational resources. Protection of the critical watersheds is the only way to ensure that the water in the lakes, streams and wetlands will always be good quality. A cooperative effort must be made by town, county, state, and federal agencies, developers, and residents to lessen the impact of housing development on the watersheds and plant communities of the county. Certainly, new housing and commercial development should be discouraged or given close scrutiny before it is allowed in the watersheds outlined in this report and careful review should be required within any watershed in the county. Townships should require minimum setbacks from all waterbodies to help protect water quality. Landowners within any particular watershed can act on their own to protect water by forming watershed or lake associations to voluntarily monitor and screen proposals in their localities.

Where development is to occur, plans should provide for creating natural buffers between the development and wetlands and waterbodies. Care should be taken to ensure that natural areas do not become "islands" surrounded by development. When a wetland is completely surrounded by development, even though the wetland has not been directly impacted, the swamp is effectively isolated and reduces its value for wildlife. Cluster development would allow the same amount of development but on much less land in such areas and, most importantly, would leave much of the uplands intact as corridors for wildlife movement into the surrounding uplands and between swamps.

Much of the work that needs to be done to protect land in Pike County can be done by county and township governments and groups like The Nature Conservancy. However, these organizations will not be able to do all of the work because of limited resources and personnel. There will be need for grassroots organizations like lake associations or a county land trust to help with land protection. These groups can assist with the identification of landowners who wish to protect their land, provide information about easements to landowners, acquire land, and management and stewardship once the land is protected.

In this report, we have outlined the watersheds where the natural communities and species of special concern occur. The core areas where the species and communities occur need to be given the most attention, and fee title acquisition is encouraged. Ideally, all of the land within the watersheds outlined in this report should receive some form of protection, but there are not sufficient financial resources to protect all of the land nor will all landowners be interested in land protection. Not all of this land can receive the same amount of protection nor do all activities need to be excluded. Current land uses that are not impacting these important sites should be

TABLE 1. The sites of statewide significance for the protection of biological diversity in Pike County in approximate order of priority from the most important to the least.

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
1	Millrift Cliffs	Port Jervis North	This Acidic Cliff community has an excellent population of a G5S1 ² plant; recommend secure easements and purchase of land on and above cliffs to prevent logging and changes in water quality and flow to the cliff.
1	Millrift Pine Flats	Port Jervis North	Recommend complete protection of this site by conservation easement and purchase; 2 natural communities and 5 special concern animals; site may be threatened by development and site should be excluded from gypsy moth control spray program.
1	Twelvemile Pond	Twelvemile Pond	Large Glacial Lake with 2 excellent populations and 1 poor population of plants of special concern; recommend purchase as a county nature preserve or conservation easement to ensure little or no development occurs around lake.
2	East Mountain Thicket	Promised Land	Excellent example of a Ridgetop Dwarf-tree Forest; part of largest undeveloped tract in private ownership in Pike Co; recommend work with landowners to protect region from development, prevent gypsy moth control spraying on mountain.
2	Little Bush Kill Swamp	Lake Maskenozha	Small population and only county site of a G4S1 PE plant; site is threatened by nearby development; recommend purchase or conservation easement.
2	Smiths Swamp	Rowland	Good Boreal Conifer Swamp and Glacial Bog communities and 4

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
			special concern plants, including only extant site in state for a PE species; owned jointly by PGC and Bureau of Forestry; remove beaver and avoid logging and other disturbances in watershed.
2	Beaver Lake	Rowland	Excellent Glacial Bog with at least 4 plants of special concern; although protected, recommend conservation easement to ensure long-term protection of site.
3	Corilla Lake	Narrowsburg	Good quality Glacial Lake with 1 G5S3 plant; recommend easement; work with landowner association to protect site from herbicides and nutrient enrichment.
3	Fairview Lake	Hawley	Fair population of a G4S2 plant; recommend work with landowners around lake to ensure good water quality, monitor septic systems and prevent herbicides from entering lake.
3	Lake Belle	Promised Land	Good quality Glacial Lake with 1 excellent population of a G5S2 plant; no current threat; recommend conservation easement and work with landowner association to protect isolated site.
3	Lake Laura	Promised Land	Good populations of 2 aquatic plants of special concern; no current threats to this isolated lake but conservation easement suggested to prevent future encroachment.

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
3	Lake Maskenozha	Lake Maskenozha	Excellent population of a G5S2 plant; prevent use of herbicides but encourage landowners to control exotic aquatic plants.
3	Lake Scott	Promised Land	Good quality Glacial Bog with 5 special concern plants; recommend easement to protect site; possible addition to Bruce Lake State Forest Natural Area; possible threats from beaver and I-84 salt applications.
3	Lehman Township Woods (SA519)	Lake Maskenozha	Extant location for a G4S2 animal of special concern; limit development and prevent aerial spraying for gypsy moth control.
3	Little Mud Pond	Pecks Pond	Fair quality Glacial Bog with 3 good populations of special concern plants; flooding is greatest threat but recreational overuse of the bog and water quality degradation associated with nearby cabins may also be problems; Delaware State Forest - needs to be managed to preserve site.
3	Little Mud Pond Swamp	Rowland	Excellent Boreal Conifer Swamp and good Glacial Bog with 3 plants of special concern; past peat mine operation may have changed hydrology; Delaware State Forest in part, entire wetland and watershed should be set aside as a natural area.
3	Little Teedyuskung Lake Bog	Narrowsburg	Fair quality Broadleaf-conifer Swamp and Glacial Bog communities with a fair population of 1 special concern plant; recommend conservation easement.

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank1	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
3	Mashipacong Shale Cliff	Port Jervis South	Good quality Shale Cliff community with a good population of a G5S3 plant; recommend conservation easement on site and on adjacent land to prevent encroachment; possible county or township natural area and scenic overlook.
3	Matamoras Cliffs	Port Jervis South	Good population of a G5S3 plant in an excellent Shale Cliff community; recommend site become township or county natural area and scenic overlook.
3	Pecks Pond Bog	Pecks Pond	Largest Glacial Bog mat in northeastern PA with good to excellent populations of 3 plants and 1 animal of special concern in Delaware State Forest; water quality should be monitored and new development limited in the watershed.
3	Sawkill Mud Pond	Edgemere	Good Glacial Bog with 1 G5S3 plant; threats from upslope development; protect watershed with conservation easements.
3	Shoemakers Barren	Bush Kill	Fair quality Acidic Cliff community with a fair population of a G5S3 plant; site in Delaware Water Gap National Recreation Area but landuse on adjacent property could have negative impact; protect plant and community with conservation easement on adjacent land, potential impacts if sprayed for gypsy moths.
3	Shohola Falls Swamp	Shohola	Good Boreal Conifer Swamp partially on State Game Land; private land on west side may be subject to development; recommend conservation easement to protect swamp.

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
3	Silver Lake	Edgemere, Lake Maskenozha	Two G5S2 aquatic plants occur here; threats include herbicide applications to the lake and pollution from faulty septic systems; work with landowners around lake to limit future development and monitor water quality.
4	Bald Hill	Shohola	Good example of a Ridgetop Dwarf-tree Forest with good species diversity; past disturbance minimal; prevent gypsy moth spraying.
4	Balsam Swamp	Promised Land	Excellent Broadleaf-conifer Swamp protected within the Bruce Lake State Forest Natural Area.
4	Ben Bush Swamp	Pecks Pond	Fair example of a Broadleaf-conifer Swamp community on state forest land; some threat from beaver; prevent logging adjacent to swamp.
4	Big Bear Swamp	Lake Maskenozha	Good quality Broadleaf-conifer Swamp within Stillwater State Forest Natural Area; control beaver and continue present protection.
4	Big Dam Ridge Swamp	Promised Land	No threat to this site with a fair population of a G4S2 plant; recommend work with landowner to protect site.
4	Blooming Grove Long Pond Swamp	Promised Land	Excellent Glacial Bog with fair to good populations of 3 plants of concern; protected as part of Bruce Lake State Forest Natural Area.
4	Bruce Lake	Promised Land	Excellent Glacial Lake and good example of a Glacial Bog, 5 special concern plants associated with the 2 communities; part of Bruce Lake State Forest Natural

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
			Area; remove beaver that are causing flooding.
4	Buck Bar	Lake Maskenozha	Excellent population of a G5S3 plant in Delaware Water Gap National Recreation Area; exotic species invasion may be only threat.
4	Buckhorn Oak Barren Pond Eddy (SA508)		Poor example of a Ridgetop Dwarf-tree Forest with a good population of a G4S2 animal in state forest; recommend prevention of aerial spraying for gypsy moth.
4	Bushkill Shale Cliff	Flatbrookville	Excellent Shale Cliff community with excellent population of a G5S3 plant in Delaware Water Gap National Recreation Area; recommend National Park Service manage area to ensure survival of community and species; prevent spraying for gypsy moth.
4	Bushkill Swamp	Pond Eddy	Fair example of a Glacial Bog community with a poor population of a G5S3 plant in a state game land; beaver flooding is degrading bog; recommend removal of beaver and restricting logging in watershed.
4	Crooked Swamp	Edgemere	Poor quality Glacial Bog with a poor population of a G5S3 plant on state forest land; site being impacted by I-84 and needs protection from highway runoff.
4	Crossroads Tavern Woods	Hawley	Fair population of a G5S2/S3 plant along roadside; recommend herbicides not be used along this section of road and that roadside grass mowing be delayed until August.

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
4	Dingmans Falls	Lake Maskenozha	Good Waterfall and Plungepool community with a poor population of a G4S1 plant; site receives heavy but controlled use; recommend National Park Service manage area to encourage plant species.
4	Dry Brook Shale Barren	Milford	Fair quality Shale Cliff with a fair population of a G5S3 plant in Delaware Water Gap National Recreation Area; manage to improve community and species habitat; prevent spraying for gypsy moth.
4	Edgemere Road Woods	Pecks Pond	Poor population of a G5S2/S3 plant along roadside; recommend herbicides not be used along this section of road and that roadside grass mowing be delayed until August.
4	Elbow Swamp	Pecks Pond	Good population of a G5S2 animal on state forest land; prevent aerial-spray control program for gypsy moths.
4	Eschbach Heights Shale Barren	Lake Maskenozha	Fair to Good population of a G5S3 plant in Delaware Water Gap National Recreation Area; species appears to be declining and may require management to prevent its loss.
4	Germantown Swamp	Rowland	Small, fair Broadleaf-conifer Swamp in state forest; recommend protection of swamp, and a buffer zone around it, from logging.
4	Glenside Shale Barren	Lake Maskenozha	Fair Shale Cliff community with a good population of a G5S3 plant in Delaware Water Gap National Recreation Area; recommend shale quarry at base of cliff be stabilized to prevent further

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
			cliff erosion; prevent spraying for gypsy moth.
4	Lake Paupack	Newfoundland	Fair Glacial Bog with a fair population of a G5S3 shrub; site is privately protected but recommend conservation easement.
4	Long Swamp	Edgemere	Fair example of a Boreal Conifer Swamp with a fair population of a G5S2 special concern plant; protect watershed from development with a conservation easement.
4	Low Knob	Pecks Pond	Small Ridgetop Dwarf-tree Forest in state forest; recommend preserving in present condition and exclusion from gypsy moth spray program.
4	Lower Shapnack Island	Lake Maskenozha	Excellent population of a G5S3 plant in Delaware Water Gap National Recreation Area; exotic species invasion may be only threat.
4	Maineses Pond	Hawley	Good population of a G5S2 plant; recommend working with landowners to restrict development in watershed.
4	Milford Cliffs	Milford	Good Shale Cliff community and G5S3 species population in Delaware Water Gap National Recreation Area; recommend National Park Service manage area to ensure survival of community and species; prevent spraying for gypsy moth.
4	Old Port Jervis Road Shale Cliff	Milford	Good population of a G5S3 plant on a Shale Cliff community; may be degraded soon by housing; work with landowner to protect site; prevent spraying for gypsy moth.

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
4	Paupack Falls	Newfoundland	Good example of a Waterfall and Plungepool community; some erosion problems in ravine around falls; recommend conservation easement and formulate management plans.
4	Pine Lake	Newfoundland	Good Glacial Bog with 3 plants of special concern in State Forest Natural Area; has been degraded by beaver impoundment; recommend beaver removal.
4	Pocono Env. Ed. Center	Lake Maskenozha	Fair population of a G5S2 special concern plant; maintain site in present condition.
4	Raymondskill Falls	Milford	Good Waterfall and Plungepool community with a fair population of a G4S1 plant; site is within Delaware Water Gap National Recreation Area; recreational use is limited and management adequate.
4	Rock Hill Pond	Pecks Pond	Fair quality Glacial Bog that has been partially flooded; Delaware State Forest in part; work with state and private camp to protect water quality; limit logging and development.
4	Shapnack Island	Lake Maskenozha	Excellent population of a G5S3 plant in Delaware Water Gap National Recreation Area; exotic species invasion may be only threat.
4	White Birch Swamp	Pecks Pond	Fair quality Broadleaf-conifer Swamp in state forest; threatened by sand-and-gravel excavation on edge; recommend buffer zone between quarry operation and wetland.
4	Wolf Lake	Narrowsburg	Glacial Lake community with 3 plants of special concern including

Table 1 (Continued, next page.)

Table 1 (Continued.)

County Rank ¹	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
			1 G5S1; lakeside development is limited but recommend water-quality monitoring; conservation easement and work with landowner association to protect lake and species.
5	Bushkill Falls	Bushkill	Scenic Waterfall and Plungepool community; current commercial tourist enterprise and management appears compatible; maintain water quality by limiting upstream development.
5	Conservation Island Promised Land		Poor example of mature Northern Hardwood Forest in state park; although protected, site needs management to reduce deer-browse damage.
5	Forest Lake	Narrowsburg	Dammed Glacial Lake and associated wetlands; one G5S2 plant population; work with landowner association to prevent logging and development in watershed.
5	Fulmer Falls	Lake Maskenozha	Fair Waterfall and Plungepool community in state park; receives heavy use but boardwalks appear sufficient to prevent damage to area.
5	High Knob	Pecks Pond Promised Land	Poor quality Ridgetop Dwarf-tree Forest on state forest land; recommend no further development.
5	Lake Giles	Rowland	One fair population of a G5S2 aquatic plant; work with landowner association to avoid pollution due to over development in watershed.

Table 1 (Concluded, next page.)

Table 1 (Concluded.)

County Rank*	Site Name	USGS Topo. Map	Natural Community, TNC Global and State Ranks, Importance, Recommendations
5	Pinchot Falls	Milford	Waterfall and Plungepool community on Sawkill Creek, a High-gradient Clearwater Creek; falls are protected as part of Grey Towers; Sawkill Creek is a designated Exceptional Value Stream; continue current protection and management.
5	Point Peter	Narrowsburg	Fair Ridgetop Dwarf-tree Forest; recommend area not be sprayed for gypsy moths.
5	Taylorstown Swamp	Rowland	Fair Broadleaf-conifer Swamp that is partially on state forest property; logging in and around swamp have degraded site; recommend prevention of further logging.
5	Tinkwig Creek	Hawley	Poor population of a G5S2/S3 plant growing on roadside; recommend no use of herbicides and delay roadside maintenance until August.
5	Twin Lakes	Shohola	Poor population of a G5S2 plant; recommend landowners around lake monitor water quality and prevent further development around lake.
5	Well Road Swamp	Rowland	Fair example of a Boreal Conifer Swamp on State Game Land; flooding has caused some species to decline; recommend allowing natural drainage to resume.

¹ Sites are ranked from 1 to 5 with 1 being the highest priority sites for protection with state or national significance, and 5 being the lowest state-wide priority sites with species or communities of special concern; ranks include potential threat and management needs.

² See Appendix I for explanation of Global and State vulnerability ranks.

TABLE 2. Areas of local significance in Pike County based on size, diversity of size, diversity of wildlife and plant life, water quality protection, and recreation potential.

County Rank*	Site Name	USGS Topo. map	Importance
High	Delaware River ¹	Narrowsburg Eldred Shohola Pond Eddy Port Jervis North Port Jervis South Milford Culvers Gap Lake Maskenozha Flatbrookville	Wintering Bald Eagle habitat; bird migration corridor; shad spawning grounds; rare plants; water supply; river recreation; aesthetics; protect water quality, prohibit further development along shore and limit development in watershed.
High	Mud Pond Region	Promised Land	Large, undeveloped tract of mixed oak forest and wetlands; wildlife and recreational value; work with landowners to protect land (see East Mountain Thicket, Table 1).
Medium	Bald Hill Swamp	Edgemere Pecks Pond	Large conifer swamp at headwaters of Little Bush Kill; although protected as state forest, development is encroaching and should be excluded within a buffer zone area.
Medium	Big Swamp	Twelvemile Pond	Only partially protected by state forest; protect from encroachment.
Medium	Lackawaxen River	Hawley Rowland Shohola	River recreation; aesthetics. protect water quality by limiting further development in watershed.
Medium	Spruce & Rowland Swamps, Masthope Creek Region	Narrowsburg	Large undeveloped tract near Delaware River; needs more field survey but potential for large county or township park; work with landowners to protect land.

Table 2 (Continued, next page.)

Table 2 (Continued.)

County Rank*	Site Name	USGS Topo. map	Importance
Medium	Sunset Creek Ravine	Lake Maskenozha	Tributary to Delaware River; heavy development pressure upstream may cause water quality problems.
Medium	Toms Creek	Lake Maskenozha	Direct tributary to Delaware River; heavy development pressure; protect upper reaches from further encroachment.
Low	Deep Brook	Milford	Potential as county/township park near Milford Borough; water quality protection for Delaware River.
Low	Gates Run	Hawley	Some older-growth hemlock and wetland; logging should be prohibited along stream.
Low	Hemlock Farms Barren	Pecks Pond	Poor quality scrub oak barren that provides open space and wildlife habitat; development unlikely.
Low	Holsey Meadow Swamp	Pecks Pond	Diverse wetland partially in state forest; include buffer zone around it as protection from logging.
Low	Ledgedale Swamp	Newfoundland	Large swamp that has potential as a local natural area near Lake Wallenpaupack.
Low	Little York Swamp	Pecks Pond	Large swamp surrounded by upland forest; restrict development within watershed; work with landowner to protect land.
Low	Maple Swamp	Pecks Pond	Important for protecting water quality of Pecks Pond; surrounding development has reduced its importance to wildlife.

Table 2 (Continued, next page.)

Table 2 (Concluded.)

County Rank*	Site Name	USGS Topo. map	Importance
Low	Painter Swamp	Twelvemile Pond	Fairly diverse of plant life; in state forest; protect from logging.
Low	Poison Brook Swamp	Edgemere	Protected as state forest but encroachment to the south has had serious impacts.
Low	Sagamore Swamp	Edgemere	Impacted by development; further encroachment should be discouraged.
Low	Sunrise Swamp	Edgemere	Impacted by development; further encroachment should be discouraged.
Low	Wallenpaupack Creek	Newfoundland Buck Hill Falls	Major contributor to Lake Wallenpaupack; some older-growth forest; protect water quality by limiting development in watershed; potential for addition to Tobyhanna State Park.

* These sites are ranked from high to low as an indication of their importance at the county or municipal level. These sites must be viewed as of lower rank in terms of biodiversity than those in Table 1.

¹ Several sites along the Delaware River are important at the state or national level in terms of biodiversity (see Table 1).

APPENDIX 10

INTEGRATED RESOURCE PLANNING

INTEGRATED RESOURCE PLANNING

Guidelines for Developing an Integrated Resource Plan Under the Delaware River Basin Commission Southeastern Pennsylvania Ground Water Protected Area Regulations identify Integrated Resource Planning as a tool to:

1. Evaluate and develop management objectives and strategies on a subbasin basis to ensure that ground and surface water withdrawals are managed in a manner that protects both instream and withdrawal uses in the subbasin.
2. Evaluate the adequacy of existing ground and surface water resources to meet all existing and future needs in the subbasin, and assess options for meeting those needs.
 - Assess water resources and existing uses of water, including availability, quality, quantity, and limitations.
 - Estimate future water demands and resource requirements.
 - Assess the capacity of the subbasin to meet present and future demands for withdrawal and nonwithdrawal uses such as instream flows. Determine if new sources of supply are needed, and if so, how to evaluate and select such sources, with consideration of implications for the size, quality and quantity of natural resources.
 - Consider stormwater and floodplain management.

The multiple objectives that the IRP process is designed to evaluate include demands on water resources for supply purposes and for maintaining the instream flows necessary for the protection of aquatic resources, recreational use and other uses. In all cases, sufficient flows are required to protect and maintain existing and designated uses. There is the potential for conflict among these demands, and the IRP needs to identify the points of conflict, and propose methods to avoid or resolve conflicting demands. The first step in this process is to assess the ability of the water resources of the subbasin to meet the demand. After the assessment of water resources and water use, available water resources should be compared to current and future water needs (both for water supply and instream uses) to determine if potential resource shortfalls and limitations may occur.

Factors to consider in the IRP include protecting surface and ground water from over-withdrawal, and balancing withdrawals with instream uses. Developing approaches to protect resources and resolve issues must consider that water quantity and water quality are interrelated. Because of this close relationship, sufficient stream flow must be maintained to protect the physical, chemical, and biological characteristics of the stream.

Important flow levels to consider include flood/floodplain maintenance flows, flushing (of fine sediment) flows, channel maintenance flows, and even the occasional drought.

Urbanization of watersheds can rapidly alter flow regimes with pervasive effects on aquatic communities. In particular, urbanization increases impervious surface area within a watershed, which increases surface runoff rates. The first effect of this change is to

decrease surface infiltration of water, which decreases ground water recharge. The second effect is to more rapidly transport precipitation to the stream network.

After urbanization, streams receive more water at a faster rate from a set precipitation level. This change in the hydrology of storm events causes peak flows to be higher (increasing the chance of a flood event per given precipitation event), increases the rate of the rising and falling water levels (i.e., they change faster), decreases the duration of the peak flows, and decreases base flow to the stream.

Base flow is reduced because ground water runs across the surface and out the stream network, instead of infiltrating into the ground and seeping out to the streams over time through ground water discharge. In addition, urbanization has the potential to cause numerous other impacts, including the delivery of fine sediments into streams during the “build-out” of the watershed, fragmenting quality stream habitat with stream crossings and/or dams, reduction in riparian habitats (direct elimination of habitat with instream consequences for water quality and nutrient sources), and the altering of ecological pathways (e.g., attempts to eliminate natural flooding).

3. Engage stakeholders as active participants in developing effective, long-term water resource management objectives and strategies.
4. Consider the inter-relationship of water quality and water availability for current and future water uses in a subbasin.
5. Assist planners to better integrate water resources protection in land use planning. Almost all land use decisions affect water resources. Growth is occurring in most subbasins of the Ground Water Protected Area. Integrated Resource Plans can assist in better managing *how* that growth occurs. The availability of ground or surface water, individually, may not be a limiting factor for growth, since a combination of both or sources of water outside of the subbasin may exist. By evaluating all water resources options, existing and future needs may be met while simultaneously protecting the resources and supporting other uses including instream flow needs.

Critical elements in Integrated Resource Planning include:

- Initiating multi-municipal effort involving all municipalities that share the resources of common subbasins for water supply and/or wastewater disposal,
- Involving the water supply and wastewater utilities operating within or planning to operate within those municipalities,
- Including the geographic area of the subbasins whose resources are shared by the municipalities and be based upon maintaining the quantity (e.g., ground water balances and dry weather stream base flows, etc.) and quality (e.g., protection of sources of water supplies from pollutant runoff, etc.) of the water resources of those subbasins;

- Addressing the municipalities' growth and land use management objectives and the utility's (ies') objectives,
- Considering all reasonable options for meeting new needs, including expanded conservation management practices, available capacity in existing systems, and development of new sources,
- Guiding the placement of infrastructure to concentrate growth in designated growth areas and restrict growth in designated rural areas.

APPENDIX 11

TRAFFIC CALMING

TRAFFIC CALMING

As development continues to occur and traffic volumes increase, there will be increased traffic flow on residential streets. Regional methods to reduce traffic volumes include increased utilization of mass transit, internalized trips through mixed use providing increased opportunities for pedestrian and bicycle traffic, supporting efforts to increase automobile occupancy rates, and access management. Local traffic calming techniques can also be considered.

The purpose of traffic calming is to manage movement through an area in a way that is compatible with the land usage in the vicinity of the road. Two fundamental principles of traffic calming are (1) that streets are not just for cars, and (2) that residents have rights. Streets should be made safe for pedestrians and local drivers; and, traffic should not adversely affect the quality of life along the streets.

The general methods of traffic calming include:

- Active speed reduction (construct barriers to traffic movements)
- Passive speed reduction (installation of signage)
- Streetside design (landscaping changes the appearance of the area and driver attitudes)
- Regional planning efforts (external traffic directed to other routes)
- Opportunities for use of alternative modes (mass transportation, pedestrian, bicycle)

The methods available along local streets include active speed reduction, passive speed reduction, and streetside design.

1. *Active Speed Reduction (Construct barriers)*

- a. Speed tables are raised areas in the street surface, which extend across the width of the street. Speed tables, which are really raised pedestrian crosswalks, would be most appropriate in areas with substantial pedestrian traffic.
- b. Changes in roadway surface - This could include rumble strips, milling, and special roadway surfaces. These techniques can increase noise in areas and, probably, raise objections by area residents.
- c. Intersection Diverters - This could involve a barrier placed across an intersection, typically to alter travel plans, such as permitting right turns only, to make travel through a neighborhood more indirect.
- d. Channelization - This could involve provision of pedestrian refuge areas, providing protected parking bays through landscaped islands, altering motor

vehicle traffic movements, and restricting movements at intersections by narrowing the space available for vehicular movement.

The active controls require changes in driver behavior. While the active methods send the message that the street is not just for through traffic, the methods are costly, and likely to be viewed negatively by some of the local users of the streets.

2. *Passive Methods of Control*

- a. Traffic signs such as Do Not Enter, Stop, Not a Through Street, Local Access Only, No Trucks, or signs establishing speed limits, indicating one-way nature of street, or prohibiting turns.
- b. Traffic signals
- c. Pavement markings, including crosswalks, edgelines, and use of different materials for pedestrian crosswalks
- d. Permitting on-street parking
- e. Speed watch

These methods have lower costs and can be applied to certain times of the day, if appropriate. However, signs are often ignored in usage, and enforcement is necessary.

3. *Changing Driver Attitudes Within Neighborhoods*

Building design, street trees, landscaping, street furniture, lighting, paving, and land use can change the driver's perception of a road as not just an area to drive, but as a shared space with pedestrians and other occupants of that area. The intent is to have the driver recognize the street as not just a wide-open roadway designed for benefit of a car, but as a place where residents of a neighborhood will also be using the street. Any designs for streets should be compatible with the character of the neighborhood. Landscaping should be easy to maintain and not affect clear sight triangles.

Implementation

Prior to implementation of any traffic calming program, it is necessary to clearly identify the specific problems which are to be addressed, identify and evaluate the alternative techniques and their drawbacks, benefits, and cost; identify alternative traffic patterns that could result from implementation of the techniques and the effects of those patterns on other streets and neighborhoods; and, involve citizens of the community in the evaluation and selection of techniques. Techniques should not detract from the character or attractiveness of a neighborhood.

APPENDIX 12

SUPPLEMENTAL MATERIALS ON SMART GROWTH TECHNIQUES DISTRIBUTED AT OCTOBER 2004 PUBLIC MEETINGS

Conservation Design

Description

Open space zoning/conservation design is an enhanced variation on the cluster zoning technique in which a higher percentage of the site is dedicated to open space. The purpose of this more advanced technique is to preserve a larger amount of land for conservation uses, while still allowing full-density development.

In contrast to cluster zoning, where the emphasis is more often placed on providing active recreational areas, open space zoning is more suited for protecting farmland, woodland habitat, historic sites, and scenic views. Although it was originally devised for use in rural areas, it can be easily adapted to residential areas.

Under this technique, subdivisions are required to dedicate a significant portion of their unconstrained land to permanent open space uses. House lots, usually for single-family homes, are sited on the remaining parts of the property, where they have views of and access to the open space. The open space is typically owned and managed (according to an approved management plan) by a homeowner association. Other possible owners include land trusts, the municipality, or individuals with large "conservancy lots", which are a form of non-common open space.

Implementing conservation design

Conservation design can be implemented through a municipality's zoning ordinance. The number of dwellings permitted is based on the net acreage of buildable land and the underlying density in the zoning district. Easements are then placed on the open space to ensure that it will not be further subdivided or developed.

Although open space subdivisions can be offered to developers as an option, sometimes accompanied by density bonus incentives to encourage their use, it can be more effective to allow full-density to be attained in projects that follow these design principles, with lesser density available for conventional layouts consisting entirely of house lots and streets.

The best way to ensure that land is protected in a coordinated fashion, to preserve open space networks, is to apply this subdivision design approach consistently throughout a given zoning district.

What can conservation design do for a community?

This technique preserves large open spaces while allowing full-density development. When executed properly, the open space in each new subdivision will ultimately join together to form inter-connected systems of conservation lands.

Cluster Development

Description

Cluster development, also called open space development, lot averaging, or density averaging, is a land use tool used to protect rural character and minimize impacts on resource lands. While accepting the premise that growth will occur, clustering focuses that growth into a smaller area of the tract and preserves the remainder as open space, recreation area, or farmland.

Although the density of development permitted by zoning remains the same, the units are clustered on a smaller portion of the site to preserve land and reduce development costs. Grouping residential units into one area requires less investment to support infrastructure.

Typically, both the lot size reductions and the percentage of open space that is created are fairly modest, often ranging between 20 and 40 percent. Frequently, density is calculated on the basis of total tract area (rather than on actual buildable land area), a practice that inflates the density on parcels containing significant amounts of undevelopable land. In addition, most cluster provisions permit the open space to consist of mostly undevelopable and marginally usable land.

The open space that is protected through cluster design may be owned by a homeowner association, a nonprofit conservation organization (such as a land trust), the municipality, or by a combination of the above. Part of the open space may be divided into large "conservancy lots" that are individually owned.

Implementing cluster development

Cluster ordinances ideally base density on net usable land (or on "Yield Plans") to reflect the number of dwellings that could be built on the property with conventional lot layout. In addition to wetlands and steep slopes, cluster ordinances specify a percentage of the relatively flat, dry land as the minimum required open space, to provide suitable areas for village greens, playing fields, conservation meadows, and even agricultural operations. They sometimes offer a modest density incentive paired with a similarly modest density disincentive applied to conventional layouts.

A factor adversely affecting implementation is the typical designation of clustering as a conditional use, which adds to costs, lengthens the review period, introduces an additional public hearing to which all the neighbors are specifically invited. This increases the uncertainty of approval for applicants. Cluster ordinances are ideally offered as a "by-right" option in the ordinance, subject to numerous but clear and detailed design standards for both the developed portions and the conserved parts of the subdivision.

Clustering does not imply development consisting solely of townhomes, apartments, or condominiums that may be out of place in a rural setting. Single-family homes can be planned, but on down-sized lots that are modeled after traditional villages.

What can cluster development do for a community?

Cluster developments, when well designed according to ordinance standards pertaining to the quantity, quality, and configuration of the open space, can produce very attractive and livable

neighborhoods that preserve noteworthy features of the natural and cultural landscape. They can also reduce construction costs for developers and long-term maintenance costs for the municipality through shorter lengths for streets and utilities.

Cluster developments are well received by homebuyers when the open space is usable, highly visible, and well distributed throughout the neighborhood. Landowners are equally receptive to clustering because it does not limit the volume of development permitted on their property.

Applying cluster development in a community can also help to preserve open space without the expenditure of public funds to purchase the development rights from landowners.

What are the often-cited barriers to cluster development?

Citizens may oppose cluster subdivisions because of their small lots and higher densities as compared to neighboring projects. If the plan is designed correctly, however, the houses will be "buffered" from adjacent parcels that may sit on larger lots. Clustering is not an attempt to increase the number of houses in a project - it simply reallocates the pattern and distribution of structures and roads. If citizens understand the technique, they may be more willing to support it.

Traditional Neighborhood Development (TND)

Description

Traditional Neighborhood Development (TND) is a development pattern that reflects the characteristics of small, older communities of the 19th and early 20th centuries. The focus of the community shifts from the automobile to the pedestrian. Emphasis is placed on the layout of the streets, the building of a variety of housing types with smaller front yards, the more judicious use of open spaces to serve as community focal points, and the appearance of clearly defined streetscapes. TND aims to encourage pedestrian activity -- residents should be able to walk from home, to jobs, to schools, to commercial establishments.

Characteristics of traditional communities

- mixed land uses
- grid street patterns
- pedestrian circulation
- intensively-used open spaces
- architectural character
- a sense of community

What can TND do for a community?

- improve traffic flow
- provide a variety of housing options
- encourage alternative transportation
- create a sense of community
- architectural character
- a sense of community

What are the often-cited barriers to TND?

1. Local fire departments have voiced concern over the narrower streets. They worry that trucks will not be able to fit down the streets. However, this has not posed a problem in some of the traditional neighborhoods that have already been constructed.
2. Obtaining a bank loan can be a difficult process because many lenders specialize in a specific type of development - residential, office, or retail. The developer may be forced to go to different sources to finance his project. Municipalities that support TND can educate bankers about the benefits of such development and encourage lenders to provide financing for projects.
3. Although providing for amenities such as park and village greens can be expensive, this is often offset by the lower costs associated with narrower streets or shorter water and sewer lines.

What role do local officials play? 1. Educate Constituents - A key obstacle to TND projects is citizen opposition. Many residents do not fully understand what traditional neighborhood development implies and are concerned about high-density housing. Local government officials and citizens need to understand the premise of TND before projects are presented for approval. It is necessary to overcome the perceptions that higher density is necessarily more damaging to the

environment and contrary to the community's overall vision. When TND is done properly, higher densities in portions of the development site allow for more overall open space.

2. Amend Regulations - Many existing zoning ordinances are incompatible with the design of traditional neighborhoods. They require large lot sizes, setbacks and off-street parking. Traditional neighborhoods favor small lots and smaller setbacks. Municipalities must be flexible with regulations for developers willing to undertake a TND project. This includes changing standards for street widths, curb radii, and yard requirements which would preclude TND.

One option to revise existing regulations is to establish an overlay zoning district for development in older neighborhoods. In the overlay zone, design standards are created that encourage compatible new construction and additions in traditional neighborhoods. The overlay zone makes exceptions to development standards that are designed to create modern suburbs.

3. Protect existing traditional neighborhoods - The style and character of existing traditional neighborhoods are often threatened by zoning ordinances that would allow new buildings of different density, form, and scale to be erected in the neighborhood. Municipalities should ensure their zoning ordinance requires suitable lot sizes and setbacks, permits a mix of uses, allows off-street parking behind or beside commercial buildings, and ensures that new streets are built with similar widths and curb radii.

4. Encourage commercial activity - Municipalities can pave the way for developers to design traditional neighborhoods, but to be successful, the plans should provide for the "Village Center" from the outset. Amenities, such as retail and commercial, make the community more attractive and housing units easier to sell.

Overlay Zoning

Description

An overlay zoning district applies regulations to an area in addition to and superseding the requirements of the underlying zoning district(s). Such a district may recognize unique features, either natural or man-made, requiring special attention, or may facilitate development of a special character.

Implementing overlay zoning

Overlay zoning allows regulations to be tailored to specific conditions. Administration is the same as any zoning district.

What can overlay zoning do for a community?

In general, the provisions of a zoning district must apply uniformly to each class of uses or structures within each district. However, Section 605 of the MPC authorizes additional classifications, potentially through the use of overlay zoning, for:

- Making transitional provisions at and near the boundaries of districts;
- Regulating nonconforming uses and structures;
- Regulating, restricting, or prohibiting uses and structures at, along or near:
 - major thoroughfares, intersections and interchanges, transportation arteries and rail or transit terminals
 - natural or artificial bodies of water, boat docks and related facilities
 - places of relatively steep slope or grade, or other areas of hazardous geological or topographic features
 - public buildings and public grounds
 - aircraft, helicopter, rocket and spacecraft facilities
 - places having unique historical, architectural or patriotic interest or value
 - floodplain areas, agricultural areas, sanitary landfills, and other places having a special character or use affecting and affected by their surroundings;
- Encouraging innovation and the promotion of flexibility, economy and ingenuity in development, including subdivisions and land developments, and for the purpose of authorizing increases in the permissible density of population or intensity of a particular use based upon expressed standards and criteria set forth in the zoning ordinance; and
- Regulating transferable development rights on a voluntary basis.

Transfer of Development Rights (TDR)

Description

Transfer of Development Rights (TDR) is a land use management tool used by local governments to support the achievement of overall comprehensive planning goals. Such community goals may include the protection of agricultural, forested, and environmentally-sensitive lands, as well as historic sites. Although specific TDR programs differ from municipality to municipality, the general premise of any program remains constant - - TDR programs are designed to transfer the development potential from certain types of land to areas designated for growth.

TDR revolves around the idea that ownership of land entails ownership of a 'bundle of rights' (i.e., the right to access, to mine mineral deposits, to lease land for farming, etc.). The landowner's use of the rights contained in his "bundle" is limited by many factors, including zoning and land use restrictions, building code provisions, environmental constraints, and other public policy restrictions.

TDR establishes a market-driven, incentive-based mechanism by which it becomes possible to sell development rights without actually buying or selling the land.

A successful TDR program will simultaneously maintain land values and protect vital resources while effectively implementing municipal land use regulations.

The Purchase of Development Rights (PDR) is similar. However, with PDR's, an entity (either alone or jointly) buys the right to develop land from the landowner. The landowner retains the use of the land, and receives tax benefits. The municipality can pass a bond issue to buy the rights and 'bank' them. A developer may purchase the development rights from the municipality when he wishes to develop an area with high density. The municipal bond financing which was entered into to purchase the rights is paid off over the years by the purchase of the development rights, as development occurs.

What can TDR do for a community?

- help to achieve overall community growth and development goals
- compensate landowners for growth and development restrictions
- allow developers to build at higher densities and perhaps increase their profit margins

Implementing TDR programs

While the MPC authorizes the development of a system for transferring development rights, it does not provide a procedure for how the transfer is to occur. It is up to each municipality implementing TDR to set up a mechanism to accomplish the transfer. The easier it is to transfer development rights, the more likely it is that the program will be successful.

Implementing a TDR program requires a complete understanding of the real estate and development market of the municipality and surrounding areas. This information is necessary for setting up the details of a TDR program - the number of development rights per acre, the amount

of increased density allowed through use of TDR's at the receiving site, etc. in a manner that makes the TDR program work for both buyers and sellers.

What are the often-cited barriers to TDR?

- high-density development is perceived as unpopular
- potential for higher taxes in receiving areas due to the increase in services that are needed to accommodate additional growth and development
- start-up costs to implement a TDR program can be costly

APPENDIX 13

**HISTORICAL RESOURCES
HISTORICAL BACKGROUND
HISTORICAL MARKERS**

Pike County's Historical Resources

<i>Map ID</i>	<i>Municipality</i>	<i>Name of Site</i>	<i>Description of Historic Resource</i>
BGT01	Blooming Grove Township	The Bethany - Dingman's Choice Turnpike	Old Road - Stage coaches and wagons used this highway to travel between Bethany (Wayne County) and Dingman's Ferry on the Delaware.
BGT02	Blooming Grove Township	The Lord House	Commodious hotel, built by Simeon Lord in response to the traffic on the turnpike. A State Historic Site
BGT03	Blooming Grove Township	Lord's Valley School	The property upon which this grammar school rests was donated to the school district in March, 1888 by the Lord family. This building gives a good indication of what grammar school facilities in Pike County were like in the past.
BGT04	Blooming Grove Township	Boiling Spring	This spring, located a short distance in the woods along Spring Road, has water emanating from underground sources which is under pressure and when it surfaces, it appears to be boiling out of the white sand bottom.
BGT05	Blooming Grove Township	Blooming Grove Hunting and Fishing Club/Blooming Grove Park Association	The original organizers of this private sporting preserve were able to acquire 12,000 acres including 8 lakes within walking distance of each other. The Association was officially incorporated in March, 1871. They had the privilege of creating game regulations entirely independent of state game laws for any lands which they owned or leased to raise and have their members hunt native and exotic game. It has preserved the Pike County wilderness in this area. Now the Club owns 20,000 acres and has acquired the Westbrook House.
BGT06	Blooming Grove Township	The Westbrook House	A two-story frame house which was built in 1870 is located on the south side of Route 51019, between Spring Road and Route 402. Solomon Westbrook came to the area in 1827. He established himself in the flourishing lumber trade by rebuilding an existing sawmill. When the horse and buggies used the Bethany-Dingman's Choice Turnpike, the Westbrook house served as an inn.
BGT07	Blooming Grove Township	Good Shepherd Catholic Church	Inspired by William C. Shanley, who originally saw the need for a Catholic Church in the area, and built by his widow, Mrs. Mary Shanley in 1926 as a memorial for her late husband. Constructed completely out of native stone and it is an exact replica of a gothic country church in England. All the work on the church was done by local artisans and laborers except for the stained glass windows which were done by the Deprado Studios of Italy.
BGT08	Blooming Grove Township	The Blooming Grove Baptist Church	The oldest church of any denomination in the township. June 10, 1901, a dedication service was held for Blooming Grove's first church.
BGT09	Blooming Grove Township	Kleinhans' Tannery	Jacob Kleinhans obtained approximately 4,000 acres from William H. Nyce, to build a tannery on the Blooming Grove Creek in 1851. Using bark from hemlock trees, he tanned shoe leather in his 50 vats. Today, a small portion of the original foundation can be seen behind the Blooming Grove Tavern.
BGT10	Blooming Grove Township	Home of Robert Smith	Two-story frame house of Robert Smith, a respected citizen, who, until the age of 84, manned the fire tower on High Knob.
BGT11	Blooming Grove Township	Estate of George M. Brewster/Hemlock Farms	This private country estate belonged to George M. Brewster. He and his family owned the Brewster Construction Company, which built the Pike County section of Route 402. Originally comprised of more than 4,000 acres, the Brewster's maintained the property as a steer ranch and as a retreat for family, friends and business associates. He dredged and dammed the area to create present day Hemlock Lake. It was later sold to Western Heritage Properties Limited, a Canadian based firm, which became the initial developer of the present day Hemlock Farms.
BGT12	Blooming Grove Township	The Brewster Tower (at entrance to Lord's Valley Country Club)	A medieval looking structure provided a panoramic view of the lake and surrounding lands and also housed electric generators which gave the George M. Brewster estate electricity before public utilities existed in the area.
BGT13	Blooming Grove Township	Brewster's Steer Barn	Just off Hemlock Farms Road, on Basswood Drive is this original structure. George M. Brewster owned this steer barn and was located on his estate property. The building has been completely renovated by the Hemlock Farms Association and is used as a community activity center.
BGT14	Blooming Grove Township	High Knob	The highest point of the Township, it forms the southern edge of the Notch. It registers an altitude of 2,022 feet above the sea level.

Map ID	Municipality	Name of Site	Description of Historic Resource
BGT15	Blooming Grove Township	The Tarkill Forest Demonstration Area	A nature education center located within the Delaware State Forest, it has 30 acres, 2 trails and trees are marked with signs indicating their names along with information concerning the forest in general. There are more than 40 species included in the demonstration area.
BGT16	Blooming Grove Township	Old Route 402	This section of Route 402 was bypassed in more recent times. This section of the road borders Peck's Pond. Half lies within Blooming Grove and half lies in Porter Township. Parking and access to fishing areas are available here.
BGT17	Blooming Grove Township	Owego Rest Area	This facility is approximately 1.5 miles west of Route 739 on Route 6. Restrooms, picnic areas, and fire pits are provided for public use. It borders the Delaware State Forest and primitive camping is allowed with a permit obtained by the Bureau of Forestry's Owego Trail Headquarters.
DELT01	Delaware Township	Dingman's Bridge and Dingman's Ferry River House	Andreas Dingmans built a flat boat to cross the Delaware River to his land. Later he operated a ferry charging others a small fee to cross the river. In 1834 the Ferry, later "The Dingmans' Bridge" was chartered by PA and NJ states. In 1979 the Bridge and House became a Pike County Historical Site.
DELT02	Delaware Township	Dingman's Ferry Dutch Reformed Church	Built in 1850, it is now under private residence and on the National Register of Historic Sites..
DELT03	Delaware Township	Marie Zimmerman Farm	The Zimmerman Farm Complex is located on a tract of land comprising almost 1,300 acres on a broad sloping hillside off U.S. Rte. 209. The main house dates back from ca. 1910 is a large 2 ½ story stone house and to the rear, perpendicular to the main section, is a 2 story wing, also of cut fieldstone. There is a barn on the site which was also constructed around the same time as the main house. A large fieldstone workshop is connected to one end, a wagonshed to the other end, and in the rear is an elongated wooded section, with a large wooden silo. In addition to these main features, there is another slightly smaller frame barn and an undistinguished frame house (built in 1920's) thought to house the tenants. On the National Register of Historic Places.
DELT04	Delaware Township	Sproul Hydroelectric Generating Plant	The generating plant consists of three basic features: a dam, penstock and powerhouse. It's Period of significance is in the 1920's and its areas of significance is its engineering and architecture. Eligible for National Register of Historic Places.
DELT05	Delaware Township	The Crane House	This house was built in the late 19th century. The overall character of the house and grounds, however, derives from features which appear to have been added during the early decades of the 20th century. It was used as a summer resort and recreational area for residents of the metropolitan regions of New York and Philadelphia and it possesses long-term association with the development of the Delaware Water Gap area.
DELT06	Delaware Township	Dingman's Falls and Access Road	Eligible for the National Register of Historic Sites.
DELT07	Delaware Township	Sproul Caretaker's House and Stable	These buildings are located in a largely wooded area on Delaware Township Road 358. The area was once part of a larger holding acquired by PA governor William C. Sproul in the 1920's for use as a private hunting and fishing reserve, later known as "Song Brook". Eligible for the National Register of Historic Sites.
DELT08	Delaware Township	Camp Log and Twig Historic District	Eligible on the National Register of Historic Places, this District represents a good example of a historic camp, containing buildings for group assembly and individual cabins, that has experienced few alterations since its opening. Most of the buildings in the camp appear to be historic.
DELT09	Delaware Township	Emery House	The Emery House is an almost totally unspoiled example of a mid 19th century Pike-County farmhouse. The house retains intact interior details. Located within the United States Army Corps of Engineers TIL Tract #8901 (within the Delaware Water Gap National Recreation Area.

Map ID	Municipality	Name of Site	Description of Historic Resource
DELT10	Delaware Township	St. John's the Evangelist Episcopal Church	This church was erected in the late 18th century (1887). Typical of the "Carpenter Gothic" style of churches. This particular example, with the exception of an addition for the organ, retains most of its original fabric, thus providing a good example of this type of building. Since the Church was located in the Village of Dingmans Ferry, the building was razed to make way for the now defunct Tocks Island project.
DNGT01	Dingman Township	Delaware Water Gap National Recreation Area	On September 1, 1965, the act authorizing the establishment of this area was signed into law by President Lyndon B. Johnson. Several historic buildings, including the Hotel Shannon, McCarty House and Callahan House area are within the Federal property area.
DNGT02	Dingman Township	Callahan House	In August of 1979 this house was placed on the National Register of Historic Sites. It is one of the best preserved examples of the earliest type of frontier house on the PA side of the Delaware River. This building was once an inn on the old turnpike and reputedly served as a hiding place for escaped slaves on the underground railroad.
DNGT03	Dingman Township	McCarty House	This house is a 1½-story dwelling set on the west side of U.S. 209. This house is a significant remnant of the 18th century domestic architectural tradition in the Delaware Water Gap region.
DNGT04	Dingman Township	Cliff Park Inn	The Cliff Park Inn resort is located on the east side of the Bushkill-Milford Road, south of the Borough of Milford. The property consists of a main hotel or resort building, surrounded by a golf course and private residential accommodations. This typifies the resort industry in Pike County as it evolved from the late 19th century into the 20th century.
DNGT05	Dingman Township	Alonzo Kline Property	Eligible for the National Register of Historic Sites. Located South side of S.R. 2001 West of Milford Borough Line.
DNGT06	Dingman Township	Union School	Dating from 1850, was located at the intersection of SR2001 and Raymondskill Road, moved to its present location on Fisher Lane and serves as the original structure for the renovated and expanded Dingman Township Offices.
DNGT07	Dingman Township	Hotel Shanna	On the National Register of Historic Sites with the periods of significance from: 1825-1849, 1900-1924, 1925-1949 for its use of a hotel.
DNGT08	Dingman Township	Brodhead Monument	Located in Milford Cemetery, erected in 1872, this monument honors Daniel Brodhead, an officer in the Revolutionary Army. Col. Commandant of the Western Military Dept. from March 1778 to Nov. 1781. He received the unanimous thanks of Congress for his efficient services. He was a friend and confidant of Washington and for many years Surveyor General of Penna. He died at Milford.
DNGT09	Dingman Township	Minisink Archeological Site	Eligible for National Register of Historical Sites. Site of Village of early inhabitants of the County, located in National Recreation Area.
DNGT10	Dingman Township	Wells Property	Eligible for National Register of Historical Sites. Site of a mill dating from 1700's.
GRNT01	Greene Township	Hemlock Grove United Methodist Church	Built in 1875, this church was named after the beautiful grove of hemlock trees fronting the church.
GRNT02	Greene Township	LaAnna Church	Built in 1898, this church was built over a two-year period for the sum of \$2,000. It was built primarily to serve the lumbering community. Named after LaAnna Houck, wife of Nathan (one of the land owners who donated their land for the church).
GRNT03	Greene Township	Greentown Historic District	Potentially Eligible Historic District; located on Route 507, slightly more than one mile south of I-84, it has a cluster of 4 buildings at the intersection of Brink Hill Road and Hemlock Grove Road, which are the only remaining structures which really depict the Town's historic character of a time long ago.
GRNT04	Greene Township	La Anna Village Historic District	Eligible for the National Register of Historic Sites, this village is laid out in a linear fashion, consisting of approximately 10 to 15 late 19th century buildings, including a vernacular church with Victorian details (built in 1898), a historic bank bar, and a pottery factory. La Anna retains both the variety of buildings and level of integrity necessary to convey the history of a late 19th century village.

Map ID	Municipality	Name of Site	Description of Historic Resource
LWNT01	Lackawaxen Township	Zane Grey's House	Home of the prolific western novelist, Zane Grey. Grey began writing novels here in 1905. He left Lackawaxen Twp. in 1918 to go to California to assist in the projection of films based on his books. His home is maintained as a museum containing original manuscripts and many mementos of the author's life. On the National Register of Historic Sites.
LWNT02	Lackawaxen Township	The Delaware House	Lackawaxen's first hotel. Reputedly built by William Holbert in 1852, it was located on the point that Camp St. Vincent now owns (across from the Grey House).
LWNT03	Lackawaxen Township	Roebing Aqueduct / Delaware Aqueduct	John Roebing, more widely known as the engineer of the Brooklyn Bridge, built the aqueduct in 1848-49 for the D & H Canal Company. Currently it is used as an auto bridge. It is considered the oldest suspension bridge in service today. On the National Register of Historic Sites.
LWNT04	Lackawaxen Township	Roebing Inn	A Greek Revival style of Architecture. Used as a Single dwelling and a hotel. The period of significance is 1850-1874, 1875-1899
LWNT05	Lackawaxen Township	St. Mark's Lutheran Church	Erected in 1848, St. Marks was first used as a Union church open to all denominations.
LWNT06	Lackawaxen Township	Lackawaxen Cemetery and Burial site of the Unknown Soldier of the Revolutionary War	Directly in front of the St. Mark's Lutheran Church. The body buried here was a militia man killed during the Battle of Minisink, July 22, 1779. One of the oldest cemeteries in the river valley. Contains the graves of author Zane Grey and his wife, Dolly, whose home (a National Park Service Site) is nearby.
LWNT07	Lackawaxen Township	Delaware and Hudson Canal	On the National Register of Historic Places for the Architecture/Engineering. The period of significance is 1825-1849, 1850-1874. Its Historic function is Industry/Processing/Extraction, and Transportation.
LWNT08	Lackawaxen Township	D & H Canal Company Office	The handsome building at the turn in the road (white clapboard with black shutters and green roof) was built by the D & H Canal Company and used as their office when the canal was in operation. On the National Register of Historic Sites.
LWNT09	Lackawaxen Township	St. Mary's, the Catholic Church	Constructed in 1863, perched on the hillside above the Lackawaxen school, the church is visible from almost any location in the village.
LWNT10	Lackawaxen Township	Lackawaxen Aqueduct	In many areas, the stone work of the canal walls and locks have remained intact throughout the years.
LWNT11	Lackawaxen Township	The Store at the Corner in Rowland	This marks the approximate location of the original establishment of the Honorable George H. Rowland.
LWNT12	Lackawaxen Township	The Bethel Lutheran Church	Located one mile west of Rowland, this church was originated in 1925.
LWNT13	Lackawaxen Township	The Mt. Moriah Cemetery	This is the last landmark on the "towpath" included in the Township. Overlooking the "Narrows" of the Lackawaxen River, this old cemetery is the burial place of many of the area's earliest inhabitants.
LWNT14	Lackawaxen Township	West Colang House	At the turn of the century, this building was a popular resort for New York City and Philadelphia vacationers. A 1900 advertisement listed rooms for \$2.00 - \$2.50 and featured running hot and cold water.
LWNT15	Lackawaxen Township	West Colang Lake Area	This area is derived from the Indian nomenclature meaning "Lake on Top of the Mountain." It is a natural highland lake and ringed with quaint cottages that date back to the early part of the 1900's when the charms of this placid lake were well known.
LWNT16	Lackawaxen Township	Holbert Mill Pond and Dam	Still visible from the road, a grist and saw mill was operated here by Frederick Holbert. This area has a "make-shift" cemetery of 30 + graves. There are unmarked slate grave stones of slaves who worked the Grimes farm that once existed at this end of the lake.
LWNT17	Lackawaxen Township	The Selden Manor House	This house was built in Mast Hope in 1848, the same year the railroad came to Pike County. The Seldens, wealthy shipping magnates of New York and Liverpool, bought a sizeable tract of land and built a forty room hotel modeled after their Georgian manor in England. Today the only intact remnant of the Manor House is the cupola residing atop the debris of this once exquisite building.

Map ID	Municipality	Name of Site	Description of Historic Resource
LWNT18	Lackawaxen Township	The Mast Hope Plank House	This building pre-dates the Selden Manor House/hotel by a few years. This building was used originally to house the carpenters and keep materials needed to construct the Manor House. It is of plank construction using walls of vertical boards rather than studded frame.
LWNT19	Lackawaxen Township	Sylvania Association	Just below the marker, alongside a small stream, is the foundation of the Sylvania grist mill. The historical sign near the junction of routes 434 and 590 marks the approximate location of the community which originally owned about 7,000 acres. The sign there is incorrect. The Association did not belong to Greeley and certainly the group did not disband merely as a result of a freak July frost. Rather, it seems that poor planning, financial difficulties and a lack of a firm commitment on the part of the members all contributed to the experiment's failure.
LWNT20	Lackawaxen Township	White Hall	The oldest existing building in the Township is found at the intersection of Route 590 and the Welcome Lake Road. It is the white clapboard house that stands in the northwest quadrant formed by the intersecting roads. Built in 1820 by the Hammer brothers of Philadelphia, the original homestead included the present day structure plus a dam and saw mill. The stone work from the saw mill is still visible on the opposite side of Route 590, adjacent to the small stream.
LWNT21	Lackawaxen Township	Dan Beard Outdoor School for Boys	Approximately one mile north of White Hall on the shores of Lake Teedyuskung is the original location of this school. Daniel C. Beard was a noted illustrator, author, and youth leader. In 1882, he illustrated Mark Twain's <u>A Connecticut Yankee in King Arthur's Court</u> . He is more widely known for his movement in the formation of the Boy Scouts in England and in the U.S. He is credited with designing the Boy Scouts hat, shirt, and neckerchief. Two of the camp buildings still remain today.
LWNT22	Lackawaxen Township	Forest Lake Club	Located ½ mile north of Woodloch Pines, this private club has been maintained as a private hunting, fishing and golf club for around a century with total land holdings in excess of 4,000 acres.
LWNT23	Lackawaxen Township	Church of the Assumption	One of the oldest churches in the river valley. Retains good architectural integrity, with architectural detail unusual in this area. Cemetery dates to canal era in Lackawaxen, including graves of early canal and railroad workers.
LWNT24	Lackawaxen Township	# 9 Bridge, Erie Railroad	Built from 1885-1895, this railroad bridge is a significant example of late nineteenth century metal truss bridge building technology associated with a period in which railroad capacity was systematically upgraded to accommodate larger and heavier trains and greater speeds.
LWNT25	Lackawaxen Township	David Mason/Mordecai Roberts House	Stone home determined eligible for listing on the National Register of Historic Places. Historically known as the Mordecai Roberts House and currently owned by Mason, the home was constructed in 1791 and is located at the corner of Church Road and the Towpath Road in Lackawaxen Township. Mordecai Roberts served in the Revolutionary War, was a messenger for General George Washington and also served as Pike County Commissioner.
LWNT26	Lackawaxen Township	Boeckelman's Mountain House	This private 3 ½ story building used to be a hotel, currently not in use.
LWNT27	Lackawaxen Township	Old Lackawaxen School	This one-room schoolhouse, now turned domestic single family dwelling was once used as a school in the Township.
LWNT28	Lackawaxen Township	John Smith Store	Corner of Rte. 590 & Lackawaxen Road, this 3 ½ story once commercial structure was built in 1875. It is now used as a multiple residential dwelling unit.
LWNT29	Lackawaxen Township	Zane Grey's Mother's House	This single family 2-story house was the house of Zane Grey's mother. There have been significant additions and renovations which keep it off the National Register of Historic Places. It was originally built in 1905.
LWNT30	Lackawaxen Township	Stone Co. Office & House	This property would be the only structural remnant of the stone quarrying industry in this part of Pike County. This industry brought Pennsylvania bluestone from this area to pave the sidewalks of New York, the curbstones of Havana, and flagstones of cities throughout the eastern United States.

Map ID	Municipality	Name of Site	Description of Historic Resource
LHMT01	Lehman Township	Brodhead Farm/ "Wheat Plains"	Period of significance 1750-1799, 1850-1874, 1845-1899. This was named for the wheat raised nearby. Farm of Richard Brodhead, a nephew of General Brodhead of the Revolutionary War.
LHMT02	Lehman Township	The Dutch Reformed Church of Bushkill	Built in 1874 replacing an earlier structure. The church grew from missionary work done in 1737 in which year Rev. George Mancius of Kingston organized Dutch Reform Churches in the Minisink area.
LHMT03	Lehman Township	Peters and the Turn Family Buildings	Now owned by the National Park Service, these are among the most historic properties in Pike County. The original Peter's house is believed to have been built in 1746 and the town store about 1837.
LHMT04	Lehman Township	Peters House (Corner Gift shop/ Antique Store, Bushkill)	The original section has been reputed to have been constructed in 1746 and is a 2-story frame structure with a fieldstone foundation. This 18th -century wing is a most nearly perfect example of this period on the PA side of the recreation area. Very few original interior elements are missing. It is the oldest house still standing in the village of Bushkill.
LHMT05	Lehman Township	Old Tin Smith Shop - General Store - Turn's Bushkill General Store	Located in Bushkill, this complex is significant because it represents and illustrates the growth of Bushkill as a commercial center serving the local agricultural economy during the 19th century, and its transition during the 20th century into a service center for the growing resort, tourist and vacation industry in the area. On the Register of Historic Sites.
LHMT06	Lehman Township	Nyce Farm/ Van Gordon House/ Eshback Farm Complex	This complex is a cluster of seven buildings, and is significant as a link in the historical development of the prosperous agricultural society in the Pennsylvania river bottom area of the Upper Delaware Valley. It has been on of the most continuously prosperous tracts of land in the vicinity and is one of the best preserved in terms of historic and architectural integrity. On the National Register of Historic Sites.
LHMT07	Lehman Township	The Bushkill Gristmill/ Peter's Mill	This is the last well preserved example of an important, and in this area, at least, an endangered architectural and technological species. The small, stream-powered mill was one of the prototype early structures. The present structure appears to date from about 1790. On the National Register of Historic Sites.
LHMT08	Lehman Township	The Bushkill School	Although not eligible for National Register of Historic Places, this school was built in 1925. As originally constructed, the plan of the schoolhouse interior provided a tee-shaped passage, four classrooms and two toilet rooms. It is now used as office and curatorial storage space by the National Park Service.
LHMT09	Lehman Township	The Costello House	Although not eligible for the National Register of Historic Places, this house represents early 19th century architecture for single family, 1 ½ story homes.
LHMT10	Lehman Township	The Bensley House	This house is an important link in the more than 2 century architectural history of the Upper Delaware Valley. The house is in excellent condition, and preserves almost every detail from the period of its construction, down to the original kitchen cookstove.
LHMT11	Lehman Township	The Bushkill Post Office	Although not eligible for the National Register of Historic Places, this post office would constitute a contributing element if a historic district would be established in the Village of Bushkill. The building was constructed in 1932.
LHMT12	Lehman Township	The Unity House - I.L.G.W.U.	This house grew from the desire of the International Ladies' Garment Workers' Union to have an inexpensive place for members to vacation. The Forest Park Hotel had been owned and operated by Richard Lederer and sold in 1919 to over 3000 union members who paid \$25 each. It had burned and been rebuilt several times, the last was in 1972. Now the home to the Mountain Laurel Performing Arts Center.
LHMT13	Lehman Township	The Pigeon Roost School	Located on the corner of the Briscoe Mountain Road and Factory Road.
MATB01	Matamoras Borough	Hope Evangelical Church	Built in 1892 and is located on the corner of 1st St. and Ave. H. in Matamoras Borough.
MATB02	Matamoras Borough	Methodist Church	Built in 1891 and is located on the corner of 3rd St. and Ave. H. in Matamoras Borough.

Map ID	Municipality	Name of Site	Description of Historic Resource
MATB03	Matamoras Borough	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.
MATB04	Matamoras Borough	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.
MATB05	Matamoras Borough	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.
MATB06	Matamoras Borough	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.
MATB07	Matamoras Borough	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.
MATB08	Matamoras Borough	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.
MATB09	Matamoras Borough	Matamoras' first graded school	Built in 1879 at the corner of Ave. G and Third St.
MATB10	Matamoras Borough	Matamoras Elementary School	Built in 1923 and at one time also served as the high school.
MATB11	Matamoras Borough	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.
MATB12	Matamoras Borough	Old Stone House / Simon Westfall 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.
MATB13	Matamoras Borough	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.
MILB01	Milford Borough	Jervis Gordon Mill Historic District (1985) / Milford Downtown Historic District	Roughly along Broad, Harford, Ann, Catherine, High, and Fourth Sts. in Milford Borough. The Jervis Gordon Mill Historic District was established first incorporating Water St., Mill St. & 7th St., prior to the Milford Borough Historic District designation in 1998. Is identified on the map as one contiguous district.
MILB02	Milford Borough	101 East Harford St. - Dimmick Inn	Built in 1856, this Greek Revival Inn was built by Samuel Kimmick replacing a structure built in 1828 which was destroyed by fire. Samuel served as County Treasurer, Commissioner and Justice of the Peace. The Inn could accommodate 50 guests.
MILB03	Milford Borough	201 East Harford St. - Harford-Smith House	Built in 1740 by Robert Harford, this is the oldest house in Milford.
MILB04	Milford Borough	208 East Harford St.	This 3-story gabled roof commercial building was built in 1823 and was once part of the Sawkill House Hotel which as been razed.
MILB05	Milford Borough	200 East Harford St.	This structure was built in 1850 and is the only brick Greek Revival in Milford. This building was used commercially as a general store in 1885, a grocery in 1905, and the Milford Steam Laundry in 1928. The front side walls were removed to create a drive through for an automobile service station.

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MILB06	Milford Borough	204 Fourth St. - Wallace Building - Masonic Hall	Built in 1875 it is a three-story brick Italianate town building used as a general store for John H. Wallace. The original store front is still intact, except the front door. In 1901 it became home to the Milford Masonic Lodge.
MILB07	Milford Borough	202 Forth St. - Milford Water Company Building	Built in 1860, this one story shotgun form used as a commercial building was moved to its present site when the Wallace Building was erected.
MILB08	Milford Borough	120 East Harford St. - John H. Wallace House	Built in 1885, was home of merchant Wallace. The Borough Council first met here in the 1870;s. Mr. Wallace became head of the Milford Water Co. (est. 1845).
MILB09	Milford Borough	116 East Harford St. - John A. Friedline House	Built in 1814, this narrow three ranked shotgun form, one room wide with three front windows has a massive Greek temple-front. It has a penny instead of a cornerstone to tell the year in which it was built, found on the northeast window sill.
MILB10	Milford Borough	110 East Harford ST. - Pinchot-Sum House/ Cyrille C.D. Pinchot House/ Milford Community House	Built by Cyrille C.D. Pinchot (grandfather of Governor Gifford Pinchot) in 1862. It is an Italianate and has some blending of Greek Revival details. The house is significant for the benefactory role of the Pinchot family toward the Milford Community. In addition, the dwelling is a striking example of Greek Revival style architecture.
MILB11	Milford Borough	108 East Harford St. - Bull Law Office	Built in 1879 for Cornelius Bull Esq., his son George and later Karl Wagner, Sr.
MILB12	Milford Borough	106 East Harford St. - Gulick/Hoagland House	Built in 1865 as a residence for Mary Gulick/Hoagland and acquired from Cyrille Pinchot in 1844.
MILB13	Milford Borough	201 Broad St. - Pinchot Homestead	Built in 1820 in the Georgian style as a wood-frame structure. In 1926 it was altered with the addition of imposing Neo-Classic details. Used as the first hotel and store, today it is known as the Community House and Pike County Library.
MILB14	Milford Borough	219 Broad St. - Normandy Cottage	Built in 1903 on the original Pinchot family garden by James Pinchot for his son Amos.
MILB15	Milford Borough	219 Broad St. - Normandy Cottage House	On the corner of Blackberry Alley and Peaer Alley, this structure has an unusual corner entry and single round window which it relates it to the back door of the cottage.
MILB16	Milford Borough	104-108 East Ann St. - Van Etten Building	Built in 1912, this three story concrete block, commercial storefront building with broad gambrel roof. It housed the Masonic Lodge on the second floor.
MILB17	Milford Borough	401 Broad St.- Hotel Fauchere & Annex	Built in 1880 as a plain Italianate by Louis Fauchere, former chef of Delmonico's Restaurant in New York City, this resort hotel was host to a myriad of famous guests. It is on the National Register of Historic Sites.
MILB18	Milford Borough	403 Broad St. - Emerson House	Built in 1902, this is a typical Queen Anne style having a hipped roof with gable dormers, two tower forms in the façade, and free use of classical elements. It was built by prominent local Dr. R.E. Eerson. In 1907 Fauchere acquired it for the Fauchere Annex. It is on the National Register of Historic Sites.
MILB19	Milford Borough	409 Broad St. - Terwilliger House - Tom Quick Inn	Built in 1880, this Second Empire, three-story hotel was owned by Amanda Beck Terwilliger.
MILB20	Milford Borough	411 Broad St. - Center Square House	Built in 1882, a Second Empire hotel built by George A. Friehe, an Alsatian, and operated by his wife Louise, who was the daughter of the proprietor of the Vandermak Hotel (since demolished). The two hotels were joined together becoming Robert Phillips' Tom Quick Inn in 1950.
MILB21	Milford Borough	Center Square- Judge Biddis Memorial	Located near the Tom Quick Inn, the memorial tells the story of the town's founder and rests on one of the four lots he set aside to create the square. Several other important monuments are located nearby.
MILB22	Milford Borough	501 Broad St. - James S. Wallace House	Built in 1835 originally as a Greek Revival, this structure has been added to many times. James Wallace became the leading merchant and one of the organizers of the Presbyterian Church.
MILB23	Milford Borough	500-2 Broad St. - Original Pike County Court House	Built in 1814, this vernacular Georgian style structure is the second oldest courthouse in Pennsylvania and served in that capacity until 1874 when the present day court house was completed. It then served as the County jail.

Map ID	Municipality	Name of Site	Description of Historic Resource
MILB24	Milford Borough	412-14 Broad St. - Pike County Court House	Built in 1874, this structure is a blend of Second Empire and free classical elements, and designed by architect George Barton and built by Abram D. Brown. It is on the National Register of Historic Sites.
MILB25	Milford Borough	410 Broad St. - Kenworthey House	Built in 1898 by A.D. Brown. A Queen Anne style structure, it was home Philadelphia physician William B. Kenworthey.
MILB26	Milford Borough	406 Broad St. - Ebenezer Warner House.	Built from 1890-91. This eclectic Victorian house was built by one of the area's first scientific farmers. He was also the founder of the First National Bank at Milford.
MILB27	Milford Borough	105 West Catharine St. - "Milford Dispatch"	Built in 1915 out of native cobblestone and built by Andrew & Joseph Snyder. Presently home of the county newspaper first published in 1825.
MILB28	Milford Borough	109 West Catharine St. - Milford Borough Building	Built in 1899 by E.S. Wolfe (who also built Forest Hall) and trimmed with indigenous blue stone. This material is often seen on local historic structures and sidewalks of Milford. When first built, its tower was capped with an open metal tower for the fire alarm bell.
MILB29	Milford Borough	320-22 Broad St. - Brown Building - Bloomgarden Building	Built in 1888 by A.D. & B.C. Brown, this Italianate commercial building once housed the local bank, and a succession of department stores.
MILB30	Milford Borough	312 Broad St. - Emerson Drug Store	Built in 1889 with original Italianate front, built next to the Fauchere for R.E. Emerson, a physician and pharmacist. The building was later moved to this site.
MILB31	Milford Borough	300 Broad St. - First Presbyterian Church	Built in 1874 by architect George Barton. It is a Romanesque revival with locally produced bricks by John Wallace. The bell-tower and "town clock" were donated in 1887 by Illinois Lt. Governor William Bross-the first signer of the constitutional amendment abolishing slavery.
MILB32	Milford Borough	222 Broad St. - First National Bank	Built in 1929 as a Colonial Revival style brick building, trimmed with limestone and has been remodeled twice. Originally, the bank opened in the Brown Building in 1900 and later moved to the Forest Hall Building.
MILB33	Milford Borough	220 Broad St. - Jonathan Brink House	Built in 1826, this residence is typical of the area.
MILB34	Milford Borough	206-16 Broad St. - Forester's Hall	Built in 1904 of the Beaux-Arts tradition, this monumental 2 ½ story masonry building designed by Hunt & Hunt for James Pinchot (his son Gifford was a proponent of forestry study.) In conjunction with Pinchot's Grey Towers, this is considered the birthplace of the Conservation movement. At one time it was the summer school for Yale University School of Forestry. It is listed on the National Register of Historic Sites.
MILB35	Milford Borough	200 Broad St. - Original Milford Post Office	Built in 1863, designed by Calvert Vaux (architect of the original façade of the Metropolitan Museum of Art) of native blue stone with Gothic Revival style, for James Pinchot to house the Milford Post Office and pharmacy. It is listed on the National Register of Historic Sites.
MILB36	Milford Borough	107 Harford St.	Many structures of this type served commercial purposes. This one was moved from Broad St. in 1904 when construction of Forest Hall began.
MILB37	Milford Borough	105 West Harford St. - James Alfred Myer Studio	Built in 1885, a one-story vernacular building was previously located across the street. It was owned by James Myer, a prominent Philadelphia photographer who summered in Milford.
MILB38	Milford Borough	150 Water St. - The Upper Mill	Built on the site of an earlier mill by Jervis Gordon in 1882. This mill still has an operating water wheel and is on the National Register of Historic Sites.
MILB39	Milford Borough	608 Broad St. - The Columns	circa 1904-07. Home of the Pike County Historical Society and the "Lincoln Flag", this Neo-Classic building was originally the summer home of Mr. Dennis McLaughlin and his family of Jersey City and Hoboken, New Jersey. It has 24 rooms including twelve bedrooms. The "Hiawatha Stagecoach" is housed in the porte-cochere.
MILB40	Milford Borough/ Milford Township	Rt. 6 & Apple Valley Village - Schocopee School	circa 1863, this building was originally on the old Schocopee Road and served as the school for Milford Township, grades 1-8 until 1946. Approximately 15 students attended each year. It was moved to Apple Valley Village in 1975 and opened for the Bicentennial celebration of 1976.

Map ID	Municipality	Name of Site	Description of Historic Resource
MILB41	Milford Township/ Dingman Township	Milford - Grey Towers Owego Turnpike/ Pinchot Estate/ Pinchot Institute	Built in 1885 and home of the Pinchot Institute, it was originally the James Pinchot family summer home. Designed by the famed architect, Richard Morris Hunt, the style is termed Eclectic and relates to the French Renaissance. Passing the Gate House, the narrow road wound under lordly trees. The mansion is seen at the top of the hill overlooking a panoramic view of the Delaware River. The structure was built of fieldstone with native blue stones used as quoins. It is presently owned by the U.S. Forest Service and is on the National Register of Historic Sites.
MILB42	Milford Borough	The Dennis McLaughlin House	608 Broad St., this house is eligible to be listed on the National Register of Historic Sites. It is designed in a classical Colonial Revival style. The house is Pike County Historical Society owned. The property is an outstanding local example of a Colonial Revival style dwelling of the early 20th century.
MILB43	Milford Borough	Milford Historic District (Boundary Increase)	Including Sawkill Creek, Front St., John St., and 7 th Street. Eligible for the National Register of Historic Sites.
PALT01	Palmyra Township	PP&L Hydro-Electric Dam	At Wilsonville, it has a height of 70 feet and a breadth of 1,280 feet. The dam also contains a 137 ton spillway gates used to regulate the Lake Wallenpaupack water level.
PALT02	Palmyra Township	Tafton Dike	Located at junction of Routes 6 & 507.
PALT03	Palmyra Township	Visitors Center	At Wilsonville, PP&L maintains an attractive and informative center within view of the dam, giving the public a complete description (by use of photographs) of the plant's functions.
PALT04	Palmyra Township	The Old Paupack Cemetery	This cemetery is a living memorial to one of the original Wallenpaupack settlers, Zadoc Killam.
PALT05	Palmyra Township	Paupack Methodist Church	Built in 1906 located on Route 507, 4 miles south of the Tafton Dike.
PALT06	Palmyra Township	Ansley House	John Ansley was one of the original founders of the Wallenpaupack Settlement. Lived in by six generations of Ansleys since its construction, it also served as a boarding house for Lake Wallenpaupack visitors until a few years after WWII.
PALT07	Palmyra Township	The Spring of Wallenpaupack Fort	This spring provided an unfailing source of water for the Connecticut pioneers for their palisaded fort. John Pellet, a member of the original Wallenpaupack group, built the home that now stands directly across from the Ben Killam Road from the spring. Until the summer of 1978, the spring supplied potable water to the House.
PALT08	Palmyra Township	Pellet House	Built early in the 19th century and in 1842, the house was enlarged and since that time the exterior shape has not been altered.
PALT09	Palmyra Township	Indian War Canoe	The 18 foot, authentic Canoe is on display on Route 507, at the Green Circle Antique and Art Shop. The Canoe is believed to have been used on the Wallenpaupack by the Wolf Tribe of the Delaware Indians in the late 1600's or early 1700's.
PALT10	Palmyra Township	Killam House	The House is located on the lake side of Route 507, 0.3 miles south of the Indian Canoe. This two-story, white clapboard homestead is also believed to have been built early in the 1800's by members of the original Wallenpaupack settlement.
PALT11	Palmyra Township	Gumbletown Road	(State Road 51028) intersects with Route 507. This road is named after the Gumble family who settled in the highlands. Several distinctive farm houses are also situated along this route.
PAL_GRNT12	Palmyra Township / Greene Township	Promised Land State Park Whittaker Lodge District	Built by the Civilian Conservation Corps, it is on the National Register of Historic Sites for its Architecture/Engineering and Event. The Area of significance: Conservation, Social History, Architecture, Landscape Architecture, Politics/Government. The period of significance is from 1925-1949.
PAL_GRNT13	Palmyra Township / Greene Township	Promised Land State Park Bear Wallow Cabins	Built by the Civilian Conservation Corps, it is on the National Register of Historic Sites for its Architecture/Engineering and Event. The Area of significance: Conservation, Social History, Architecture, Landscape Architecture, Politics/Government. The period of significance is from 1925-1949.

Map ID	Municipality	Name of Site	Description of Historic Resource
PAL_GRNT14	Palmyra Township / Greene Township	Promised Land State Park - Gas & Oil House	The Gas and Oil House was built in 1935. It was constructed to serve as the storage and dispensing facility for gasoline and oil used in park automotive equipment and vehicles. The building was used for this purpose from 1935 to 1971. Since 1971, it has been used only for the storage of miscellaneous park materials.
PALT15	Palmyra Township	Paupack Consolidated School	Located on S.R. 507, South of S.R. 6. Opened in 1925, the year Lake Wallenpaupack was created, remodeled in 1938 and again in 1958, was closed by the School District in 1988.)
PORT01	Porter Township	Site of the first planting of trees on state forest land	A wooden sign on Rt. 402 in the center of Porter Twp. marks Ludleville as the site of the first planting of trees on state forest land in October 1899.
PORT02	Porter Township	Pine Flats	An area where a 60 cabin colony and clubhouse stand near the Big Bushkill Creek.
PORT03	Porter Township	Little Mud Pond	Cabin Colony leased out by the Department of Forestry for the purpose of permanent camping and outing ground in one of the first attempts to open the forests up to the public.
PORT04	Porter Township	Porter Township Municipal Building	On Route 402, opposite the Snow Hill Road. The structure was originally the Hunter's Range School, the second on that site, and because it has remained unaltered it is a good example of the rural school facilities in Pike County a half century ago. Built in the 1920's, the one-room schoolhouse held grades 1-8. Since the reuse as the Township Hall, the interior has remained unchanged and the original slate blackboard is still occasionally used by the township officials.
PORT05	Porter Township	Edgemere Ranger Station	Located near the abandoned C.C.C. camp and was one of five which served the area.
PORT06	Porter Township	The abandoned C.C.C. Camp	A camp once occupied by the C.C.C.
PORT07	Porter Township	Clark Cemetery	The resting place of several early township residents
PORT08	Porter Township	Camp William Penn	Since 1929, this camp is owned and operated by the Philadelphia Department of Recreation to provide a camp for those city children who otherwise could not afford summer camp. From 1929-1949, this was the summer residence of the students of Girard College of Philadelphia, a boarding school for fatherless boys. Since 1952, the camp has been under the direction of the City of Philadelphia. Included within the camp are some of the Township's oldest buildings, all of which were believed to be built in the 1870's.
PORT09	Porter Township	The Smith House	On Peck's Pond, this house was built by one of the oldest families in the area. During the early part of this century the Smiths, like so many other residents of that period, operated a boarding house.
SHOT01	Shohola Township	Rohman's Inn/ Shohola Glen Hotel	Formerly the Shohola Glen Hotel, this was the site of the temporary infirmary that treated those wounded in the 1864 prisoner train wreck. Now a restaurant/tavern. On the National Register of Historic Sites.
SHOT02	Shohola Township	Thomas-Gardner Store	Built by Chauncey Thomas and for many years the place of business of Stephen St. John Gardner. It sold general merchandise, coal and lumber.
SHOT03	Shohola Township	Shohola-Barryville Bridge	In 1941, a steel bridge was built in a scenic area closer to the mouth of Shohola Creek. Of the old bridge, only the piers remain.
SHOT04	Shohola Township	Wood Home	On the Woodtown Road, is the house of veteran Boston Red Sox Pitcher "Smokey" Joe Wood. His relative built this structure right after the Civil War.
SHOT05	Shohola Township	Shohola Falls Post Office	A genuine log cabin that was built from yellow pine logs taken from the surrounding woods. From 1890 - 1927, this building served as the Post Office.
SHOT06	Shohola Township	Pond Eddy Bridge	Built in 1904, a double-trussed, steel bridge was constructed by the Oswego Bridge Company. In 1926, the New York and PA Joint Bridge Commission acquired the Oswego-built bridge and the tolls were lifted. Provides the only access to the old quarry town. On the National Register of Historic Sites.
SHOT07	Shohola Township	Church of St. Jacobi	The Shohola Evangelical Lutheran Church congregation finished construction of this church in 1871. This was the first church erected in the Township.
SHOT08	Shohola Township	Vinton's Country House	Built in 1830 as a home, now a restaurant.

Map ID	Municipality	Name of Site	Description of Historic Resource
SHOT09	Shohola Township	Chauncey Thomas Building	Erected in 1849, now used as apartment buildings.
SHOT10	Shohola Township	St. Ann's Church	This church was erected in 1924 and the first resident pastor of the Lackawaxen missions (which included St. Ann's) was appointed in 1928
SHOT11	Shohola Township	Shohola Township Municipal Building	It was constructed as a firehouse in 1927 by Edward Beisel and for years a locomotive wheel rim hanging in front of the building served as the town's only fire alarm. In 1976, the Township Supervisors purchased this building and converted it into a municipal building.
SHOT12	Shohola Township	Smith-Nelson Shohola Elementary School	A short distance out of the village on the Twin Lakes Road is the old Shohola School. Built in 1926, as the Township's ninth school house, it replaced two other smaller schools. During the 1920's grades 1-11 were taught in the two room building. The school was named in recognition of the outstanding careers of two of the schools instructors, Anna Smith and Mary Nelson.
WEST01	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.
WEST02	Westfall Township	Nearpass House	On the National Register of Historic Sites for the Engineering, Event, and Architecture. Built by Balthus Nearpass and was historically significant from the time periods of 1800-1824, 1825-1849.
WEST03	Westfall Township	Mill Rift Cemetery	The cemetery was built in 1888.
WEST04	Westfall Township	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.
WEST05	Westfall Township	Arisbe, The Charles Pierce 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.
WEST06	Westfall Township	The Original Carpenter's Ferry House/ Reuben P. Bell Homestead	On Tenth Street (border between Westfall Township and Matamoras Borough)
WEST08	Westfall Township	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.
WEST09	Westfall Township	Cook Residence	Originally the Solomon Middlaugh homestead, also built in the early 1800's located on Bluestone Boulevard.

HISTORICAL BACKGROUND

Located in the northeast corner of Pennsylvania, Pike County forms part of the Pocono Mountain Region. The county is bounded on the east by the Delaware River, which separates it from Sussex County, New Jersey and Sullivan County, New York. Pike County abuts Monroe County, Pennsylvania to the southwest and Wayne County, Pennsylvania to the north. Lake Wallenpaupack runs along the northwestern boundary between Pike and Wayne Counties. Pike County's land cover is characterized mainly by forests and scattered residential development, occurring over fairly rugged mountainous terrain. Some land, largely along the Delaware River and in Greene Township located in the southwestern corner of the state, has been cleared for agricultural purposes, although currently cultivated farmland occupies only 716.29 hectares (1,770 acres) or 0.5% of land cover in the county (Pike County Planning Commission 1992a:9).

Pike County has experienced many changes throughout its history. Historically, Pike County's economy has centered on "boom and bust" industries (such as lumbering and quarrying) and summer tourism. This culture of transience has shaped the landscape throughout Pike County's history. Early European settlers attempted to farm the fertile strip of land along the Delaware, quickly discovering that this was the only area in the county in which agriculture had the potential to thrive given the rocky soil conditions that covered most of the county's land. While these pioneers struggled to make agriculture succeed, some of them quickly seized upon exploiting the rich timber resources the county had to offer. The Delaware and Hudson Canal in Lackawaxen Township (which opened in 1828) spurred this industry, providing the area with a way to send the lumber and wood products (such as clothespins, hoop poles, railway ties, etc.) to major markets. The canal also spurred the development of villages to support the canal and the products it shipped. Lumber production in Pike County waned by the mid-nineteenth century, largely due to competition from the central part of the state. Economic development and settlement in the county was once again spurred by the bluestone industry in the mid-nineteenth century. Rich deposits existed along the northeastern boundary of the county abutting the Delaware River, and for several decades, the small villages of Pond Eddy, Millrift, and Parker's Glen boomed around the quarrying activity. This industry, too, was doomed to fail, as bluestone was abandoned in the late nineteenth century for other less expensive materials like concrete.

The next stimulus to development in Pike County related to the tourist industry that has flourished in the county, since the mid-nineteenth century. Nineteenth-century resorts, such as Shohola Glen, catered to middle and upper-class urbanites from Philadelphia and New York. These accommodations offered guests room and board while they viewed natural attractions in the mountains, including waterfalls, trees, and wildlife. The earliest tourists usually spent prolonged periods of time in the mountains, often for the whole summer, as they escaped from the warm, unpleasant conditions of summer in the city. Private hunting and fishing clubs also appeared during the late nineteenth century for members of the urban elite. During the early twentieth century, tourism evolved with the coming of the automobile. Resorts and recreational facilities began to cater toward different audiences, including middling sorts, who would come to the area for shorter periods of time. Motels appeared along major thoroughfares for these tourists, while

summer cabins were built as “second homes” for others wishing to spend longer periods of time in the Poconos, but without living in close quarters with strangers. Parks and recreational sites opened that catered to all types of tourists, such as Promised Land State Park, Lake Wallenpaupack, and the Delaware Water Gap National Recreation Area. Tourism is by its nature a “transient” activity and its establishment in Pike County brought a “permanent” kind of transience to the county. Rather than an economy driven by economic activities replacing one another every few decades or so, the establishment of a tourist economy meant that transience became the characterizing feature of life in Pike County, as more and more people lived within the county's boundaries only for the summer months.

While tourism is still a strong force in Pike County, the county's economy is once again changing. Pike County is increasingly becoming a “bedroom community” for persons working in the New York and Scranton/Wilkes-Barre metropolitan areas. Opening in 1971, Interstate 84 provides easy access to both urban areas, and Pike County has now become the home of many commuters (Pike County Planning Commission 1992b:8). These commuters live in new developments, mainly in the eastern part of the county, that are situated immediately adjacent to the interstate. While not yet spurring significant commercial development, it is probable that some will occur in the future to cater to this new group of permanent residents. This new trend toward “bedroom communities” shows how transience continues to define Pike County culture as the county moves into the twenty-first century. The following narrative traces the history and settlement of Pike County from its seventeenth-century origins through the present day, emphasizing the various forces that have contributed to its heritage and have defined it as a county of change.

Early Settlement Theme

Historic resources associated with the Early Settlement theme are few in number, since so little architectural fabric survives from this period. Widely scattered buildings from this period do survive in the Upper Delaware Valley, some of which are probably hidden from view underneath later construction. Building types that could be evaluated under this architectural theme include: residences (including farmhouses), outbuildings on farms, mills, roads and/or paths, and resources related to the lumber industry. The latter may include resources such as residences and camps that were used by those active in the lumber industry in this early period, although little of these types of resources appear to have survived. It should be noted that substantial archaeological remains probably exist from this period, including prehistoric Native American settlements and early Euro-American settlements, especially along the Delaware River.

Transportation Theme

Historic resources associated with the transportation industry include the transportation resources themselves, as well as buildings and development that was encouraged by the opening of transportation corridors in Pike County. During the early settlement era, historic resources would include paths forged by Native Americans and roads associated with inland travel, especially along stagecoach routes. Villages and farmsteads that emerged along the early road paths during the early settlement period may also be

considered under this theme. From the period of the canal's heyday, 1828-1898, resources would include canal remnants, the path of the towpath, locktenders' houses, locks, villages that developed because of the canal, and any individual resources within those villages. From the railroad era, historic resources would include rail lines themselves, railroad stations, villages that developed because of the railroad, and individual components of those villages, such as general stores, residences, and hotels/inns. Resources associated with the modern road-building era would include the road paths themselves and bridges, and any associated development along the roads themselves that would lend significance to historic context of the road (i.e., roadside development).

Village Theme

Nineteenth-century villages reached their zenith during the second half of the nineteenth century. As the twentieth century approached, village settlement and activity waned. Some villages were completely transformed with the coming of the tourist industry, as sections of towns became devoted to hotels and tourist shops. Factory-produced goods manufactured in urban centers came to replace goods and services previously supplied by local artisans, soon driving specialty shops that thrived in villages out of business. Agriculture also began its steady decline around 1850, and villages that once supported the marketing and distribution of agricultural products declined with it. Villages further suffered with the rise of the automobile and automobile culture. Automobiles allowed residents to travel to more distant markets in larger towns that offered them a wider variety of goods and services. Residential development in the twentieth century tended to occur on the periphery of the towns of Milford and Matamoras, as well as on larger lots outside of villages (a process known as "suburbanization"). Commercial activities also increasingly moved away from villages to the periphery, establishing themselves along major roads, such as Route 6, as roadside strips.

The kinds of resources that relate to the village theme include the villages themselves and any individual buildings that make up the village itself, such as residences, churches, shops, schools, mills, and railroad stations. Many nineteenth-century villages in Pike County no longer convey their nineteenth-century heritage. Many have been altered dramatically under the impact of the tourist industry that has taken over in Pike County, while others have suffered from neglect, deterioration, and demolition of historic structures.

Agricultural Theme

The major resource type associated with the agricultural theme in Pike County is the farmstead. Farmsteads usually evolved over time, and their appearance on the landscape reflects the many changes that they underwent throughout their history. Thus, any farmstead that might be evaluated for National Register eligibility should be considered along a continuum and how its appearance reflects the evolution of the farmstead through time, considering issues such as the number of buildings on the farm, their function, and date of construction. Other than the farmstead, individual resources that have lost the context of the farm unit as a whole, such as a lone surviving bank barn, can also be considered under this theme. Grange halls and buildings used for discussion of

agricultural reform ideas, as well as mills used for the processing of grains, also relate to the agricultural theme.

Recreation and Tourism Theme

Resources associated with the recreation and tourism theme are numerous and vary considerably through time. Related to nineteenth-century tourism are boarding houses, resorts, hotels and recreational attractions that accommodated the first tourists that came to the area. In the first few decades of the twentieth century, as the tourist economy of the county was shifting to account for the new automobile culture, new resources and resource types emerged. These include Promised Land State Park, Lake Wallenpaupack's recreational facilities, private clubs and associations, the Delaware Valley Railroad line, and any individual resources contained within these areas related to recreation and/or tourism. Single-family summer cabins and clubhouses are the most commonly-found types of resources from this period, along with areas that were used for recreational activities such as parks, trails, boat launches, and golf courses. In the middle and late decades of the twentieth century, new types of architectural resources have appeared. These resources include motels, modern resorts, and roadside attractions, which include diners, drive-ins, restaurants, miniature golf courses, etc.

Residential Theme

See text of Historical Resources Study.

HISTORICAL MARKERS

Name	Location	Marker Text
	U.S. 209, 3 miles south of Milford	Opposite, on Minisink Island and adjoining flats along both sides of river, were prosperous Delaware Indian settlements. After fraudulent "Walking Purchase" of 1737 these Indians migrated to Wyoming Valley and became the enemies of Pennsylvania.
Battle of Minisink	Old PA 590, North of Lackawaxen	July 22, 1779, 300 Tories and Indians led by Joseph Brant, Mohawk Chief, were attacked near Lackawaxen by some 175 settlers. Brant was returning from raiding New York settlements. All but 25 of the patriots were killed. Brant escaped.
Charles S. Pierce	U.S. 6 and 209, Northeast of Milford	The noted philosopher, logician, scientist and founder of pragmatism lived in this house from 1887 until his death in 1914. America's most original philosopher and greatest logician, a great part of his work was written here.
Civil War Prison Train Wreck	PA 434 at North end of Shohola	On July 15, 1864, an Erie Railroad train carrying 833 Confederate prisoners and 128 Union guards to the prison camp at Elmira, NY collided with a coal train between Shohola and Lackawaxen. About 48 prisoners and 17 guards were killed. Survivors, both injured and uninjured, were brought to Shoholawhere they were generously cared for by residents of the village.
Dingman's Ferry	U.S. 209 at Dingman's Ferry	Here was located one of the earliest ferries across the Delaware. Andrew Dingman in 1750 built the flatboat he used as a ferry with his own hand axe. Dingman was one of the pioneer settlers.
Fort Hyndshaw	U.S. 209, South of Bushkill	Built in 1756 by order of the Province of Pennsylvania. Northernmost of a line of defenses erected during the French and Indian War.
Gifford Pinchot	U.S. 209, South of Milford	The noted forester, conservationist and Governor of Pennsylvania two terms in 1923-27; 1931-35, had his ancestral home at Gray Towers, Milford. He is buried in this cemetery. Born in Connecticut, 1865. Died on October 4, 1946.
Gifford Pinchot	U.S. 6, Northwest of Milford	The noted forester, conservationist and Progressive Leader. Chief, 1898-1910, U.S. Forest Service (as rename in 1905). Governor of Pennsylvania, two terms, 1923-1927 & 1931-1935. His first term brought major governmental reorganization. His second term was famed for the paving of rural roads throughout the state – including this road – to provide unemployment relief and "get the farmer out of the mud." Grey Towers was his family home.
Old Stone Fort	1 st Street, Matamoras	Sometimes referred to as Fort Matamoras, this stone structure was built about 1740 by Simon Westfael, one of the earliest Dutch settlers in the region. It was a refuge from Indians in days of frontier warfare.
Pike County	County Courthouse, Milford	Formed March 26, 1814 from Wayne County and named for Zebulon M. Pike. Its bluestone and lumber, carried by D & H Canal and by Erie R.R., helped build our nation. Famed for its natural beauty. Near Milford, the county seat, is Gov. Pinchot's Gray Towers.
Sylvania Colony	Junction U.S. 6 and PA 434	The site of Horace Greeley's Utopian colony modeled on Brook Farm and the ideas of Fourier, French Socialist, was near here, 1842-45. The 300 members of the Sylvania Society abandoned it after July frosts killed all crops in 1845.
Sylvania Colony	PA 434 at 590, Greeley	The site of Horace Greeley's Utopian colony modeled on Brook Farm and the ideas of Fourier, French Socialist, was located here. Based on common property holding and equal labor, it failed in 1845 after July frosts had killed all crops.
Unity House	Bushkill Falls Road at Unity House	A vacation and labor education retreat was operated here, 1919-1989, by the International Ladies' Garment Workers' Union (ILGWU). Each year it hosted several thousand visitors – including union members, retirees, and public officials – and offered cultural events significant to the labor movement. The only workers' resort of its size in the U.S., it closed due to declining employment in the domestic apparel industry.
Wallenpaupack	PA 507 at Paupack	This region was the site of one of the earliest settlements in this area. Early Connecticut claimants built a fort here in 1773 and had a virtually independent government until 1796. The old Indian trail from Cochection to Wyoming passed nearby.
Wyoming – Minisink Path	SR 4004, .3 mi. West of Lords Valley	The highway here follows closely the route of the Delaware Indian trail from Minisink Island to Wyoming. Refugees from the Massacre of Wyoming, 1778, camped by the "boiling" spring, which may be seen in the woods a few yards south of here.
Wyoming – Minisink Path	PA 507 at Paupack	Here the path from Minisink Island to Wyoming descended the hill to ford Wallenpaupack Creek, before the valley was flooded to make the present lake. Crossing the mts. to Capoose (Scranton), it descended the Lackawanna Valley to the Susquehanna.
Wyoming – Minisink Path	U.S. 209, 3 miles South of Milford	Here, an important Indian trail connecting the Delaware and Susquehanna Rivers ascended Indian Point to Powwow Hill. The path was used by Delaware Indians in their migration to the Wyoming Valley, and later by Connecticut settlers.
Zane Grey	Zane Grey Museum, North of PA 590, Lackawaxen	The prolific author of western novels lived on this property, 1905-1918. Among his books written here was the famed "Riders of the Purple Sage" (1912). He had a life long love for this area, and his remains now rest within view of the house.

APPENDIX 14

NONDISCHARGE ALTERNATIVES TO HQ AND EV WATERS

SOCIAL AND ECONOMIC JUSTIFICATION FACTORS

ANTIDEGRADATION BEST AVAILABLE COMBINATION OF TECHNOLOGIES FOR WASTEWATER DISCHARGES

NONDISCHARGE ALTERNATIVES

Nondischarge Alternatives

The requirement to consider nondischarge alternatives applies to both HQ and EV waters regardless of the degree of degradation or the social or economic benefit associated with a proposed discharge. The requirement to evaluate and use nondischarge alternatives, when they are cost-effective and environmentally sound, is a critical test and must be met by any activity or project generating new, additional, or increased point source discharges to HQ or EV waters.

The following are some nondischarge alternative wastewater management and disposal options, listed in order of preference by PaDEP.

- Pollution prevention and process changes, to use less water, eliminate objectionable chemicals, and produce less wastewater.
- Alternative project siting.
- Land application of wastewater, including irrigation and in-ground infiltration systems.

Generally, where adequate soils and conditions exist for irrigation or direct in-ground infiltration of effluent, sewage may be pretreated only to secondary treatment levels before land application.

Environmental considerations for this method include:

- availability of soil types, depths, and slopes to accommodate the types of pollutants left in the wastewater after pre-treatment and which can adequately receive and treat the quantity of wastewater produced,
- availability of land which is sufficiently isolated from the public,
- sensitivity of local groundwater quality and uses,
- seasonality of systems which rely on vegetative uptake for additional wastewater renovation and create the need for winter storage of wastewater.

In general, these environmental factors become less critical with an increasing level of pre-treatment.

- Recycle/Reuse of Wastewater

Treatment and recycle of wastewater for reuse at industrial facilities is frequently used and is an economical nondischarge alternative. The recycle of highly treated water for reuse can be feasible and cost-effective where water supplies are limited or

costly, or where effluent must be treated to high levels of quality for discharge to surface waters. The degree of treatment necessary to produce a reusable water depends upon the sensitivity of the process in which the water is used, but in most cases, well-developed technologies can meet the necessary quality.

Tertiary effluent can be recycled back to toilet facilities for flush water and other non-sensitive uses with only minimal additional treatment. Other non-potable water reuses, such as vehicle washing or irrigation, can become possible with the addition of newer membrane filtration technologies.

- **Alternative Discharge Locations**

Another version of this alternative is connection of the proposed discharge to an existing permitted sewage conveyance system and treatment facility.

If the treatment system discharge is located outside the HQ or EV water, the environmental review should compare the benefit of eliminating the discharge to the HQ or EV water to the potential environmental consequences of development and construction along the sewer line connection and any hydrologic impacts which might result from the transfer of groundwater baseflow to the downstream location. If the treatment system discharge is located on an HQ or EV water, connection of a new source of sewage flow will qualify as a nondischarge alternative only if the connection will not cause exceedance of the hydraulic or organic design capacity or discharge effluent limits of the existing treatment plant and the flows emanate from the area designated to be served under the approved Act 537 plan.

- **Holding Facilities and Wastewater Hauling**
- **Constructed Treatment Wetlands**

For public proposals, which are being financed directly by public rate-payers or taxes, the criterion for cost-effectiveness in EPA's manual is the affordability of the project to the rate-payers. The actual criterion for affordability outlined in the manual is 1 percent of the median household income of the rate paying public. When projected annual rates are higher than 1 percent of the median income, secondary tests of affordability, including debt indicators (like bond ratings), socioeconomic indicators (like unemployment rate), and community financial management indicators (like property tax revenue collection rate) are factored into the determination. Criteria for these secondary tests are applied in a "scored" matrix.

For private-sector proposals, the approach measures the impact which a nondischarge alternative would have upon profit and financial operation of a facility.

Social and Economic Justification Evaluation Factors

Water Quality Considerations

- Sensitivity of Water Use
- Nature of Pollutants
- Degree of Change in Water Quality
- Proximity to Wetlands or Floodplains
- Discharge Characteristics
- Reliability of Treatment Technology
- Additional Impacts
- Compliance Record
- Other Factors

Social or Economic Considerations

- Effect on public need/social services
- Effect on Public Health/Safety
- Effect on Quality of Life
- Effect on Employment
- Effect on Tax Revenue
- Effect on Tourism
- Other Factors

Antidegradation Best Available Combination of Technologies for Wastewater Discharges (ABACT)

For wastewater discharges to HQ and EV waters the most effective treatment/disposal (T/D) technologies consist of a hierarchy of preferred methods which take technical and economic feasibility as well as expected water quality impacts into consideration. The goal of this hierarchy is to reduce or eliminate surface water discharges and minimize degradation of both surface and groundwater by providing advanced wastewater treatment and/or soil renovation prior to discharge to groundwater. However, for methods which involve a stream discharge, there also exist treatment performance standards defined as ABACT. ABACT in this context refers to treatment and disposal methods designed to help maintain existing water quality. One or more of the following technologies or alternatives suggested by the applicant and agreed upon by DEP should be applied to sewage or selected industrial waste discharges in HQ or EV waters.

- The most preferred technology for wastewater discharges is to eliminate the discharge through a variety of land application options (including year round spray irrigation, drip irrigation, and land spreading) or extension of existing collection systems to convey wastewater to an existing sewage treatment system outside the HQ or EV watershed. Land application includes the installation of a treatment system providing a minimum of secondary treatment prior to release of the effluent onto the land. Sufficient storage to prevent any stream discharge during wet or cold weather periods when land application is not technically feasible is also required.
- Subsurface disposal is considered an equivalent technology.
- Collection and conveyance of sewage to existing treatment facilities outside the watershed or stream segment is another option because it eliminates the discharge of

treated wastes to HQ or EV waters. One possible disadvantage is the export of water out of the basin and potential disruption of the existing hydraulic balance.

- Where year-round land application, subsurface disposal, or collection/conveyance outside the basin are not technically or economically feasible, the next preferred treatment/disposal alternative is seasonal and/or partial land application. The chief difference between year-round and seasonal land application is that a stream discharge is permitted for the portion of the year when soils cannot attenuate the wastewater. The advantages lie in the fact that: 1) the discharge occurs during wetter portions of the year (usually November through April) when stream flows and waste assimilation capacities are higher and therefore, the impact of a stream discharge is less significant, and 2) the portion of the effluent that is land applied helps recharge groundwater. Where seasonal land application is employed, minimum wintertime stream discharge requirements are set using the more stringent of ABACT or water quality-based effluent limits (WQBELs).

Partial land application consists of disposing of a portion of the wastewater effluent onto soils on either a year-round or seasonal basis. Partial land application is required whenever it is technically feasible and cost effective. Generally, permit requirements for the portion of wastewater to be discharged are the same as for a system based on year-round stream discharge. The advantage to partial land application is that it reduces the total annual volume of wastewater discharged to the stream while increasing groundwater recharge.

- The final technology option is the year-round discharge of treated wastes. This technology is only employed when nondischarge alternatives are not environmentally sound and cost-effective. Where this technology is employed, a discharger must provide, as a minimum, the more stringent of ABACT or treatment technology that will achieve water quality-based effluent limitations (WQBELs). WQBELs are developed to assure compliance with water quality criteria at a specific design stream flow.
- **EV Waters:** For wastewater discharges (sewage or selected industrial wastes) to EV waters treatment technologies center on the use of pollution prevention technologies to reduce pollutant loads on treatment systems followed by the use of the soil/geologic matrix to remove some or all of the wastewater constituents as an alternative to surface water discharge. Except in the case of individual onlot sewage systems, land application preceded by varying degrees of advanced chemical, physical, and/or biological treatment will be required for treatment/disposal of wastewaters in EV waters if cost effective. The use of land application minimizes or eliminates surface water discharge and the associated water quality degradation. In addition, these combined technologies offer the highest likelihood of producing an effluent that will not degrade the protected stream. Treatment and discharge of wastewater to EV waters can only be permitted if the maintenance or enhancement of existing surface and groundwater quality can be demonstrated.

APPENDIX 15

LANDOWNERS OF 200 ACRES OR MORE

**RESIDENTIAL BUILDING PERMITS
BY MUNICIPALITY 1990-2004**

PIKE COUNTY RECORDED SUBDIVISIONS

LANDOWNERS OF 200 ACRES OR MORE

LANDOWNER (500+ acres) (as of 9/13/04)	ACREAGE
COMM OF PA	97517
BLOOMING GROVE H & F CLUB	14449
USA	7969
FOREST LAKE CLUB	4334
PPL HOLTWOOD	4333
PORTERS LAKE H & F ASSN	2995
MINK POND CLUB	2298
WILSON, ROBERT	2056
SKY TOP LODGE	1960
EASTON ANGLERS ASSN	1749
SUNNYLANDS INC	1673
BRIGHT CREEK PARK ASSN	1603
BLUE HERON DEV	1559
LAKE PAUPACK CORP	1319
SPRUCE CABIN ASSOC	1317
PIKE COUNTY INDUSTRIAL	1302
PRICE, COLE	1286
READING EAGLE	1283
GUMBLE, FLOYD	1251
MASKENOZHA R & G CLUB	1217
KASTNER, MARIANNA & PINCHOT	1156
BRADLEE, ANTOINETTE	1156
SLATESTONE HUNTING CLUB	1126
MCKAY, WILLIAM	1117
RIZZO, PHILIP	1105
LITZENBERGER, ROBERT	1075
THUNDER MTN PARTNERS	1058
CAMP SPEERS ELJABAR	1029
GRASSY ISLAND CRK R & G CLUB	1022
LITTLE BUSHKILL R & G CLUB	1017
GIRL SCOUTS OF DELAWARE CO	1010
NJ FED YMCA & YWHA	982
STONE, GEO	979
QUIWAUMICK HUNTING CLUB	967
SOCIETY OF SAINT JOHN	939
SNAKE HILL HUNTING CLUB	889
HEMLOCK FARMS COMM ASSOC	879
WHITE GAME CLUB	872
POLATNICK, JACK	872
FINAN, SEAN	847
BEAVER RUN H & F CLUB	824
ARTHUR, JAMES	817
KING ARTHUR EST	777
KATZ, DAVID	744
WELCOME LAKE R & G CLUB	728
NEBO HUNTING LODGE	725
ROBINSON, AARON	710
VALLEY VIEW CAMP	685
CITY OF PHILADELPHIA	664
MASTHOPE MTN COMM	660
SAW CREEK H & F ASSOC	638
PINE FOREST CAMPS	622
OELLERICH, LAWRENCE	571
STRUB, SEAN	537
QUINN, JOHN	510
GREEN VALLEY ASSOC	508

LANDOWNER (200-499 acres) (as of 9/13/04)	ACREAGE
HUDSON COUNCIL BOY SCOUTS	486
VERGA, CHAS	477
ERWIN, NANCY BUDNOVITCH	475
BELLEMONT H & F	469
CAMP PAWE INC	458
MILFORD RIDGE	457
LEHMAN LAKE H & F CLUB	446
BERTUZZI, ERNEST	440
PRICE, RICHARD	439
PIKE PENN INC	439
DARK HOLLOW CLUB	439
DAVY CROCKETT GUN CLUB	438
ECKMAN LUMBER	437
EAST STROUDSBURG AREA SCHOOL	435
CAMP NETIMUS	408
OAK HILL EST	404
JAMES, DONALD	402
LAKE RUSSELL PROPERTIES	396
BLUE STONE H & F CLUB	396
PETERS, CHAS	394
DER	391
HONG SOUNG	383
HAWLEY GUN CLUB	383
MILL POND PRESERVE	382
WYNOOSKA CLUB	379
WOODLOCH PINES	375
ELLIS, JOHN	365
GOLD KEY COUNTRY CLUB	357
MARQUIN REALTY	356
COSTA, MARY	356
WOODPECKER LAKE ASSN	339
PNR DEVELOPMENT	337
HUTCHISON, REGINA	329
DELVIEW R & G CLUB	323
LIEN, WILLIAM	319
HILLVIEW R & G CLUB	315
RUSSEN, MICHAEL	314
PIONEER RANGERS	314
FOREST GLEN EST	313
GEITZ, MICHAEL	310
YELENCIS, ANTHONY	304
FRAZER, SCOTT	300
KNESNIK, RANDY	291
DZIEDZINA, JOHN	285
WAYNE SPORTING CLUB	280
PINE HILL FARM	277
DEL FORNO, PAUL	277
CABEL, GEO	274
CORSO, JOSEPH	272
PHIPPS, MARY	271
WICKSNES, ROBT	270
HOLBERT, DAVID	270
FUHSE, JOAN	259
WIEDERHOLD, RUTH	250
LITTLE WALKER LAKE EST	248
WAYMART HUNTING CLUB	247

PANTHER CREEK CLUB	507
GUMBLE, GEO	507
CENA, ALEX	504

Subtotal 500+ acres 185805

COSTA, ANNA	244
BIG RIDGE HUNTING CAMP	241
WARSHAW, INGRID	240
SHOOK, ALICIA	240
COUNTY OF PIKE	235
BRIDGE, CHAS	233
MARTIN, RICH	232
KUHN, LONI	227
SCHNEIDER, GERTRUDE	226
FAWN LAKE FOREST ASSN	226
DARON DEVELOPMENT	223
TRACY, ELIZABETH	220
PHIPPS, HOWARD	216
BROMLEY, ELIZABETH	216
ROCKO, JOYCE	209
GRABER, CHERIE	209
LAVANANT, SUZANNE	208
MUSHPAUGH SPORTS CLUB	207
LORAL SPACECOM	206
SOUTH WILKES-BARRE R & G CLUB	204
THOMA LIMITED PARTNERSHIP	203
SCHUTZ, ALMA	203
AGILENT TECHNOLOGIES	203
UNFLAT, GUNTHER	202
BUYNAK, MATT	201
SONDERMANN, ROBT	200
BUTTEL, GEO	200

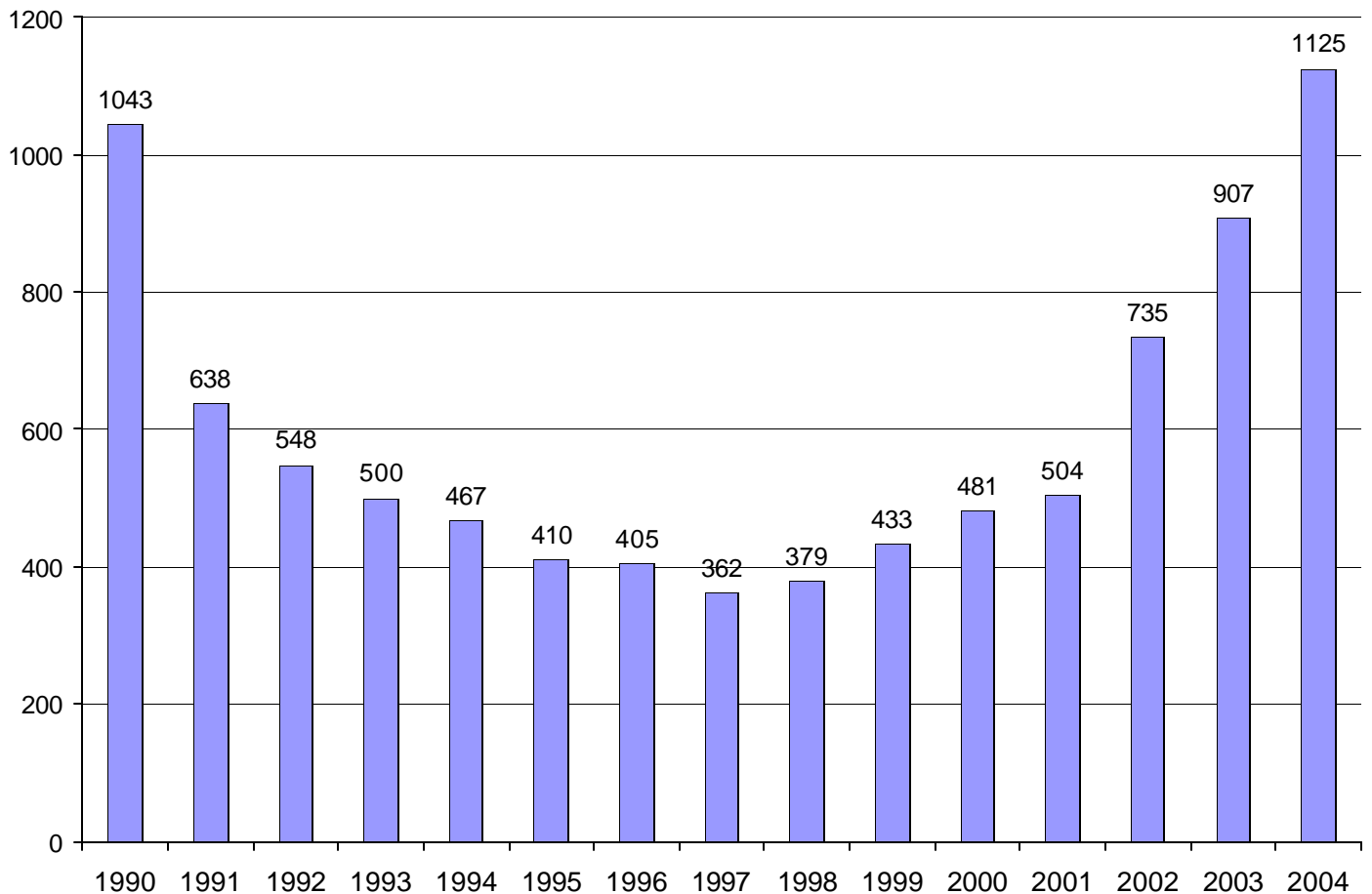
Subtotal 200-499 acres 25924

Grand Total 211729

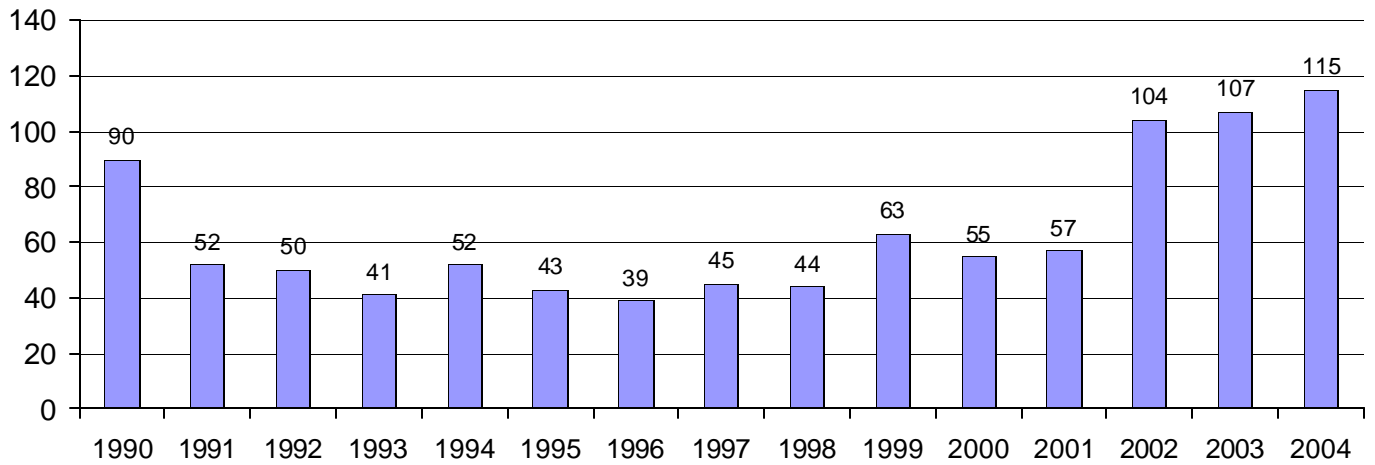
**RESIDENTIAL BUILDING PERMITS
BY MUNICIPALITY 1990-2004**
Pike County, PA Residential Building Permits - 1990-2004
Board Of Assessment and Revision of Taxes

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Totals
Blooming Grove	90	52	50	41	52	43	39	45	44	63	55	57	104	107	115	957
Delaware	109	80	65	45	29	26	39	31	50	77	90	79	101	100	159	1080
Dingman	203	134	107	99	93	110	113	98	98	112	119	137	188	230	242	2083
Greene	51	47	40	39	35	22	19	19	22	19	22	13	24	28	19	419
Lackawaxen	179	79	66	79	87	61	50	46	39	36	31	50	71	99	150	1123
Lehman	307	178	133	125	105	87	103	76	63	62	101	87	125	186	261	1999
Matamoras	1	4	2	0	2	3	1	2	3	5	1	4	4	6	9	47
Milford Boro	2	0	2	1	0	0	0	0	4	2	1	1	0	2	0	15
Milford Twp	10	10	13	8	15	8	5	9	7	8	7	9	23	25	24	181
Palmyra	60	32	37	27	29	24	21	16	25	21	21	34	48	60	68	523
Porter	6	4	7	8	4	6	2	0	8	7	8	5	12	18	18	113
Shohola	14	13	18	20	10	9	10	11	12	16	17	17	21	32	47	267
Westfall	11	5	8	8	6	11	3	9	4	5	8	11	14	14	13	130
Totals	1043	638	548	500	467	410	405	362	379	433	481	504	735	907	1125	8937

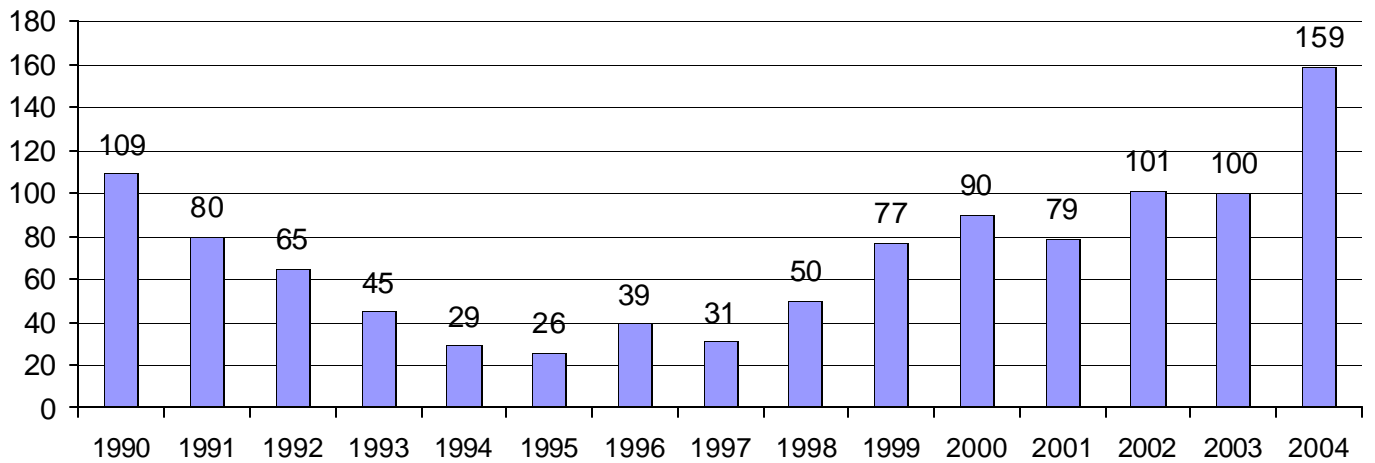
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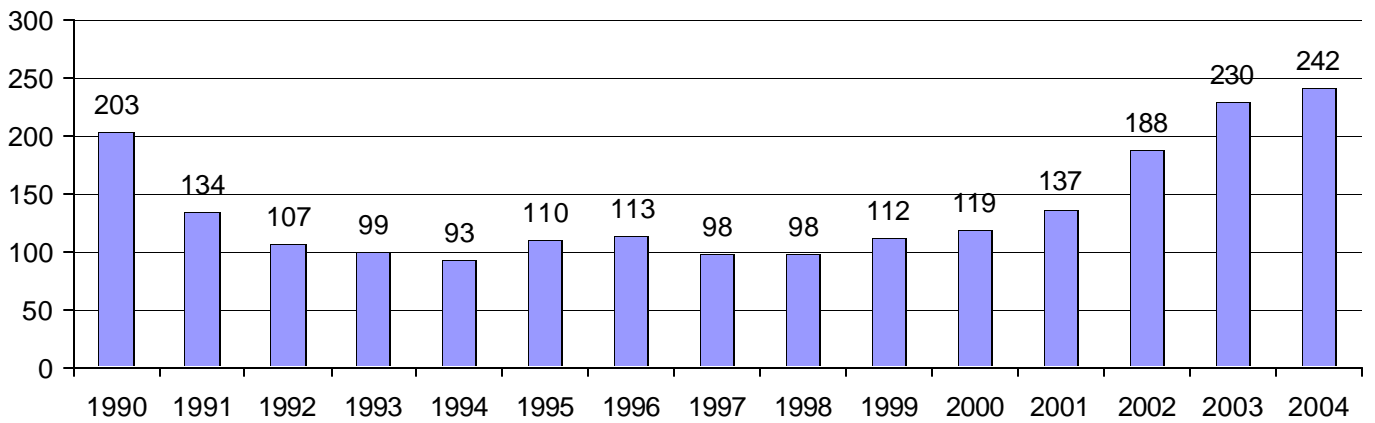
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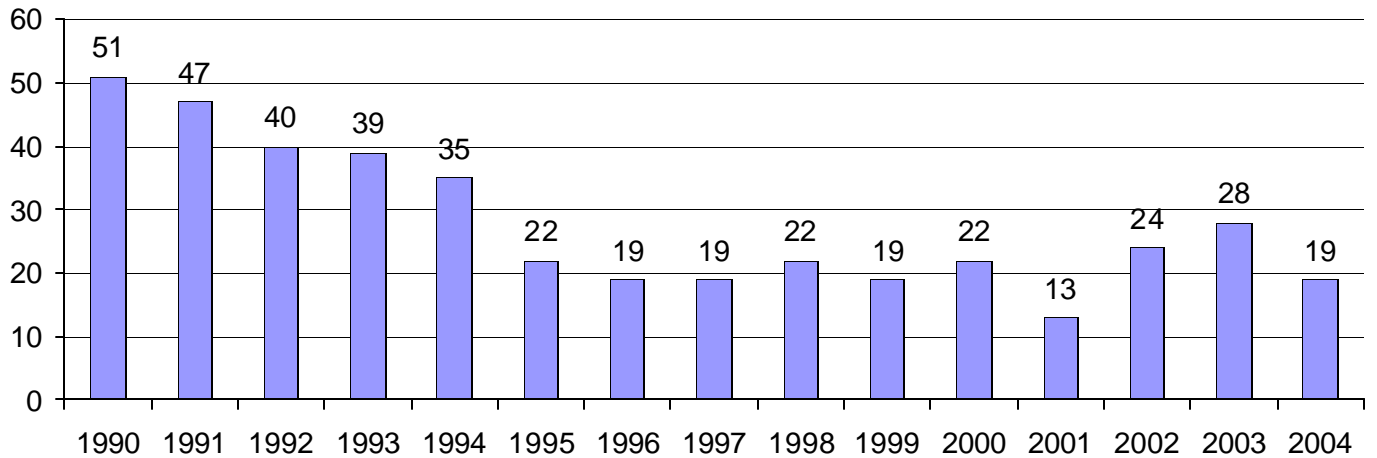
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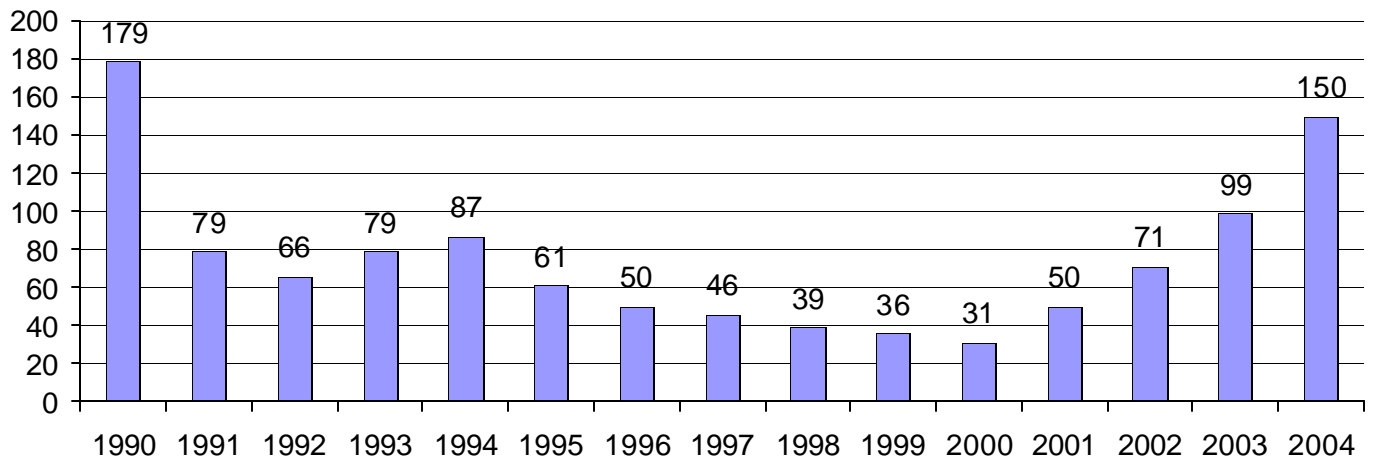
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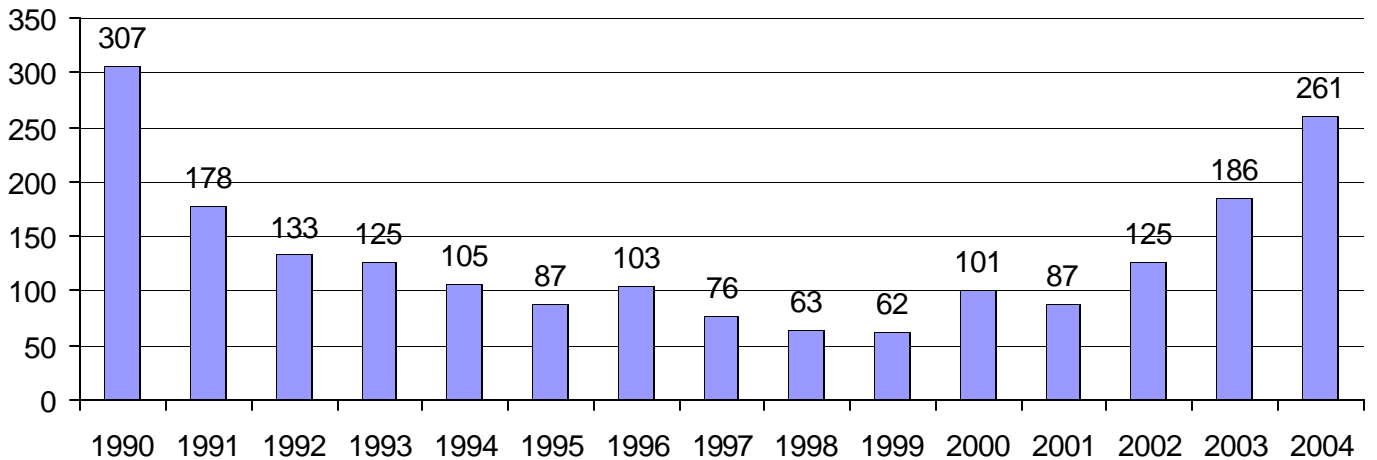
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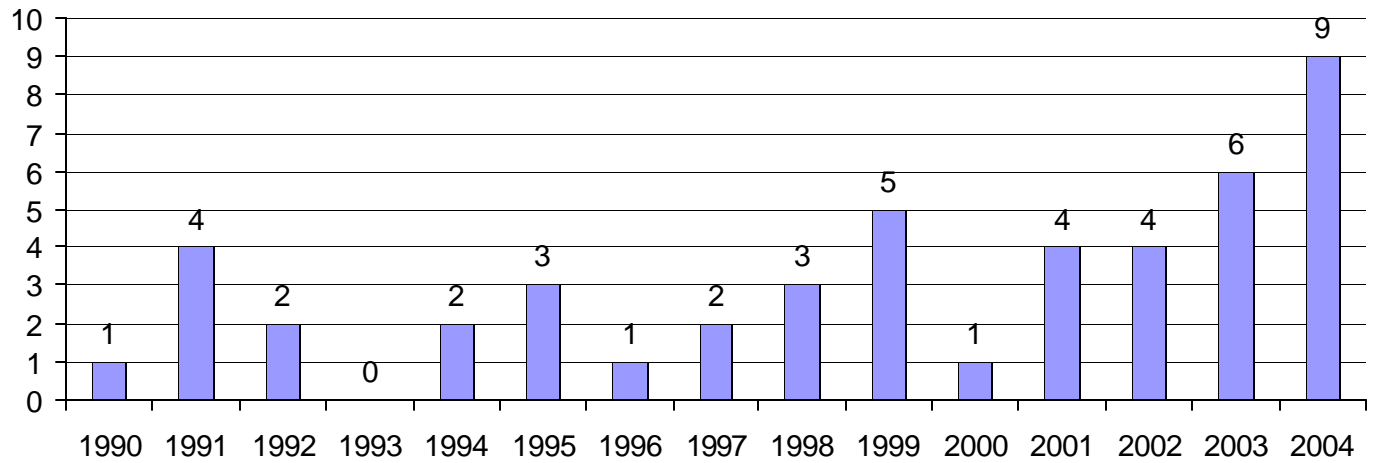
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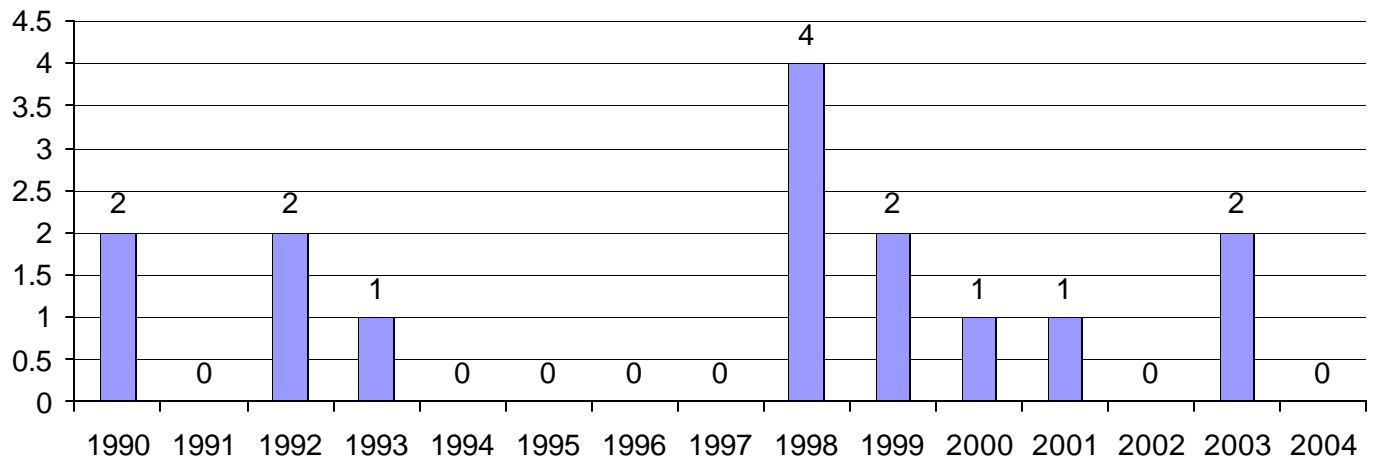
Lehman



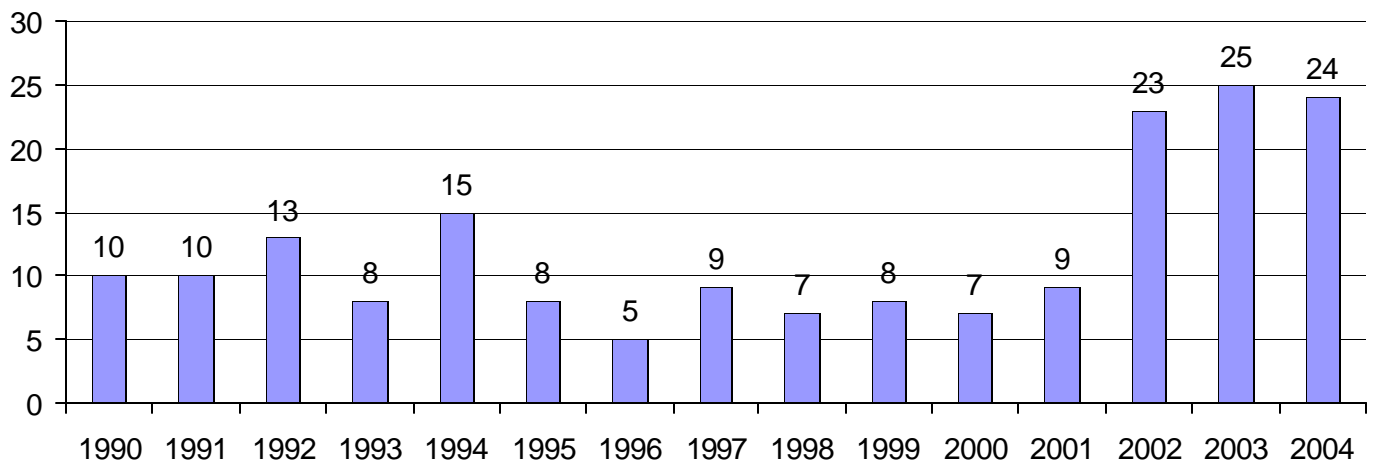
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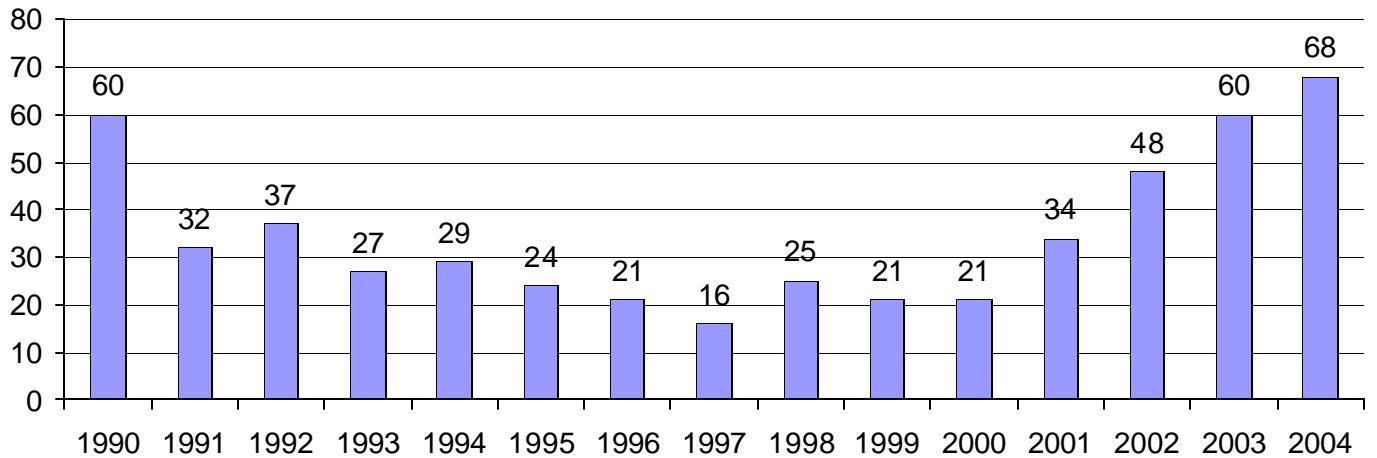
Milford Boro



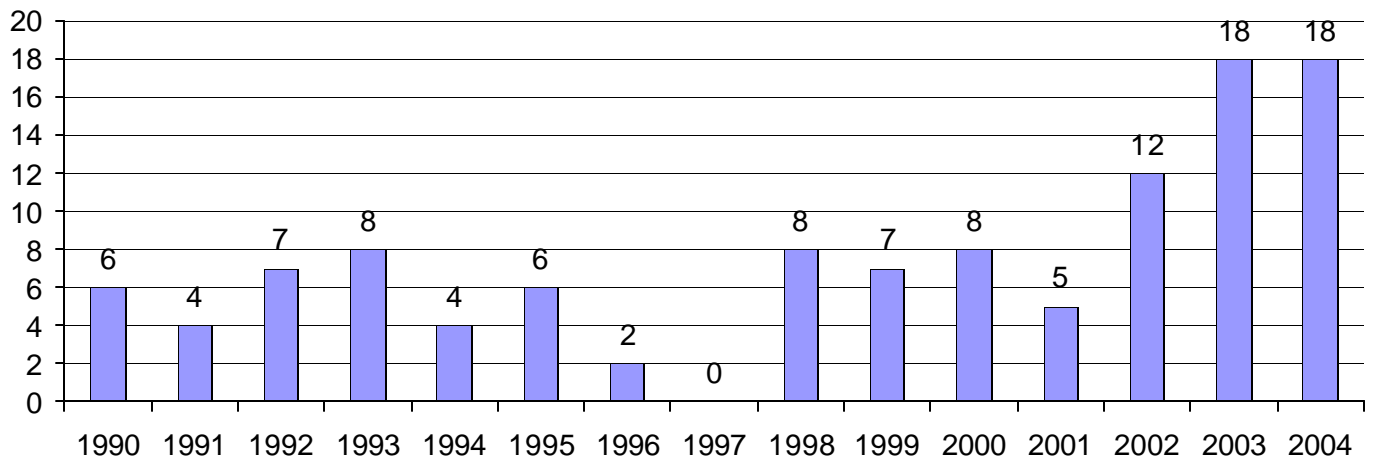
Milford Twp



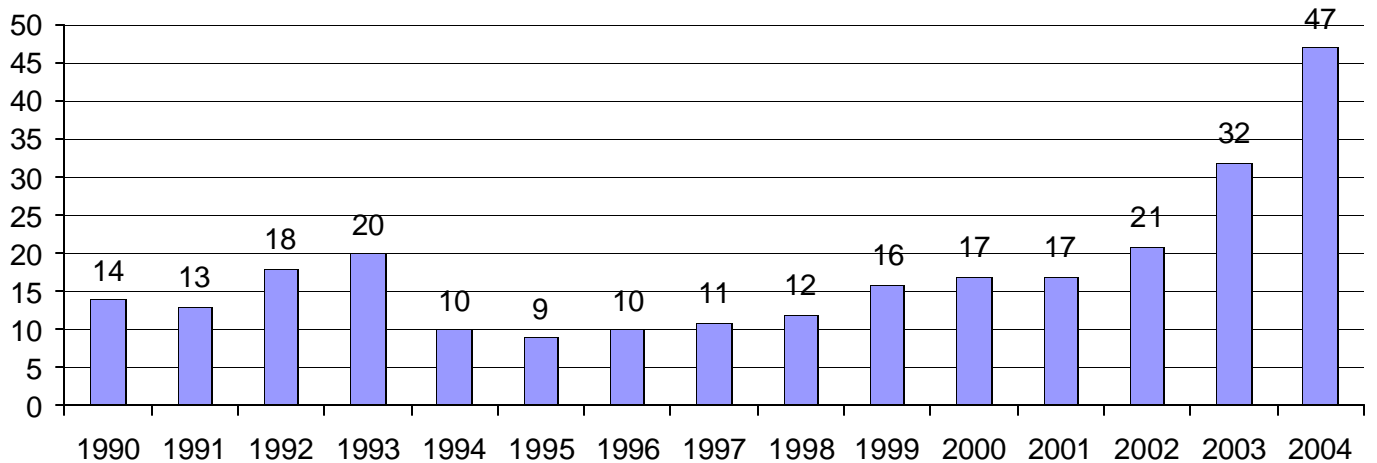
Palmyra



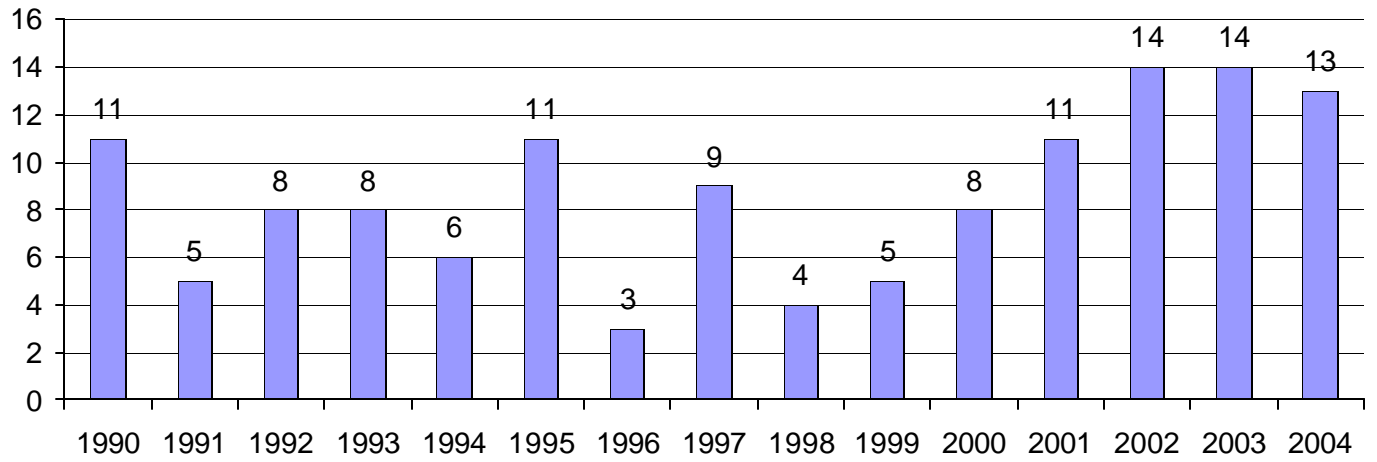
Porter



Shohola



Westfall



PIKE COUNTY RECORDED SUBDIVISIONS

Municipality	Subdivision Name	Developer	Approval	Acreage	Lots	Homes	Central Water	Central Sewer	Control
Blooming Grove	Blooming Grove Acres	Swezy, Charles	1969	20	10	1			Devel
Blooming Grove	Camelot Forest	Colorado Inc.	1967	102	135	63			POA
Blooming Grove	Hemlock Farms *	Western Heritage	1963	4,262	3,869	2,435	X		POA
Blooming Grove	Hitching Post	Greeley Homes Inc	1980	36	38	35	X	X	POA
Blooming Grove	Lawyers Club	Lawyers Club Inc	1977	40	10	0			Devel
Blooming Grove	Lewis Miller	Miller, Lewis	1957	12	23	15			Devel
Blooming Grove	Lords Valley Inter.	Lords Valley Inter. Inc.	1975	262	53	42			Devel
Blooming Grove	Mel-Chris Woods	SML Inc	1972	106	61	21	X		Devel
Blooming Grove	Sandy Hill Court	Boehm, Joseph	1974	28	19	6			Devel
Blooming Grove	Sky-Top Ranches	Gumblet, Gabriella	1975	154	34	24			Devel
Blooming Grove	Tanglewood North *	Tanglewood Lakes Inc.	1971	450	370	76			POA
Blooming Grove	Whispering Pines	Swezy, Charles	1986	40	19	7			Devel
Blooming Grove	White Birch Run	Mary Costa	1977	200	64	13			Devel
Blooming Grove	Zane Blaine	Blaine, Zane	1971	20	49	10			Devel
Delaware	Auten	Auten, John	1967	60	29	16			Devel
Delaware	Birchwood Lakes	All American Realty	1966	1,000	2,688	756			POA
Delaware	Brookside Development	Eckman Lumber	1972	47	58	22			Devel
Delaware	Delaware Crest Preserve	Dingman Development & Design	1990	27	18	0			Devel
Delaware	Dingman Plaza	Miller, Lewis E.	1973	55	37	13			Devel
Delaware	Emery	Patten Corp	1986	50	12	4			Devel
Delaware	Highland Acres	Parkside Realty	1957	40	119	32	X		Devel
Delaware	Hoffman	Hoffman, William/Marie	1977	116	26	7			Devel
Delaware	Lake Kemadobi	Pocono Pleasures	1969	31	92	17			POA
Delaware	Marcel Lake Estates	All American Realty	1973	640	1,032	185	X	X	POA
Delaware	Meadow Ridge Acres	Swezy, Charles	1971	80	41	21			Devel
Delaware	Mountain Shadows	Thurnherr, Hazel	1980	44	10	4			Devel
Delaware	Old Marcel Lakes	Saint, Rachel	1961	60	190	86			POA
Delaware	Pine Crest Ridge	R&R Land Development Corp	1988	25	9	1			Devel
Delaware	Pocono Acres	Mike Dallesio	1978	119	49	26			Devel
Delaware	Pocono Mt. Lake Estates *	PMLE Inc.	1973	800	407	55	X		POA
Delaware	Pocono Mt. Lake Forest	PMLF Corp.	1972	1,000	975	217	X		POA
Delaware	Pocono Mt. Water Forest *	PMWF Corp.	1972	235	185	53			POA
Delaware	Sylvandale	Wycoff, Alfred/Marion	1967	148	383	12			Devel
Delaware	Thiel	Thiel, William	1987	48	23	6			Devel
Delaware	Traces of Lattimore	Lattimore Developers	1984	470	128	40			Devel
Delaware	Tri-Angle Farm	Angle, Raymond	1966	16	36	1			Devel
Delaware	Wild Acres	Benasa Realty	1978	3,200	3,044	1,069	X	X	POA
Dingman	Blue Stone Ridge	Licari, Andrew	1990	68	31	2			Devel
Dingman	Bosko	Bosko, George	1974	11	10	2			Devel
Dingman	Camp Indian Trails	Miller, Lewis	1978	218	223	23			Devel
Dingman	Conashaugh Farms	Verkade, John	1980	17	21	13			Devel
Dingman	Conashaugh Lakes	Bald Hill Inc/Tatra Realty	1973-82	1,700	964	254			POA
Dingman	Country Club Woods	CHLM Inc	1973	94	78	67			POA
Dingman	Cranberry Ridge	Sunrise Homes	1978	199	38	24			Devel
Dingman	Crescent Lake	Miller, Lewis	1970	100	125	53	X		POA
Dingman	Crooked Oaks	Dubois, Richard	1984	75	33	14			Devel
Dingman	Deercroft	Gilligan, Thomas	1989	96	31	1			Devel
Dingman	Dubbs	Dubbs, Bernard	1972	32	12	7			Devel
Dingman	Dwarfskill Court	Miller, Lewis	1974	62	12	11			Devel
Dingman	Fassler	Fassler, Arnold	1987	60	16	6			Devel
Dingman	Foxcroft Woods	Betti-Mar, Ltd	1970	59	37	16			Devel
Dingman	Gold Key Lake	Carpathian Realty Corp	1966	1,400	2,046	742			POA
Dingman	Hemlock Farms *	Western Heritage	1976	30	48	25	X		POA

Dingman	James Emery	Emery, James	1986	17	12	5			Devel
Dingman	Lake Adventure	Lake Adventure Inc.	1976	397	1,794	1,520	X	X	POA
Dingman	Laurel Hills	Lauer, Harold	1972	59	49	18			Devel
Dingman	Log Tavern Lake	Miller, Lewis	1975	262	49	21			Devel
Dingman	Lynric Hills	Mazzucco, Richard	1988	13	9	3			Devel
Dingman	Meadow View Acres	Piff, Cecilia	1976	90	34	11			Devel
Dingman	Mount Haven	Filone, Anthony	1975	107	49	6			Devel
Dingman	Oak Manor Estates	Kalish, Jay	1972	19	23	18	X		Devel
Dingman	Oak Ridge Crossing	Gilpin, William	1990	73	55	0			Devel
Dingman	Old Mill Estates	Finan, N. / Malhame, D.	1982	317	35	13			Devel
Dingman	Pederson	Pederson, Warren	1966-78	100	71	50			Devel
Dingman	Pocono Mt. Water Forest *	PMWF Corp	1973	330	314	75			POA
Dingman	Pocono Mt. Woodland Lakes	Crutor Inc	1973-75	2,543	1,676	476			POA
Dingman	Raymondskill Valley Est.	Quinn, Merrit	1972	27	21	11			Devel
Dingman	Rocco	Rocco, James	1974	21	18	7			Devel
Dingman	Sawkill Crossing	Pirog, Eugene	1989	79	16	2			Devel
Dingman	Shohola Lake Farms	Grieco, Charles	1979	67	19	6			Devel
Dingman	Spring Brook Estates	Spring Brook Estate	1978	82	25	16			Devel
Dingman	Stone Hedge Farms	Spots, Margaret	1977	48	21	13			N/A
Dingman	Sunrise Lake	Ramagosa, Robert	1964	850	1,198	565	X		POA
Greene	Al's Acres	Haggarty, Albert	1950	25	80	56	X		Devel
Greene	Axehandle	Wynoska Club Inc.	1977	15	10	5			Devel
Greene	Bloss Acres	Patten Corp	1986	99	22	3			Devel
Greene	Buena View Estates	Town Green Inc	1971	28	27	0			Devel
Greene	Charles Freeburger	Freeburger, C.	1974	26	26	3			Devel
Greene	Cold Hill Acres	Royal Enterprises	1978	53	22	10			Devel
Greene	Edgar Wilson	Wilson, Edgar	1980	25	124	57	X		Devel
Greene	Escape *	Southern Corp	1974	338	400	315	X	X	POA
Greene	Fawn Hill	Schoenagel Bros.	1970	40	54	14	X		POA
Greene	Game Ridge	Cunningham, C.	1973	96	30	9			Devel
Greene	Grant Wilson Estates	Wilson, Grant	1962	80	165	34			Devel
Greene	Heights	Wilson, Robert	1970	60	442	229			Devel
Greene	Lake Jamie	Balliet	1976	60	77	48			Devel
Greene	Lake Paupack	Lake Paupack Corp	1978	85	60	54			Devel
Greene	Lake Wallenpaupack Est.	Lake Wallenpaupack Estates	1970	202	496	61	X		POA
Greene	Lake in the Clouds	Char-Mart Inc	1967	300	418	152			POA
Greene	Laurel Lane	Schoenagel Bros.	1980	93	82	31	X		Devel
Greene	Leland Rose	Rose, Leland	1977	25	127	30			Devel
Greene	Mountain View Estates	Altemier, R / Singer Jr., F.	1988	60	14	0			Devel
Greene	Oscar Olsommer	Olsommer, Oscar	1969	10	74	19			Devel
Greene	Panther Lake Estates	Unknown	1966	165	160	46			POA
Greene	Pine Hill	SML Inc	1975	72	41	13			Devel
Greene	Rinehimer	Rinehimer, Byron	1969	90	200	147	X		Devel
Greene	Rocky Acres	Ruffner, C.F.	1978	259	75	45			Devel
Greene	Rustic Acres	Obert, Robert	1960	17	50	4	X	X	Devel
Greene	Sandspring Acres	Schoenagel Bros.	1980	29	27	12			Devel
Greene	Sky View Lake	Pocono Sky	1968	390	663	125			POA
Greene	Sugar Hill Estates	Winona Lakes Inc.	1973	380	200	35			Devel
Greene	Sugar Hill Forest	Saltzman, Steven	1974	46	20	2			Devel
Greene	Top of the Mtn. Estates	Evans, Paul	1975	86	49	17			Devel
Greene	Tra-Mar Cove	Tagus, Robert	1939	15	28	13	X		Devel
Greene	Tranquility Falls	LaVigne, Rey/Ann	1969	134	235	35	X		POA
Greene	Whitetail Ridge	Patten Corp	1987	142	23	2			Devel
Greene	Wm. Rhoads Development	Rhoads, William	1962	170	206	66			Devel
Greene	Woodland Meadows	Coutts, George	1973	106	39	14			Devel
Lackawaxen	434 Development	Pine Forest Camp	1987	31	16	9			Devel
Lackawaxen	Ann Tournquist	Tournquist, Ann	1954	13	12	0			Devel

Lackawaxen	Baisendville Valley	Hiris, Frank	1972	40	52	11			Devel
Lackawaxen	Bear Ridge	Pine Forest Camp	1988	24	14	10	X		Devel
Lackawaxen	Canal Acres	Unistrukture Inc	1971	50	34	6	X		Devel
Lackawaxen	Catchall Landing Estates	Cortese, John	1975	74	34	11			Devel
Lackawaxen	Cortese Plan	Cortese, John	1975	55	10	11			Devel
Lackawaxen	Donald Holbert	Holbert, Donald	1980	6	24	15			Devel
Lackawaxen	Farm Properties	Thompson, Alex/Evelyn	1974	24	17	2			Devel
Lackawaxen	Fawn Lake Forest	American Central Corp	1970	2,000	2,076	624	X		POA
Lackawaxen	Field Bend Lock	McKean, George	1982	26	17	1			Devel
Lackawaxen	Fred Kuhn	Kuhn, Fred/Hazel	1967	25	56	14			Devel
Lackawaxen	Friendly Acres	Swezy, Charles	1973	300	127	39			Devel
Lackawaxen	Harold Olafson	Olafson, Harold	1981	45	11	5			Devel
Lackawaxen	Huggy Bear Lake	McKean, George	1971	150	249	38			Devel
Lackawaxen	Hunters Ridge	Russell, Joseph	1973	117	42	11			Devel
Lackawaxen	Laurel Wood	Albertson, Rob	1971	230	112	4			Devel
Lackawaxen	Maplewood Acres	American Central Corp	1971	315	80	5			Devel
Lackawaxen	Masthope Rapids	Falling Waters at Masthope Inc	1978	2,650	2,500	815	X	X	POA
Lackawaxen	Megargel	Megargel, A.H.	1975	23	10	2			Devel
Lackawaxen	Mt. View Estates	McKean, Edgar/Steve	1981	42	18	7			Devel
Lackawaxen	Norwegian American Colony	Beekley/Taylor/Musgrove/Chapman	1902	1,049	20	3			Devel
Lackawaxen	Old Orchard Estates	Nelson, Robert	1975	70	43	13			Devel
Lackawaxen	Patten Corporation	Mid-Atlantic	1986	82	11	4			Devel
Lackawaxen	Regenass Estates	Prog. Land Plan	1989	50	15	1			Devel
Lackawaxen	Riverview Acres	Swezy, Charles	1971	190	103	11			Devel
Lackawaxen	Roland Acres	Swezy, Charles	1980	142	19	5			Devel
Lackawaxen	St. Vincent Pointe	Blaney, John	1987	62	21	8			Devel
Lackawaxen	Stelling & Brickstein	Brickstein, J./Stelling, A.	1911	43	31	8			Devel
Lackawaxen	Temperton	Temperton, Dale	1964	9	21	15			Devel
Lackawaxen	Tinkwig Mt Lake Forest	Tinkwig Mt Lake Forest Corp	1973	1,400	821	168			POA
Lackawaxen	Tuscarora	Bluestone Mountain	1971	139	66	8			Devel
Lackawaxen	Welcome Lake Estates	Case, William	1967	53	82	28			Devel
Lackawaxen	Westcolang Park	Fairlamb, D.E.	1920	90	90	17			Devel
Lackawaxen	William Case	Case, William	1980	24	24	15			Devel
Lackawaxen	Wooded Acres	Halpern, Ted	1976	24	18	5			Devel
Lackawaxen	Woodhaven of Penna.	Ledgedale Corp	1977	14	13	4			Devel
Lackawaxen	Woodledge Village	Ledgedale Corp	1971	359	574	69	X		POA
Lackawaxen	Woodloch Springs	Woodloch Properties	1990	438	402	402	X	X	Devel
Lehman	Eagle Point	Wesland Development Corp.	1984	21	60	35	X	X	Devel
Lehman	Emmitt Bensley	Bensley, Emmitt/Clarence	1967	3	10	3			Devel
Lehman	Glen at Tamiment	Wesland Development Corp.	1987	350	449	110	X	X	Devel
Lehman	Homestead	Rainey, Charters/Amy	1952	25	25	2			Devel
Lehman	Mountain Shadows	Thurnherr, Hazel	1977	108	23	7			Devel
Lehman	Pine Ridge	Pine Ridge Inc.	1965	1,100	1,536	667	X		POA
Lehman	Pocono Mt. Lake Estates *	PMLE Inc.	1973	2,404	2,000	500	X		POA
Lehman	Pocono Ranchlands	American Leisure	1973	1,900	2,000	450	X		POA
Lehman	Rustic Acres	Rohner, Robert	1960	110	180	137	X		Devel
Lehman	Saw Creek Estates	Lehman Pike Devel. Corp.	1976	2,300	3,100	1,700	X	X	Devel
Lehman	Schoonover	Schoonover, S.	1961	7	19	6			Devel
Lehman	Stony Hollow Village	Winona Lakes Inc.	1974	218	239	96	X	X	Devel
Lehman	Sunset Acres	Bonsera, Joseph	1966	40	68	17			Devel
Milford Township	Asa Martin	Martin, Asa	1986	26	10	3			Devel
Milford Township	Emery	Emery, James/Bruce	1972	28	24	6			Devel
Milford Township	Foster Hill Heights	Weissang, Robert/Cecile	1988	79	13	5			Devel
Milford Township	Greenwood Hills	Miller, Lewis	1970	20	62	9			Devel
Milford Township	Hickory Hill	Finan, N. / Malhame, Maryanne	1977	79	55	3			Devel
Milford Township	Keystone Park	Moglia, Emil	1969	40	40	15			Devel
Milford Township	Milford Heights	Berkowitz, Louis	1976	51	25	12			Devel

Milford Township	Moon Valley Falls	Miller, Robert	1988	65	68	24	X	X	Devel
Milford Township	Orben	Orben, Vic/Jane	1975	12	13	3			Devel
Milford Township	Pine Acres	Wittecock, William	1962	15	40	26	X		Devel
Milford Township	Sawkill Run	Milprop Associates	1986	67	24	15			Devel
Milford Township	School House Ridge	Perretti, William	1977	150	34	25			Devel
Palmyra	Al-Wa-Da	Al-Wa-Da Corp	1975	30	233	51			Devel
Palmyra	Ann & Howell	George Anns	1963	6	46	7			Devel
Palmyra	Ansley	Leonard Ansley	1962	35	67	31			Devel
Palmyra	Beech Woods	George Gumble	1969	15	72	49			Devel
Palmyra	Big Wood	George Gumble	1969	40	151	69	X		Devel
Palmyra	Colony Cove	Fred Singer	1973	100	192	117	X		POA
Palmyra	Coutts Brothers	Coutts Brothers	1981	100	31	13	X		Devel
Palmyra	Cranberry Cove	Leland Gumble Jr.	1973	100	192	117			Devel
Palmyra	Deer Woods	George Gumble	1971	90	65	15	X		Devel
Palmyra	Dirk Manor	William Dirk	1972	58	88	29			Devel
Palmyra	Earl Unger	Earl Unger	1980	15	20	15			Devel
Palmyra	Edward Taushman	Edward Taushman	1964	12	86	45			Devel
Palmyra	Escape *	Southern Corp	1972	75	139	49	X	X	POA
Palmyra	Fairview Lake	Henry Weits	1976	120	178	93			Devel
Palmyra	Forest Homes	H & L Edwards	1948	10	62	39			Devel
Palmyra	George Lyman	George Lyman	1965	5	19	7			Devel
Palmyra	Hemlock Grove	Johnny Apple	1966	80	130	80	X		Devel
Palmyra	Hemlock Point	Martin Lennon	1976	64	106	48	X		POA
Palmyra	Ivywood	SML Inc.	1966	7	16	14			POA
Palmyra	Killam Tract	Gumble Brothers	1969	37	76	44	X		Devel
Palmyra	Lake Crest Estates	James Swanick	1941	30	40	3	X		Devel
Palmyra	Lake Wenonah	Unknown	1949	12	35	10			Devel
Palmyra	Lakeview Acres	A.Panick / J. Ortwein	1966	8	76	52	X		Devel
Palmyra	Laurel Lane	Schoenagel Brothers	1968	100	126	70	X		Devel
Palmyra	Layton Property	John Westbrook	1902	18	34	10			Devel
Palmyra	Lenape Village	Fairview Lake Devel Corp.	1967	10	15	12			Devel
Palmyra	Louise Steiner	Louise Steiner	1973	32	52	13			Devel
Palmyra	Lynndale	Gumble Brothers	1973	60	100	79	X		Devel
Palmyra	Matyas	Eugene Matyas	1970	2	15	2			Devel
Palmyra	Millbrook Development	Gumble Brothers	1978	172	432	145	X		Devel
Palmyra	Otter Springs	Charles Singer	1973	42	53	16	X		Devel
Palmyra	Pauline Stirner	Pauline Sterner	1976	4	10	5			Devel
Palmyra	Paupack Gardens	John Zimmerman	1938	30	78	42	X		Devel
Palmyra	Paupack Hills	Harold Thomson	1980	32	11	4			Devel
Palmyra	Paupack Park	Vacation Food Co.	1962	3	11	5			Devel
Palmyra	Penn-Wood	Anna Coutts	1966	71	154	74	X		POA
Palmyra	Poco-Fairview	Von Hake, Helen	1977	14	10	4			Devel
Palmyra	Preston Flory	Preston Flory	1956	11	82	35			Devel
Palmyra	Seeley on L Wallenpaupack	Seymour Seeley	1929	19	27	18			Devel
Palmyra	Simons Point	Louise Simons	1964	85	62	40			Devel
Palmyra	Spinnler Point Colony	Spinnler Pt. Colony Assoc.	1929	65	500	108			POA
Palmyra	Sunset Acres	Unknown	1965	60	170	8			Devel
Palmyra	Sunset Point	Jerome Cianfrini	1970	20	137	77	X		Devel
Palmyra	Sunset Ridge	Peter Helms	1988	16	10	3	X	X	Devel
Palmyra	Tafton Cove	Wilson-Hill	1978	70	505	60	X		Devel
Palmyra	Tafton Heights	William Gormley	1969	18	18	15			Devel
Palmyra	Tafton View	Ira/Gertrude Rutherford	1953	50	228	52			Devel
Palmyra	Tanglewood Lakes	Tanglewood Lakes Inc.	1976	1,579	1,077	500	X		POA
Palmyra	Tanglewood North *	Tanglewood Lakes Inc	1971	600	481	86	X	X	POA
Palmyra	Vetterlein Estates	Louise Vetterlein	1965	15	27	10			Devel
Palmyra	Walter Illigash	Walter Illigansh	1966	11	80	51			Devel
Palmyra	White Beauty View	White Beauty View	1970	20	38	18	X	X	Devel

Palmyra	White Sands Beach	Naldo Guccini	1963	11	70	27			Devel
Palmyra	William Soose	William Soose	1973	23	40	11	X		Devel
Porter	Blue Heron Lake	Blue Heron Lake	1924	41	177	56			Devel
Porter	Earl Ness	Earl Ness	1964	87	68	48			Devel
Porter	Eilenberger	Ralph Eilenberger	1964	21	42	31			Devel
Porter	Fox Hollow	Landview Properties	1990	52	21	1			Devel
Porter	Hemlock Farms *	Western Heritage	1966	200	309	154	X		POA
Porter	Soldo & Szabo	Soldo & Szabo	1977	3	12	9			Devel
Porter	Spruce Run Creek	Raymond Hulse	1990	448	38	2			Devel
Shohola	Brantwood	Brand Watson	1972	45	39	13			Devel
Shohola	Crystal Spring Heights	Joseph DeRose	1979	40	10	8			Devel
Shohola	East Cove Wds/Chestnut HI	Davis R. Chant	1971	63	57	29			Devel
Shohola	Evergreen Park	Charles Swezy	1971	110	43	18	X		Devel
Shohola	Happy Hollow	Charles Swezy	1971	100	90	73	X		Devel
Shohola	Hinkel Estates	Hinkel Estates Inc.	1975	190	77	25			Devel
Shohola	Lake Canapache	Canapache Land Co.	1971	25	42	9			Devel
Shohola	Laurel Valley Estates	Edgar/Marion McKean	1975	12	11	12	X		Devel
Shohola	Log Cabin Property	Ryall/Salmon/Watson	1911	22	19	11			Devel
Shohola	Maple Park	Charles Swezy	1967	80	152	41	X		Devel
Shohola	Max Otto	Max Otto	1968	32	16	9			Devel
Shohola	Michael Frank	Michael Frank	1971	124	51	5			Devel
Shohola	Sagamore Estates	Deabel Inc.	1965	334	1,086	140	X		POA
Shohola	Shohola Acres	George O'Connor	1975	41	25	7			Devel
Shohola	Shohola Heights	Muriel Lohden	1975	70	43	19			Devel
Shohola	Shohola Trails End	Greenbriar Development Corp	1971	360	1,850	1,500	X	X	POA
Shohola	Twin Lakes Park	George Stair	1954	106	80	51			Devel
Shohola	Twin Lakes Preserve	Twin Lakes Preserve	1979	35	24	19			POA
Shohola	Twin Lakes Woods	CDE Realty Corp	1978	260	88	35			Devel
Shohola	Walker Lake	PA Lakeshore Inc	1955	449	2,699	276			POA
Westfall	Buck Horn Acres	J. Segal / S. Emanuel	1976	78	29	1			Devel
Westfall	Crawford Hills	High Bridge Devel. Corp	1987	46	20	7			Devel
Westfall	Farmstead Sec.1	Stephen Palmer	1977	88	29	16			Devel
Westfall	Glass House Hill	Earl Edwards	1978	63	46	29			Devel
Westfall	Keystone Park	Emil Moglia	1969	22	43	27			Devel
Westfall	Laurel Acres	Charles Swezy	1969	152	100	0			Devel
Westfall	Milford Landing	Milford Group	1986	117	306	105	X	X	POA
Westfall	North Castle Acres	Prevast & Parent	1944	30	18	0			Devel
Westfall	Palmer Woods	E. Hoyt Palmer	1980	33	23	10			Devel
Westfall	Philips Lane	Robert Philips	1942	35	40	16			Devel
Westfall	River Drive Estates	I & G Construction	1966	70	92	25			Devel
Westfall	Rosetown Estates	David Katz	1989	33	12	0			Devel
Westfall	Valley View Estates	L & J Inc.	1979	75	36	13			Devel

APPENDIX 16

POPULATION, HOUSING, ECONOMIC, COMMUTING, AND EDUCATION DATA

POPULATION CONCENTRATION
(Percent of County Totals)

Municipality	1890	1930	1960	1970	1980	1990	2000
Blooming Grove	3.7	4.2	4.6	4.6	6.4	7.2	7.8
Delaware Twp.	8.5	6	6	5.7	8.2	12.6	13.6
Dingman Twp.	5.2	4.8	4.2	4.4	10.2	16.4	19
Greene Twp.	11.8	10.2	8.7	8.7	8	7.5	6.8
Lackawaxen Twp.	16.4	13.1	11.7	11.5	11.6	10.1	9
Lehman Twp.	7.9	7.3	3.5	5.3	7.9	10.9	16.2
Matamoras	NA	23.8	22.8	19	11.6	6.9	5
Milford Borough	8.4	11.8	13.1	10.1	6.3	3.8	2.4
Milford Twp.	1.7	2	4.2	3.5	3.5	3.6	2.8
Palmyra Twp.	8.6	4.9	7.1	10.2	9.4	7.1	6.8
Porter Twp.	0.9	0.7	0.6	0.7	1.5	0.6	0.8
Shohola Twp.	10.2	5.7	4.5	4.9	5.4	5.7	4.5
Westfall Twp.	16.6	5.5	9.2	11.4	10	7.5	5.2

Source: U.S. Census Bureau

PIKE COUNTY
RACIAL CHARACTERISTICS - 2000

	All ages		18 years and over	
	Number	Percent	Number	Percent
Total population	46,302	100	33,950	100
One race	45,623	98.5	33,564	98.9
White	43,109	93.1	31,817	93.7
Black or African American	1,513	3.3	1,070	3.2
American Indian and Alaska Native	111	0.2	72	0.2
Asian	285	0.6	204	0.6
Native Hawaiian and Other Pacific Islander	3	0	3	0
Other race	602	1.3	398	1.2
Two or more races	679	1.5	386	1.1

HISTORICAL POPULATION DATA, US CENSUS

Pike County and its Municipalities

Past 10 years

Municipality	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Blooming Grove Twp.	351	446	375	263	317	384	358	424	548	1,176	2,022	3,621
Delaware Twp.	799	721	550	376	447	412	511	549	671	1,492	3,527	6,319
Dingman Twp.	491	481	427	325	357	367	361	382	518	1,855	4,591	8,788
Greene Twp.	1,114	1,022	893	787	760	906	829	793	1,028	1,462	2,097	3,149
Lackawaxen Twp.	1,547	1,259	1,193	902	977	805	1,072	1,068	1,363	2,111	2,832	4,154
Lehman Twp.	742	658	668	556	543	402	459	318	624	1,448	3,055	7,515
Matamoras Boro	-	-	1,388	1,535	1,784	1,735	1,761	2,087	2,244	2,111	1,934	2,312
Milford Boro	793	884	872	768	886	901	1,111	1,198	1,190	1,143	1,064	1,104
Milford Twp.	158	172	158	120	151	131	233	386	418	633	1,013	1,292
Palmyra Twp.	810	638	526	406	365	467	582	651	1,204	1,722	1,976	3,145
Porter Twp.	89	53	50	51	55	78	94	51	88	277	163	385
Shohola Twp.	960	701	545	434	429	457	455	413	574	986	1,586	2,088
Westfall Twp.	1,558	1,731	352	295	412	407	599	838	1,348	1,825	2,106	2,430
Pike County	9,412	8,766	7,997	6,818	7,483	7,452	8,425	9,158	11,818	18,271	27,966	46,302

Source: US Census Bureau

MEDIAN AGE

Region	1980*	1990	1994**	2000*
Pike County	39.1	37.1	38.6	39.6
Pennsylvania	32.1	34.4	36.1	38.0
United States	30	32.7	NA	35.3

*U.S. Census

**National Planning Data Corporation

PIKE COUNTY POPULATION BY AGE GROUP, 1990-2000

AGE	1990	%	2000	%
UNDER 5	2,254	8.1	2,723	5.9
5 to 9	2,108	7.5	3,666	7.9
10 to 14	1,740	6.2	3,969	8.6
15 to 19	1,503	5.4	2,904	6.3
20 to 24	1,270	4.5	1,567	3.4
25 to 34	4,688	16.8	4,625	10
35 to 44	4,206	15	8,198	17.7
45 to 54	2,743	9.8	6,557	14.2
55 to 59	1,354	4.8	2,681	5.8
60 to 64	1,743	6.2	2,395	5.2
65 to 74	2,838	10.1	4,430	9.6
75 to 84	1,209	4.3	2,046	4.4
85 PLUS	310	1.1	541	1.2
TOTAL	27,966	100	46,302	100

Source: U.S. Census Bureau

SUMMARY OF HOUSING UNITS 1990 and 2000

Municipality	1990 Census Owner Occupied Housing Units	2000 Census Owner Occupied Housing Units	1990 Census Renter- Occupied Housing Units	2000 Census Renter- Occupied Housing Units	1990 Census Average HHA Size of Owner Occ HU	2000 Census Average HHA Size of Owner Occ HU	1990 Census Average HH Size of Renter Occ HU	2000 Census Average HH Size of Renter Occ HU	1990 Census Vacant Housing Units	2000 Census Vacant Housing Units	1990 Census Vacant HU for Seasonal, Recreational, or Occasional Use	1990 Census Vacant HU for Seasonal, Recreational, or Occasional Use
Pike County	8,775	14,775	1,761	2,658	2.63	2.64	2.56	2.57	20,316	17,248	18,369	15,350
Blooming Grove	707	1,238	89	144	2.50	2.45	2.88	2.69	2,308	1,891	2,227	1,678
Delaware	1,105	1,965	137	279	2.81	2.78	3.09	2.96	1,753	1,209	1,698	993
Dingman	1,426	2,693	197	287	2.85	2.97	2.65	2.73	2,558	2,709	2,368	2,435
Greene	721	1,082	121	189	2.45	2.43	2.53	2.46	1,721	1,509	1,368	1,349
Lackawaxen	909	1,456	194	238	2.56	2.41	2.61	2.72	2,145	2,056	1,986	1,863
Lehman	836	2,208	182	395	2.83	2.84	3.02	3.08	2,957	2,052	2,647	1,763
Matamoras	585	648	183	277	2.54	2.62	2.44	2.22	153	52	14	6
Milford Boro	258	298	191	224	2.52	2.39	1.92	1.75	115	38	21	18
Milford Twp.	322	429	75	98	2.67	2.52	2.04	2.15	166	67	79	41
Palmyra	690	1,127	131	203	2.39	2.37	2.48	2.35	3,090	2,508	2,841	2,337
Porter	51	149	20	19	2.27	2.28	2.35	2.21	801	758	796	725
Shohola	536	716	86	120	2.56	2.44	2.47	2.65	2,294	2,253	2,180	2,055
Westfall	629	766	155	185	2.53	2.50	2.57	2.45	255	146	144	87

Source: 1990 and 2000 Censuses of Population and Housing, U.S. Census Bureau

HOUSEHOLDS, 2000								
	Families	% Families Married Couples		% Families No Spouse Present	Non-Family Households	Non-Family Households		
		Children	No Children			Persons Living Alone	Persons Living Alone 65 and Older	Other
Pike County	13,083 (71.3%)	38.6	46.9	14.5	5,263 (28.7%)	3,595	1,417	1,668
Pennsylvania	3,225,707 (63.5%)	34.6	43.0	22.3	1,854,371 (36.5%)	1,319,987	1,562,470	534,384
Blooming Grove Twp.	1,090	28.3	59.3	12.5	367	257	128	110
Delaware Twp.	1,756	47.1	40.1	22.8	596	402	112	194
Dingman Twp.	2,418	46.5	39.5	14.0	697	423	152	274
Greene Twp.	936	30.3	54.6	15.1	408	292	104	116
Lackawaxen Twp.	1,207	32.8	56.2	11.0	549	426	192	123
Lehman Twp.	2,068	41.7	41.0	17.3	713	416	108	297
Matamoras Borough	661	34.8	39.5	25.7	302	247	143	55
Milford Borough	276	32.2	47.5	20.3	280	214	71	66
Milford Township	370	39.2	47.3	13.5	189	122	46	67
Palmyra Township	938	30.4	56.0	13.6	495	317	145	178
Porter Township	112	25.9	61.6	12.5	60	28	12	32
Shohola Township	574	39.9	51.4	8.7	289	216	86	73
Westfall Township	677	35.7	49.6	14.7	318	235	118	83

Source: U.S. Census

UNITS IN STRUCTURE 1980-1990-2000 (Percent Total)

1980						1990						2000					
Units in Structure	Pike County	Monroe County	Wayne County	PA	Sussex County,NJ	Units in Structure	Pike County	Monroe County	Wayne County	PA	Sussex County,NJ	Units in Structure	Pike County	Monroe County	Wayne County	PA	Sussex County,NJ
1,Detached	89.6	78.5	77.6	53.4	84	1,Detached	78.6	30.8	33.7	53.4	81.5	1,Detached	80.7	82.4	78.4	55.9	80.7
1,Attached	0.4	2.3	0.5	18.1	1.3	1,Attached	2.3	1.8	0.2	18.4	4.7	1,Attached	2.0	4.3	1.3	17.9	4.2
2 Units	2.3	5.1	6.7	7.5	4.4	2 Units	1.2	0.7	0.6	5.7	2.9	2 Units	1.0	2.7	3.0	5.2	2.9
3+ Units	2.5	9.4	4.6	17.5	10	3+ Units	1.6	1.7	0.5	16.0	8.9	3+ Units	1.5	6.1	4.0	15.9	10.7
Mobile Homes	5.8	5.2	9.5	3.6	0.8	Mobile Homes	14.8	1.4	12.3	5.2	0.9	Mobile Homes	14.7	4.5	11.8	4.9	1.4

Source: U.S. Census Bureau

PIKE COUNTY 2000 DATA

MUNICIPALITY	Total Population	Median Family Income	Median Household Income	Median Age	Pop Under 18	Pop 16 yrs and over	Total in Labor Force	Persons per Sq.Mi.*	% of Persons below Poverty Level	% of Families Living Below Poverty Level
Blooming Grove Twp.	3,621	\$46,250	\$42,386	45.5	732	2,983	1,340	48.1	8.6	6.4
Delaware Twp.	6,319	\$49,070	\$46,263	36.3	1,974	4,550	2,878	143.0	6.6	5.2
Dingman Twp.	8,788	\$56,458	\$54,866	36.6	2,730	6,321	4,186	151.0	4.3	4.1
Greene Twp.	3,149	\$41,571	\$33,962	43.0	704	2,522	1,290	52.3	8.7	5.0
Lackawaxen Twp.	4,154	\$46,856	\$38,090	43.6	992	3,270	1,669	52.8	9.7	7.4
Lehman Twp.	7,515	\$50,714	\$49,856	36.9	2,247	5,536	3,537	153.7	7.9	5.6
Matamoras Borough	2,312	\$45,917	\$37,361	40.0	605	1,803	1,026	3,302.9	4.0	2.4
Milford Borough	1,104	\$46,136	\$33,571	42.3	228	920	543	2,208.0	9.1	4.0
Milford Township	1,292	\$57,500	\$48,264	43.5	298	1,034	651	103.4	5.2	4.1
Palmyra Township	3,145	\$44,537	\$39,414	44.3	693	2,551	1,349	91.4	8.8	6.0
Porter Twp.	385	\$42,188	\$38,125	48.8	60	320	195	6.6	3.2	1.8
Shohola Township	2,088	\$46,207	\$41,593	42.1	510	1,629	947	46.7	6.2	4.2
Westfall Township	2,430	\$51,065	\$42,472	42.8	579	1,915	1,168	79.9	6.9	4.9
Pike County	46,302	\$49,340	\$44,608	39.6	12,352	35,354	20,779	84.7*	6.9	5.1
Pennsylvania	12,281,054	\$49,340	\$40,106	38.0				274.0	11.0	7.8

*Total area of Pike County is 547 sq. miles – 2000 Census Information

Source: U.S. Census Bureau

COMMUTING TO WORK
MODES OF TRANSPORTATION AND MEAN TRAVEL TIME – 2000

Municipality	Car, truck, or van, drove alone		Car, truck or van, carpooled		Public Transportation (including taxicab)		Walked		Other Means		Worked at home		Mean Travel Time
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Minutes
Blooming Grove Twp.	964	77.4	164	13.2	39	3.1	23	1.8	4	0.3	52	4.2	47.2
Delaware Township	2,138	81.0	363	13.7	28	1.1	49	1.9	17	0.6	46	1.7	51.4
Dingman Township	3,271	81.3	465	11.6	94	2.3	42	1.0	23	0.6	128	3.2	52.5
Greene Township	879	75.2	192	16.4	20	1.7	14	1.2	8	0.7	56	4.8	38.4
Lackawaxen Township	1,262	82.8	175	11.5	33	2.2	9	0.6	4	0.3	41	2.7	38.7
Lehman Township	2,305	72.1	526	16.5	256	8.0	27	0.8	16	0.5	65	2.0	60.4
Matamoras Borough	815	83.0	99	10.1	18	1.8	27	2.7	4	0.4	19	1.9	29.2
Milford Borough	338	67.5	55	11.0	18	3.6	49	9.8	7	1.4	34	6.8	26.0
Milford Township	467	75.0	83	13.3	17	2.7	13	2.1	2	0.3	41	6.6	34.0
Palmyra Township	991	79.9	130	10.5	6	0.5	35	2.8	12	1.0	66	5.3	31.7
Porter Township	142	76.8	20	10.8	3	1.6	6	3.2	-	-	14	7.6	43.2
Shohola Township	706	81.3	89	10.3	11	1.3	10	1.2	7	0.8	45	5.2	45.2
Westfall Township	905	81.9	111	10.0	20	1.8	17	1.5	-	-	52	4.7	30.1
Pike County	15,183	78.7	2,472	12.8	563	2.9	321	1.7	104	0.5	659	3.4	46.0

Source: U.S. Census Bureau – 2000

**PLACE OF WORK FOR WORKERS 16 YEARS AND OLDER
STATE AND COUNTY LEVEL - 2000**

Municipality	Worked in State of Residence	Worked in County of Residence	Worked Outside County of Residence	Worked Outside State of Residence	Total Persons Commuting To Work
Blooming Grove Township	807	278	529	439	1,246
Delaware Township	993	755	238	1,648	2,641
Dingman Township	1,437	1,222	215	2,586	4,023
Greene Township	996	258	738	173	1,169
Lackawaxen Township	1,085	400	685	439	1,524
Lehman Township	1,610	392	1,218	1,585	3,195
Matamoras Borough	347	323	24	635	982
Milford Borough	301	297	4	200	501
Milford Township	341	319	22	282	623
Palmyra Township	1,095	323	772	145	1,240
Porter Township	137	42	95	48	185
Shohola Township	428	371	57	440	868
Westfall Township	523	484	39	582	1,105
Pike County	10,100	5,464	4,636	9,202	19,302
	52.3%	28.3%	24.0%	47.7%	

Source: PLACE OF WORK FOR WORKERS 16 YEARS AND OVER – STATE AND COUNTY LEVEL (5) – Universe: Workers 16 years and over Data Set:
Census 2000 Summary File 3 (SF 3) – Sample Data

Pike County Municipal Population Projections 2000-2010

	Total Population Census 2000	Total Population: July 1, 2001	2000 - 2001 % increase	Total Population: July 1, 2002	2001-2002 % increase	Total Population: July 1, 2003	2002 - 2003 % increase	Total Population: July 1, 2004	2003-2004 % increase	Total Population: July 1, 2005	2004 - 2005 % increase	Total Population: July 1, 2006	2005 - 2006 % increase	Total Population: July 1, 2007	2006 - 2007 % increase	Total Population: July 1, 2008	2007 - 2008 % increase	Total Population: July 1, 2009	2008 - 2009 % increase	2010 Estimate	2009 - 2010 % increase	2000 to 2010 % increase
Pike County	46302	48205	3.3%	50086	4.3%	52227	3.6%	54117	3.6%	56337	4.1%	58714	4.2%	61192	4.2%	63774	4.2%	66465	4.2%	69269	4.2%	49.6%
Blooming Grove Twp	3621	3764	3.9%	3905	3.7%	4083	4.6%	4226	3.5%	4387	3.8%	4572	4.2%	4765	4.2%	4966	4.2%	5175	4.2%	5394	4.2%	49.0%
Delaware Township	6319	6623	4.8%	6923	4.5%	7263	4.9%	7517	3.5%	7903	5.1%	8287	4.9%	8690	4.9%	9113	4.9%	9556	4.9%	10020	4.9%	58.6%
Dingman Township	8788	9220	4.9%	9681	5.0%	10199	5.4%	10685	4.8%	11263	5.4%	11875	5.4%	12521	5.4%	13202	5.4%	13919	5.4%	14676	5.4%	67.0%
Greene Township	3149	3252	3.3%	3342	2.8%	3441	3.0%	3504	1.8%	3585	2.3%	3687	2.9%	3793	2.9%	3901	2.9%	4013	2.9%	4127	2.9%	31.1%
Lackawaxen Township	4154	4289	3.2%	4445	3.6%	4619	3.9%	4793	3.8%	5028	4.9%	5223	3.9%	5427	3.9%	5638	3.9%	5857	3.9%	6084	3.9%	46.5%
Lehman Township	7515	7896	5.1%	8222	4.1%	8613	4.8%	8976	4.2%	9456	5.3%	9913	4.8%	10393	4.8%	10896	4.8%	11423	4.8%	11975	4.8%	59.3%
Matamoras Borough	2312	2364	2.2%	2428	2.7%	2494	2.7%	2537	1.7%	2591	2.1%	2655	2.5%	2721	2.5%	2788	2.5%	2857	2.5%	2928	2.5%	26.6%
Milford Borough	1104	1129	2.3%	1157	2.5%	1182	2.2%	1198	1.4%	1214	1.3%	1240	2.2%	1267	2.2%	1294	2.2%	1322	2.2%	1350	2.2%	22.3%
Milford Township	1292	1338	3.6%	1389	3.8%	1468	5.7%	1537	4.7%	1616	5.1%	1693	4.8%	1774	4.8%	1859	4.8%	1948	4.8%	2041	4.8%	58.0%
Palmyra Township	3145	3242	3.1%	3345	3.2%	3457	3.3%	3539	2.4%	3638	2.8%	3753	3.2%	3872	3.2%	3995	3.2%	4122	3.2%	4253	3.2%	35.2%
Porter Township	385	397	3.1%	408	2.8%	419	2.7%	430	2.6%	442	2.8%	455	2.9%	468	2.9%	482	2.9%	496	2.9%	510	2.9%	32.6%
Shohola Township	2088	2159	3.4%	2224	3.0%	2286	2.8%	2330	1.9%	2388	2.5%	2458	2.9%	2531	2.9%	2605	2.9%	2682	2.9%	2761	2.9%	32.2%
Westfall Township	2430	2521	3.7%	2599	3.1%	2685	3.3%	2769	3.1%	2826	2.1%	2926	3.5%	3029	3.5%	3136	3.5%	3247	3.5%	3361	3.5%	38.3%

Source: US Census Bureau Estimates 7/1/2000 to 7/1/2005
Pike County Office of Community Planning estimates 7/1/2006 to 2010 based on US Census Bureau 2000-2005 Average % Increase

**PERCENT HOUSEHOLD DISTRIBUTION
by Income for Pike County Municipalities
and Other Areas in 2000**

Municipality	Less than \$10,000	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 and above
Blooming Grove Twp.	5.7	7.6	15.5	12.5	17.3	41.5
Delaware Twp.	4.8	6.1	10.7	13.0	19.7	45.7
Dingman Twp.	3.7	3.4	6.8	9.5	19.2	56.5
Greene Twp.	9.1	8.1	15.6	18.9	17.3	31.0
Lackawaxen Twp.	7.3	8.6	16.5	12.5	18.1	37.0
Lehman Twp.	4.6	4.1	10.9	12.0	18.6	49.8
Matamoras Boro.	6.6	8.6	17.3	11.2	22.0	34.5
Milford Boro.	14.2	9.6	13.5	14.2	16.5	32.0
Milford Twp.	5.9	4.4	8.6	15.4	18.1	47.6
Palmyra Twp.	6.4	10.1	15.0	14.0	17.8	36.5
Porter Twp.	1.3	7.1	18.1	20.0	14.8	38.7
Shohola Twp.	5.8	5.7	14.7	11.1	23.4	39.3
Westfall Twp.	6.1	8.2	9.0	14.4	19.0	43.3
Pike County	5.8	6.4	12.2	12.7	18.8	43.9
Monroe County	6.6	5.7	12.4	12.4	16.9	46.1
Wayne County	10.1	8.7	17.3	15.1	19.6	29.2
Sussex County (NJ)	3.9	3.1	6.8	7.8	14	64.5
Pennsylvania	9.7	7	13.8	13.3	16.9	39.4

*U.S. Census Bureau broke down income levels in different categories compared to the 1990 Census for the lower income levels. In 2000, the lowest category of income levels was less than \$10,000.

**PIKE COUNTY: EMPLOYED PERSONS SIXTEEN YEARS AND OVER
by Occupation – 1990**

Occupational Category	Number	% of Total
Managerial and Professional Specialty	2,690	21.5
Executive, Administration, Managerial	1,389	11.1
Professional Specialty	1,301	10.4
Technical, Sales, Administrative Support	3,782	30.2
Technicians, and related support	372	3
Sales	1,527	12.2
Administrative support including clerical	1,883	15
Service	1,860	14.8
Private household	39	0.3
Protective service	275	2.2
Service, except protective & household	1,546	12.3
Farming, forestry, and fishing	270	2.2
Precision production, craft, and repair	2,107	16.8
Operators, fabricators, & laborers	1,819	14.5
Machine operators, assemblers, inspectors	673	5.4
Transportation and material moving	643	5.1
Handlers, equipment cleaners, helpers, laborers	503	4
TOTAL	12,528	100

**PIKE COUNTY: EMPLOYED PERSONS SIXTEEN YEARS AND OVER
By Occupation – 2000***

Occupational Category	Number	% of Total	Pennsylvania Percentage
Managerial and Professional Specialty	5,618	28.6	32.6
Service Occupations	3,451	17.6	14.8
Sales and Office Occupations	5,230	26.6	27.0
Farming, Fishing, and Forestry Occupations	69	0.4	0.5
Precision Construction, Extraction, and Maintenance Occupations	2,467	12.6	8.9
Production, Transportation, and Material Moving Operations	2,804	14.3	16.3
TOTAL	19,639	100	100

*The U.S. Census Bureau has different Occupation Categories in 2000 in comparison to 1990.

Source: U.S. Census Bureau

APPENDIX 17

PIKE COUNTY VISIONING

PIKE COUNTY VISIONING 1998 TO 2020 FINAL REPORT

A series of three “Visioning Workshops” were conducted in November of 1995. Workshop participants rated the importance of various issues to the future of Pike County. *Environmental Resource Protection, Regional Planning and Zoning, and Preservation of Historic Resources* received the top three ratings. Other issues of importance included *Education, Health Care and Economic Diversity*. Based on the responses of workshop participants, six task forces were established to further define priorities and goals and objectives for the County’s future.

It was at that juncture that the local organizing committee of *Pike Vision 21st Century* found itself. The group’s objective was to communicate information to the general populace of Pike County, to educate them on options for growth which might help the County to grow while at the same time protecting the scenic, cultural and natural environment, and to help them to understand the opportunity they have to help shape the future of Pike County.

The 130 Pike County citizens who met on September 8, 1998 formally began their Visioning Process in six Task Forces designed to deal with components affected by the prominent issues facing Pike County. The Task Forces were Economic Development, Environment, Government, Infrastructure, Land Use and Quality of Life. During the process, the Government and Infrastructure Task Forces combined due to the extreme interrelatedness of the areas. The Quality of Life Task Force subdivided into three groups to handle its large assignment, Arts and Recreation, Education and Youth, and Health, Housing and Seniors. During the process the Task Forces heard from individuals and groups representing various interests, view points, philosophies, and programs. From these presentations and extensive research the Task Forces developed their reports and the associated recommendations. Review of the Task Forces Reports reveals the interrelationships and common theme of enabling Pike County to successfully enter the 21st Century and maintain its heritage and character for the benefits of all residents.

The county-wide concepts, options, and recommendations for Pike County’s preparation for the future were to be a guide to municipal action, not a mandate. The recommendations were intended to relate to general concepts and programs, not site-specific dictates. Pike County was to rely on and enable the 13 municipalities which comprise the County to cooperate with one another within partnerships which allow planning to take place.

The Task Force Reports are delineated in the following sections of Pike County Visioning.

Economic Development
Environment

Government/Infrastructure
Land Use
Quality of Life

Each Task Force developed their report individually with no standard format. As one reviews the recommendations, projected costs of each are not included. There was a reluctance to suggest cost as it might take priority over consideration of the recommendations and the alternatives for financing the projects.

Four meetings were held in order for the residents of Pike County to review the recommendations prior to the formulation of the Final Report.

These meetings were held –

- September 13th – Milford Township Municipal Building
- September 14th – Delaware Township Municipal Building
- September 15th – Shohola Township Municipal Building
- September 23rd – Palmyra Township Municipal Building

A review of the rough draft was presented. Participants had the opportunity to respond to the recommendations and make additional ones. Several recommendations were made by the residents. The following are recommendations made by the residents.

- For the Economic Development Task Force
A business incubator should be established to foster and nurture small businesses.
- For the Environmental Task Force-
*I am dismayed there is no reference to the deer management problem
If our vision of the future includes protecting the quality of the environment, we need to protect it against all threats: uncontrolled development, polluting industries, or incompetent governmental agencies.*
- For Government/Infrastructure Task Force
Moving offices of the county government from Milford is a step in the wrong direction. This would be an expedient way to solve one problem at the expense of good government and the citizens of Pike County. Proposing that the county government become engaged in “urban flight”, and become a perpetrator of increased sprawl is irresponsible and inconsistent with other Task Force’s recommendations.
 - *The role of private communities should be explicitly stated*
 - *Transportation is of a major concern, especially public transportation*
 - *Education is of major importance and cost effective programs should be implemented to keep taxes in line.*
- For Quality of Life Task Force
 - *There is a need to increase affordable housing for senior citizens*
 - *Low cost computer classes for senior citizens during the day.*

Task Force Reports

Economic Development
Environment
Government/Infrastructure
Land Use
Quality of Life

Each Task Force developed their report individually with no standard format. As you review the recommendations, projected costs of each are not included. However, there was a reluctance to suggest cost as it may take priority over consideration of the recommendations and the alternatives for financing the projects. It is of utmost necessity that the recommendations be prioritized into short-term and long-term goals, consolidation and coordination of projects (recommendation), and the implications for multiple municipality involvement.

Finally, the Task Forces that were involved with this report are appreciative of the work done by the previous Visioning group, 1995-1996. The foundation laid by this group was of great benefit in formulating the work and action of the 1999 group.

Economic Development Task Force

Mission Statement

The Economic Development Committee of Pike County has been charged with a Mission; That Is To Say, To...

1. Formulate ideas, opinions, and strategies necessary to stimulate and sustain the economic growth of Pike County into the new millennium. The ideas, opinions, and strategies, shall be researched and presented in a manner that encourages immediate recognition of their value and feasibility by the Pike County Board of Commissioners.
2. Promote the development of partnerships between Municipal, County, State and Federal agencies to utilize the most contemporary technology to facilitate Economic Development.
3. Promote the expansion of existing businesses and the development of new business seeking an equitable distribution of the tax burden and quality employment for our citizens.
4. Promote economic development while avoiding any negative impact on the natural beauty and resources of our community and environment.

1. Zoning:

Adopt New or Modify Existing Zones allocating reserved space for...

- 1) Industrial Park Development
- 2) Office Parks and Complexes, i.e., Centralized Shared Business Services.
- 3) Commercial Growth.
- 4) Restricted Development
- 5) Recreational Development
- 6) Residential Development.

Identify Areas to be preserved for Specific Purposes;

Identify Areas to be enhanced as...

- 1) Historical
- 2) Parks
- 3) Unique Applications
- 4) Theme Sectors

Target those Areas most suitable for business locations with a focus upon the possibility of a new exit being constructed along Interstate Route 84 solely for access to an anticipated Business Park.

2. Necessary Tools for Re-zoning...

County Maps

- 1) Municipalities;
- 2) Federal Lands;
- 3) State Lands;
- 4) Waterways and Wetlands;
- 5) Infrastructure.

3. All Maps Shall Define Wetland and Critically Sensitive Areas.

All municipalities should undertake consistent zoning adoption or modification procedures, with assistance provided by the county. An Architectural Review Board and the County Planning Commission are best suited to assist each municipality in this effort.

4. EDC Coordinator

A full-time county employee whose main concentration would be the attraction of new businesses to Pike County. Other duties would include:

Coordinate all economic development. Act as a liaison between business firms and County Offices, Programs and Services.

Maintain a relationship with individuals or firms interested in re-locating to or starting in Pike County, by...

1. Offer direction, guidance and resource information

Maintain an inventory of all enterprises established within the County,

1. By location;
2. By category, such as retail, tourism, manufacturing, research & development, clerical, professional, educational, governmental;

Maintain an inventory of all properties available and suitable for new business activity,

1. by location;
2. by category (as above)
3. by accessibility and traffic patterns;

Visit existing businesses periodically

1. work with enterprises to resolve any problems, with concentration on...
 - a. Banking
 - b. Utilities
 - c. Permits
 - d. others as warranted
2. Provide council and advise.

Maintain and update promotional materials of...

1. Land availability
2. Educational opportunities
3. Recreation opportunities
4. Tax Structure
5. Availability of services
6. Reference from businesses in Pike County
7. Inventory and success rate of advertisement in periodicals
8. Resource center for business development

The county should fund the position of EDC Coordinator. The remuneration for this position should be structured in such a manner as to offer a monetary incentive for the establishment of new business. The assisted expansion of existing business should also be addressed through an incentive program. The present county clerical staff should handle any clerical duties required.

5. Architectural Review Board

Board should consist of 5 or more individuals including people from diverse vocations such as a developer, historian, preservationist, attorney, and architect; and, be available to review all commercial projects within the county.

Shall serve as a first stop for review and recommendations, where...

1. Projects regarded as being detrimental should be classified with proper cautionary language (to be developed) to alert other review organizations.
2. Primary concern is to preserve and enhance these purposes;

Other suggestions for...

1. Road cuts, berms, planting, preservation of natural beauty, Signage, height limitations, set back limitations, etc.

The County Commissioners would appoint the "review board" for three year staggered terms. Because these positions would be voluntary, no funding is necessary to enhance and preserve our natural environment while promoting necessary economic growth.

6. Key Observations

A structure must be found in which all municipalities work together. The county should establish strong partnerships with all Chamber of Commerce serving the county.

Without proper zoning we will be unable to attract new business or stimulate the growth of existing business, while at the same time assuring that reasonable controls will preserve natural amenities.

A general fund should be established to finance low interest, short term loans to municipalities. These loans could then be used in turn to finance projects resulting from the re-zoning effort.

The establishment of new business and the growth of existing business are necessary to provide an equitably distributed tax base necessary to maintain natural resources and environmental amenities.

A balanced "tax dollar" is reached only when private citizens do not pay an inequitable percentage of the tax burden. A balanced economy is derived from many elements. These elements include, but not limited to, citizens composition, industrial presence, commercial enterprises, and governmental policies and participation.

The Vision of Services

Our Vision Recommendations for services relating to the Economic Development of Pike County are...

1. The establishment of a **Quality of Life Center**. The Center should be comprised of and offer these entities and amenities.
 - a) Post Secondary Education facility offering associate and bachelor degree courses with concentration in job training programs;
 - b) Distance Learning facilities;
 - c) Library facilities;
 - d) Ambulatory Care facilities;
 - e) County Chamber of Commerce facilities;
 - f) Historical Culture and Eco-Science facilities;
2. The establishment of strong and reliable Telecommunications services
3. The establishment of a comprehensive Internet Web Site.

At least initially, Pike County should authorize and fund the establishment of the **Quality of Life Center**. Presently there are several parcels available for this type of development. The county and private sector together, as applicable, should fund the creation and maintenance of the entities comprising the center.

Our research has conclusively proven that Post Secondary Education can be best provided to Pike County by Luzerne County Community College. Their leadership clearly expressed and displayed the ability and cooperative desire to best serve our community. A partnership of Luzerne County Community College with an institution offering a bachelors degree program would be most desirable and is certainly feasible.

The Telecommunications Base issues should be addressed with each service provider until a resolution of current problems is reached. Presently, there are several providers with none of them offering consistent services within the county.

The County and Private Enterprise should fund Web Site development. Private enterprise should carry the larger percentage of the funding burden.

A volunteer panel of county residents (A Commissioner's Board of Oversight) should be established to explore the availability of State and Federal funding for all of the foregoing projects. The panel should also establish direct communications with the telecommunications service providers and work with them to eliminate existing problems. The panel would report directly to the County Board of Commissioners.

Development of the **Quality of Life Center**, Telecommunications Base, and Internet Web Site would be the cornerstone of an advertisement campaign utilized to attract new business to the community.

A Tourism Position

Our Vision for Pike County Tourism embodies the immediate pursuit of five key initiatives:

1. Creation of a joint public/private sector planning structure (in cooperation with the Pocono Mountain Vacation Bureau) with designated operational funding.
- 2.. Promotion of a highly visible “natural preserve” identity;
3. Re-establish the retirement and second home image (embracing the cooperation of realtors and builders in conjunction with tourism);
4. Create a County identify which includes a distinctive region and county-wide uniform informational Signage system (in time for the Keystone Arts Center 2000 opening)
5. Formation of a blue ribbon commission to study the opportunity in Pike County for the creation of the “Pocono Center for Historical Culture and Eco-Science”

Healthy Tourism is absolutely essential to the future of Pike County, because it is the leading industry. Our tourism industry needs...

- a) Continued support from the PMVB to establish a Pike County Visitors Center in Partnership with PCCC, EDC and EDCNP.
- b) To develop a comprehensive Web-Site to establish the unique identity of Pike County. The “site” should be developed by a partnership consisting of the County, the Chamber of Commerce, and the EDC. The funding should be a cooperative effort of the county and business Community.
- c) To create a Pike County Calendar of events.
- d) To develop county itinerary products based on tourist interests (hiking, hunting, boating, dining, shopping, sight seeing, etc).
- e) To support local trail development including the bicycle route proposed for Route 6.
- f) To establish a partnership with the Delaware Water Gap National Recreation Area and the Upper Delaware River Council.
- g) To better utilize the image and communications of the PMVB and the Commonwealth in local promotions.
- h) To continue to stimulate the growth of Corporate groups and Convention Business opportunities.
- i) To establish a partnership with the proposed Keystone Arts Center in order to assist with it’s development and to utilize it’s potential.
- j) To partner with the PMVB on the Heritage Park planning process.
- k) To support “Sustainable Tourism”. Tourism based on the enhancment and preservation of our environment.

Even though the Keystone Arts Center will be a miraculous addition to our tourism product, we believe there is an opportunity to develop a comprehensive regional center for historical, cultural, and Eco-science disciplines.

This tourism vision is interdependent with the other visions of the Economic Development Task Force, and with those of the other task forces (Quality of Life; Environment; Government/Infrastructure; Land Use). To achieve consistency, we anticipate a comprehensive joint review of all committee submissions.

Pike County Government and Infrastructure Task Force

Mission Statement

The mission of the Government and Infrastructure Task Force is to inquire into the various aspects of county and municipal governments, including their structure; in order to formulate a vision of Pike County for the millennium, enabling us to grow and prosper.

Objective

To accomplish this vision, we must;

- Enhance the services provided to the growing population of Pike County, through government, and public participation that is responsive and accountable.
- Preserve, maintain and enhance the historical, cultural and environmental resources of Pike County.
- Foster Intergovernmental Cooperation/Regionalization/Partnerships.
- Commission a new comprehensive plan.

Topics/Background/Recommendations

Telecommunication

It has been documented in many publications that E-commerce drives market forces. In Pennsylvania, Governor Ridge, via a legislative initiative, strives to provide young people with a global competitive edge, by connecting schools and the workplace through Telecommunications. In addition, colleges, schools, and libraries are being wired and connected through the Internet. Health Services, from Emergency Medical Services (EMS) to doctor's records, are being connected, but again dependent on a telecommunication network.

However, because of a lack of a cohesive telecommunications infrastructure in Pike County, these state initiatives will limit Pike County's economic growth and cultural awareness, retard education and training, and reduce Pike County's ability to provide adequate EMS, and health services, because the recruitment of high quality professionals and other personnel may depend on the fast transmission of data, information and knowledge.

Objectives

- Provide a unified state of the art telecommunications system that will serve the need of business, private and public sectors of Pike County.
- Create a county "hub" with regional connections to facilitate and provide rapid and timely services and information.
- Bring together the telecommunication companies that will insure and deliver proper networking to provide a state-of-the art telecommunications system to Pike County.
- Ensure that every Pike County resident has access to telecommunications information and services.
- Encourage telecommuting so that we can attract and enable highly paid people to live and work in Pike County.

Public Safety

The issue of Public Safety (Police, Fire, EMS) is critical to the health, safety and welfare of the citizens of Pike County. With the expanding population, the demands placed upon the present and future Public Safety Agencies is presently significant.

Pike County must have adequate law enforcement protection for all residents through professional, adequately-funded and equipped police departments commensurate in size with the county's expanding population.

History

Pike County has grown explosively over the last three decades. It has grown from 12,000 residents in 1970 to over 18,000 in 1980, 28,000 in 1990, and about 40,000 at present, a population increase of almost 370% over 30 years (summer population are almost twice that high due to seasonal usage). A substantial number of new residents are from the New York-New Jersey metropolitan area, having moved to Pennsylvania for its rural setting and to escape crime, crowding, high taxes and other urban problems. Pike County is the fastest growing of Pennsylvania's 67 counties, and the 45th fastest growing county in the United States. A substantial number of new year-round residents live in private communities developed initially as recreational/summer home communities.

Problems

Communities have been hard pressed to keep up with provision of services, including law enforcement. Police staffing has not kept pace with growth; in fact, the number of officers has not increased substantially from 1970 levels.

At present, there are only four communities within the county, the townships of Westfall and Shohola and the Boroughs of Matamoras and Milford, with municipal police forces. Those four departments provide law enforcement for approximately 8,080 people or about 20% of the county residents. Other rapidly growing municipalities, particularly Dingman, Delaware, and Lehman townships, have no municipal police forces. At the present time, some municipalities in the southern end of the county are studying a regional policy.

The Pennsylvania State Police provide public law enforcement for the balance of the county. Typically there are no more than two to five officers per shift. They are responsible for the remaining 40,000 or so residents, a number that more than doubles during the summer. Despite their best efforts, they are hard-pressed to provide adequate and/or timely enforcement.

The county has a Sheriff's Department, but the deputies work primarily for the court system. They do not provide enforcement for the balance of the county, largely due to legal and financial constraints. The many private communities have an array of law enforcement and security arrangements. Some have large, professional departments; some have private security guards with limited authority; some have part-time volunteers and community watch patrols; some have nothing whatsoever. Efforts to coordinate community enforcement operations have met with limited success.

The cost of enforcement is a primary problem. Many residents have moved here to avoid taxes and resist efforts to increase them. Recent battles over school budgets reveal the difficulties that would be associated with funding expanded law enforcement options.

Recommendations

It is likely that no one solution will work for the entire county, but some mix of the following options should be considered.

- Upgrade County Sheriffs Department, recent state legislation may make it possible for the Sheriff's Department to provide the full spectrum of law enforcement services to county residents. Since four municipalities already have enforcement, however, it appears likely that there would be some sentiment for excluding them from coverage for tax reasons. The county Sheriff believes that it would be both feasible and legal for the Sheriffs Department to contract with townships and private

communities. Some jurisdictional issues pertaining to private communities would have to be resolved.

- Develop Regional Police Forces. The townships with the greatest population and fastest growth, Dingman, Delaware, and Lehman Townships could develop a regional police force, possibly with the inclusion of Blooming Grove and other townships. Discussions with the appropriate townships should be initiated to determine if such an approach would be feasible. The county should also seek available state grant money to conduct studies of area options.
- Strengthen the Pennsylvania State Police. The statutory ceiling on the number of troopers statewide was recently revoked, so it may be possible to increase the number of troopers at the Blooming Grove barracks. This option should be pursued through county representatives to state government. The state police, however, do not have municipal enforcement as a primary responsibility, so efforts in this arena should complement other actions.
- Improve Law Enforcement Coordination and Liaison. A concerted effort needs to be made to strengthen links between law enforcement entities and improve operational efficiency, particularly between private security and governmental law enforcement organizations. Periodic conferences, shared information, coordinated operating procedures, shared dispatch and other methods should be actively pursued, up to and including establishment of a formal coordination center.
- Offer Law Enforcement Services to Private Communities. Either an enlarged county sheriffs office or a regional municipal police force would provide to private communities if those communities agreed to contract for same. A proposal should be drawn up based on sound fiscal projections of costs and presented for consideration to all private communities in the county.

Conclusion

The Government/Infrastructure Task Force is acutely aware of the reluctance county and municipal voters will have to the development of a new and expensive law enforcement authority, at least until critical enforcement problems arise. We nonetheless feel that action can and should be taken now to head off those problems which will inevitably appear as the area's population increases.

The county should begin by conducting grant-funded problem studies, augmented by working meetings with enforcement authorities and elected officials from the state, county, municipalities, and private communities.

A formal system for coordinating enforcement operations among private and public law enforcement organizations in the county, including a chartered council with representatives from each of these spheres, should be established in the near future to lay the ground work for a comprehensive approach to dealing with enforcement problems in the future. Information on potential enforcement problems and issues should be presented at public meetings and through the media.

Background (Fire and EMS)

Problem

Communities have been hard-pressed to keep up with provision of services, including fire and EMS.

A dozen all-volunteer fire companies serve the 13 municipalities in the county. The companies are having problems retaining volunteers (there are about 500 countywide), raising sufficient funds to pay for equipment (85-100% of funding comes from donations), and obtaining sufficient training. As the number of residents and residences increase and the number of volunteers decrease, fire departments are being stretched thinner and thinner.

The problem for EMS services are very similar. The over-riding problem is lack of manpower to handle the volume of calls. EMS services rely on volunteers, and the numbers have been dropping because of

liability issues, the risk of AIDS, higher training requirements, the increasingly mundane nature of work (more transportation calls from an aging population, fewer emergency calls), and related problems.

Both services are suffering from problems associated with the rapid and somewhat haphazard growth in county, particularly in the private communities. Lack of standards for roads and signs have made it difficult and occasionally impossible to respond to life and property-threatening emergencies. EMS and fire program managers throughout the county feel that a crisis is nearly at hand in which there simply won't be enough volunteers to respond to calls. Residents are not aware of the extraordinary service provided to them at virtually no cost, entirely through the work of volunteers. It is likely that no one solution will work for the entire county, but some mix of the following options should be considered.

- To better coordinate volunteer fire companies, we recommend a Fire Marshal
- To meet the needs of the growing population, we recommend regionalization of Fire and EMS within the county.
- Increase personal incentives-The county relies almost entirely on volunteers to provide vital EMS and fire services. Incentives such as tax breaks or pensions should be actively explored in cooperation with state and local government as positive inducements to volunteer service.
- Increase/Improve Training-The county should provide additional financial support for training, which reduces the time volunteers must spend raising funds. A new fire training center is also needed and should be developed.
- Providing Seed Money- Funds also needed for equipment, facilities, etc. Most volunteers are willing to work harder to raise funds if some operational seed money is provided as an incentive.
- Improve communications-The county should institute a full, countywide 911 system (with a secondary, non-emergency 311 system), mandate standard road and individual residential signs that are visible at night and placed in standard locations, assure that all roads are properly signed, and support the creation of network e-mail communications and informational web site systems to link fire and EMS stations.
- Upgrade EMS service-Areas in eastern and central Pike County do not have advanced life support (ALS) services, which are critical to assuring that patients with life-threatening illnesses or injuries survive until they arrive at hospitals. The county should also be divided into three separate response areas to improve rapid and coordinated delivery of service.
- Public Education-County residents need to be educated on the proper use of the 911 system and the definition of what constitutes true emergency.
- Paid Staff-Consideration should be given to having some paid county staff to coordinate and manage fire and EMS programs, enforce standards, and improve communications. Much of the associated cost would be offset by their ability to locate and obtain grants and other funding sources.

Conclusion

The bottom line in all these recommendations is that a relatively small investment will lead to a stronger and healthier volunteer commitment and will accordingly improve services to residents. The only alternative, one which has not been advanced by even the most taxed volunteer operations is to create a much more expansive professional fire and EMS service. The county needs to make a small investment now to forestall the possibility of much more significant costs in the near future.

Members of the Government/Infrastructure Task Force believe that the county is on the edge of a serious problem that is not receiving adequate attention. Volunteers can give only so much of their time and energy to these critical and mandatory services. The increasing problems with providing adequate coverage to an expanding community will only get worse with time unless the county takes some of the recommended actions to support and fund its volunteer operations. Modest expenditures now will likely forestall the potential need for major expenses (i.e., professional, full time staff) in the future.

Finance

With the projected significant increase in Pike County's population over the next several years, the fiscal integrity of the municipalities and the county must be maintained to enable the residents to receive the services necessary to provide for their health, safety, and welfare.

In order to adequately plan for the fiscal integrity of the governments of Pike County, the Government/Infrastructure Task Force recommends a long range fiscal study be completed for all municipalities and the county. Such a study should include:

- Review and Analysis of the current situation
- Projected future county and municipal governmental fiscal impacts
- Providing follow-up services as required

A fiscal study of Pike County and the Municipalities will be completed by November 30, 1999 and will become part of the Visioning report.

Capital Planning

The Capital Planning Committee's findings indicate that the county needs to take a much more aggressive posture in planning for future expansion of county offices, as well as providing space for current operations, and storage needs for county employees and agencies. We also see a need to move some offices and county functions to the Pike County Jail site because of its central location in the county.

The Task Force recognizes that there is an acute demand for space for our growing needs. Please view our recommendations as examples of the required thought process, not an absolute solution to the problem. Further destruction of our old historic buildings and as a result the blighting of historical ambiance in the county seat, should be stopped. It is already evident that the county needs expansion in its courts system and related offices.

We have identified the following judicial requirements:

- The county court must stay in the county seat.
- Milford has limitations on expansion, due to an inadequate sewer system.
- A new court house needs to blend into the historical center of town.
- Parking is not sufficient for present needs and with our growing population the situation will deteriorate.

To accomplish Capital Planning, we have two specific recommendations:

1. Hire a full time grant administrator, who will explore all the grants available to the county and its municipalities and the best way to write them.
2. Hire, on a temporary basis, a consultant in county planning to research and write a plan for the county. This plan should show the stages of implementation and ways to form various partnerships with private entities to achieve the final goal. (need for an updated comprehensive plan)

Recommendations

- To accomplish the needs of the county and its growing population additional land for county use may be necessary. The purchase of additional land should be kept under consideration and reviewed upon completion of the Task Force Reports, when the need and size of the property might be identified.
- Move all non-mandated services (those designated services housed other than in county seat) to a new site with the jail property as the most administratively feasible site.

(Location will be a secondary consideration if a comprehensive telecommunications system is developed enabling county service, municipalities, and schools, businesses, industries, etc. to be technologically connected. By updating existing facilities with the latest fiber-optics technology in order to utilize modern telecommunications with office connected “on-line”, services would be available directly to the public.)

- Develop a plan for a new court house and related offices by working with those groups preserving the historical nature of the county seat. All remaining historical buildings that are owned by Pike County and will not be utilized in a new plan should be returned to the private sector. An additional courtroom(s) with associated offices is needed. The present Administration Building should be used mainly for judicial purposes. The following offices could be housed in the Administration Building: Court Personnel, Treasurer, District Attorney and Staff, Probation, Public Defenders, Coroner, Prothonotary, Veterans Affairs, Recorder of Deeds/Register of Wills, Children and Youth, Elections, Tax Claims and Assessment.
- The following offices could be housed in a facility in the center of the county: Pike County Conservation District, Penn State Extension Services, Community Planning & Human Development (Recycling and Solid Waste), Communications Center and PEMA, Area Agency on Aging, Economic Development, Job Training, Mapping, Commissioners, Storage (archives) Grants Coordinator, Accounts Payable/Payroll, and Auditors.
- The Government/Infrastructure Task Force believes that building improvements are urgently needed to house Pike County Offices. This program has to be carefully done so as not to be disruptive to municipalities involved, the public continues to be served efficiently, and cooperative planning exists with the host municipality.
- In association and consideration with the municipalities, conduct a study on the water and sewage situation in the county, including options available in operation and fiscal implications.
- Parking problems could be solved by a parking area built within a new Court House. A separate task force, composed of local business owners, tourist agencies and the Chamber of Commerce, could look into developing a plan to address the parking problem (taking into account the different seasons and changing needs during the year.)
- A new Senior Center will open shortly. However, we recommend that a Youth Center be built on the same property. This facility could incorporate a gymnasium for the benefit of both groups. A small fee could be charged to cover the cost of maintaining the facility.
- All the task forces recommended building a Quality of Life Center for Pike County. This center should be centrally located and could be built in stages to facilitate all the needs listed in various reports.

Public Transportation

The Government Task Force recommends the Commissioners of Pike County do a study relating to a Public Transportation system within the county, including appropriate location(s) for park and ride(s). Such a study would include services presently being provided and services required for an expanding population and possible business park.

Roads

The Government Task Force supports the goals of the Pike County Road Task Force. In addition, the Government Task Force encourages all municipalities to participate in the Road Task Force; and urges the Road Task Force to actively pursue the upgrading of roads/bridges enabling the infrastructure to adequately accommodate the increase in vehicular traffic resulting from the increased population.

Recommendations

- All municipalities participate in the Road Task Force. Urge the Road Task Force to actively pursue the upgrading of roads/bridges enabling the infrastructure to adequately accommodate the increase in vehicular traffic resulting from the increased population.
- That PennDot and the municipalities study the options available for alternative routes (east/west) to alleviate congestion on routes 6/209.
- Support the future needs study for an additional exit off route 84 for better access to the region.

Signage

The Signage Committee has been charged with the responsibility for the creation of a uniform county-wide directional Signage system.

To that end, and because there are important informational, aesthetic and safety values involved, a Directional Sign Committee has been meeting monthly.

The Signage Committee is collaborating with PennDot on a separate signing district for Pike County within the State Signage Code (TODS-Tourist oriented Directional Signing Policy) and with the Pocono Mountain Vacation Bureau (PMVB) on a region-wide sign system, using Pike County as a model. In this agreement the PMVB would further pursue a grant for the project and the selection of a design consultant.

Recommendations

The purposes of uniform directional Signage for Pike County are fourfold:

- To improve the system of Signage directing travelers around the county given that tourism is one of the largest sources of income for Pike County residents;
- To improve the information distribution system for travelers helping them locate products and services they are interested in;
- To reduce the billboard clutter that mars the county's natural beauty, a resource that has contributed greatly to economic development, attracting tourists, permanent and part-time residents, and new industries and cultural facilities;
- To promote highway safety.

Recycling and Household Hazardous Waste, Garbage Collection

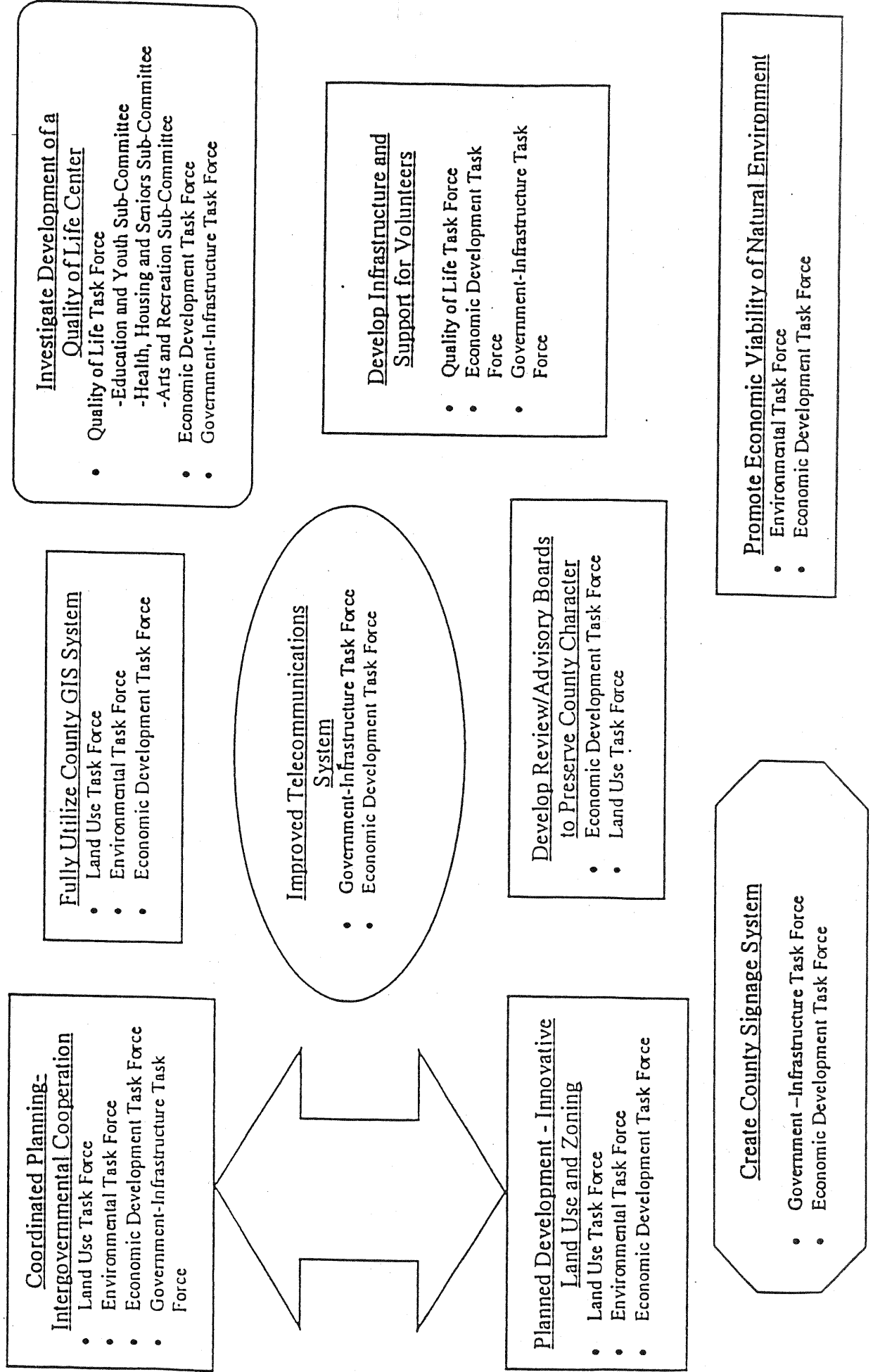
The county is responsible for the development of a solid waste plan for the county and to provide disposal capacity for a period of ten years by executing agreements with all landfills that service the Pike County Solid Waste Haulers.

- The Borough/Townships shall continue to be solely responsible for the transportation, collection and storage of municipal waste.
- In support of the Act 101 goals, we recommend setting the following recycling goals; 25% by the year 2002 and 35% by the year 2010 of municipal waste and 100% of all biosolids that have been approved for "beneficial use".
- With 90% of the lots in Pike County utilizing on-lot septic, it is necessary that studies be completed exploring the options available for regional water/sewage systems.

Recommendations

Throughout the deliberation of the Government/Infrastructure Task Force the recurring themes of Intergovernmental Cooperation, Regionalization, and Partnership dominated. It was not the intent of this Task Force or any other Task Force to advocate for increased Pike County Authority and to advocate for diminished municipality authority. However, the Government/Infrastructure Task Force believes that in order for the county and municipalities to successfully meet the demands to be placed upon them in the future, regional cooperation and partnerships must take place. It is of extreme importance that the county serve as a facilitator to accomplish the goal and still maintain local control.

Pike County Visioning Recommendations From Multiple Task Forces



APPENDIX 18

OFFICIAL MAPS

Official Maps

The governing body of each municipality has the power to make an official map of all or a portion of the municipality which may show elements of the Comprehensive Plan with regard to public lands and facilities, and which may include, but need not be limited to, the following elements:

1. Existing and proposed public streets, watercourses and public grounds, including widenings, narrowings, extensions, diminutions, openings or closings.
2. Existing and proposed public parks, playgrounds, and open space reservations.
3. Pedestrian ways and easements.
4. Railroad and transit rights-of-way and easements.
5. Flood control basins, floodways and floodplains, stormwater management areas and drainage easements.
6. Support facilities, easements and other properties held by public bodies undertaking the elements described in the Comprehensive Plan.

Each municipality should prepare an official map, but regional cooperation should occur on mapping of projects such as roadways, parks, and trails which will be located in more than one municipality.

The governing body may make surveys and maps to identify the location of property, trafficway alignment or utility easement by use of property records, aerial photography, photogrammetric mapping or other method sufficient for identification, description and publication of the map components. For acquisition of lands and easements, boundary descriptions by metes and bounds must be made and sealed by a licensed surveyor.

The adoption of any street lines or other public lands as part of the official map does not constitute the opening or establishment of any street nor the taking or acceptance of any land, nor does it obligate the municipality to improve or maintain any such street or land. The adoption of proposed watercourses or public grounds as part of the official map does not constitute a taking or acceptance of any land by the municipality.

For the purpose of maintaining the integrity of the official map of the municipality, no permit shall be issued for any building within the lines of any street, watercourse, or public ground shown or laid out on the official map. No person shall recover any damages for the taking for public use of any building or improvements constructed within the lines of any street, watercourse, or public ground after the same shall have been included in the official map; and, any such building or improvements shall be removed at the expense of the owner. However, when the property of which the reserved location forms a part, cannot yield a reasonable return

to the owner unless a permit shall be granted, the owner may apply to the governing body for the grant of a special encroachment permit to build.

The governing body may fix the time for which streets, watercourses and public grounds on the official map shall be deemed reserved for future taking or acquisition for public use. However, the reservation for public grounds shall lapse and become void one year after an owner of such property has submitted a written notice to the governing body announcing his intentions to build, subdivide or otherwise develop the land covered by the reservation, or has made formal application for an official permit to build a structure for private use, unless the governing body shall have acquired the property or begun condemnation proceedings to acquire such property before the end of the year.

APPENDIX 19

WATER RESOURCES PLANNING

Recommendations and Findings of 1998 Pike County Water Resources Plan

- “To successfully manage growth, areas designated for development in municipal comprehensive plans and included in Act 537 sewage facilities plans must also be identified in water supply for future water service. Likewise, sources of water must also be protected through wellhead protection programs to ensure long-term supply to the residents of the County.
- The Water Resources Plan provides a County-wide approach for water supply planning and wellhead protection. The responsibilities for operating a water supply system occur with the local authorities and private water companies. The County’s role is to coordinate water supply planning on a County-wide basis, encourage regional approaches for water resources planning and provide strategies for protecting water supply sources.
- Several of the County’s 59 community water systems are small systems that have limited resources to effectively supply potable water to its existing and future customers. A solution for these systems would be interconnections of systems that are in close proximity to each other...Two possible areas in the County for regionalization would be Lake Wallenpaupack and Milford-Matamoras corridor.”
- Some of the community systems would serve infill development, provide remedial service to some nearby areas, and/or serve areas of adjacent land as they develop. The plan also recommended community water system structural improvements to the year 2010, including water source, treatment, storage, and distribution. Management improvements could also be employed.
- “A goal of the Steering Committee is to increase the proportion of households served by community water systems by the year 2010 to 50% in an effort to reduce the likelihood of contamination of on-lot wells by existing on-lot sewage disposal systems.
- Of the 59 community water systems, 46, or 78%, have adequate safe yields to meet current peak water needs. However, only 39, or 66% of the systems anticipate meeting projected 2010 peak water needs.
- With regard to finished water storage capability, just 21 systems currently have adequate distribution storage capacity for one-day average water use. This is the most serious and frequently-occurring system deficit Countywide. Water storage deficiencies are of particular concern because peak day water use in 16, or 27%, of the systems is more than twice the average day water use for those systems. By 2010, only 18, or 31%, of the County's community water systems are projected to have adequate finished water storage for human consumption.

- Forty-seven systems, or 80%, have adequate source pumping capabilities to meet projected 2010 peak day needs. This evaluation was done to assess fire protection capabilities and the ability for interconnection. Just 21 of the County's 59 systems, or 36%, currently have adequate fire flow storage capacity. Only twenty, or 34%, of the County's systems have fire hydrants with only half of the 20 systems having adequate storage capacity. This hinders the ability of the systems to provide interconnections which could be utilized in emergency situations as well as provide proper fire protection.
- The County's 59 community water systems were evaluated to determine the current and future anticipated viability. Using the rating criteria, 31 systems, or 53%, have demonstrated current compliance with state requirements and are judged to be overall strong systems. However, of these 31 systems, only 10 will meet projected needs by 2010. The others will need to make additional investment in system improvements to accommodate planned growth and development.
- A total of approximately 21,469 additional persons could be reasonably expected to be served by existing and planned community water systems with minimal-to-moderate improvements.”

Recommendations of Pike County Water Resources Plan with County-Wide Implications

- “Groundwater quality in the County can only be protected through a coordinated effort among residents, municipalities and the County. Residents must be educated as to the necessity of regularly pumping septic systems and proper septic system usage.
- At a minimum, municipalities should coordinate with the County to monitor the incidence of septage system pumping. If indicated, municipalities should require such pumping through the adoption of on-lot disposal system ordinances.
- Municipalities can also protect their groundwater by adopting well siting, construction and abandonment standards that apply as part of the subdivision and building permitting process. Such requirements would involve siting wells at safe distances from potential contaminant threats, grouting and the placement of a sanitary seal on all at- or below-grade well openings.

Developments utilizing on-lot wells...currently experiencing water quality problems are recommended for interconnection.”

- “Municipal support of the recommendations of this Plan is essential, particularly in the area of regional recommendations. Community water systems which are capable of assisting others may not reach out on their own to help troubled systems without active local support and encouragement. Weaker community water systems, noncommunity water systems and troubled on-lot developments may not ask for assistance and need to be encouraged and supported in requesting help as well.
- In some cases, such as in the Milford and Matamoras areas and Palmyra Township, the establishment of regional water authorities would be beneficial. The fewer new wells that are drilled into the County's aquifers, the fewer the potential sources of contamination will exist. As a plentiful water supply is already produced by the County's wells, it makes sense to utilize them to the fullest before drilling new wells.”
- “Municipal comprehensive planning and zoning can support the recommendations of this plan or undermine them. If the County's strong community water systems are to be encouraged to make needed improvements and extend water service to remedial water users, they must be permitted to extend their systems to serve new development as well. Only a significant increase in rate bases can be expected to help fund needed system improvements, particularly in view of the limited financial resources of many of the County's existing households. To this end, it is critical that local municipalities plan and

zone land for development at densities which can utilize community water adjacent to their stronger community water systems.

- The County's townships will also play a critical role in the future development of areas not yet served by community water systems. The DEP requires new community water systems to prepare a business plan to ensure long-term system viability and this new requirement may have the unintended effect of encouraging a proliferation of new on-lot water systems in areas where both types of systems are options. Because on-lot systems are most often accompanied by on-lot sewage disposal systems, and because most areas within the County with soils that are suitable for on-lot sewage disposal systems have already been developed, the result could be an increase in the installation of systems on marginally suitable soils and the increased likelihood of fecal coliform contamination of on-lot water supplies.
- The County's townships can take action to avoid this situation by reevaluating and, where needed, revising their planning and zoning schemes to actively encourage the development of new community water systems where new water needs cannot be met by existing community water systems. This can be done by directing future development primarily into growth areas and other appropriate areas, using higher densities (less than one acre) as an incentive for the development of new community water systems.”

APPENDIX 20

REGIONAL POLICE SERVICE STUDY

REGIONAL POLICE SERVICES IN PENNSYLVANIA (Governor's Center for Local Government Services)

Alternative Methods of Providing Police Services

Traditional Method The municipality establishes its police department, staffs and equips it, and gives it the legal responsibility for providing police services and law enforcement.

Centralized Support Services/Decentralized Patrol Centralization of support services provides for consolidating records, communications, investigations, recruitment and other personnel functions but leaves the patrol and traffic functions to individual political subdivisions. There are examples of centralized support services in Pennsylvania in the form of countywide communications systems and regional records systems. This method could be considered a hybrid of the traditional method and consolidated police services. In most instances, this method cannot be given serious consideration as a cost reducing method since support services do not relate directly to the patrol force that is the most costly police function.

Contracted Police Services Contracting police services is the most common method of regionalized police service in the state. Police services are provided by *Community A* to *Community B* for a mutually agreed upon dollar amount based upon certain cost factors. This method often develops when a political subdivision that provides no police services realizes the need and negotiates a contract or agreement with a neighboring community to provide police services. At other times, municipalities have chosen to abolish their existing police departments and purchase police services from another police department.

Consolidated Police Services Consolidation of police services requires the abolishment of political subdivision boundaries for police services and the unification of existing police departments into one regional police department. The distinctive characteristic of this method of policing is the operation of the police department outside the direct control of any one single municipality. The police department is responsible to a policy board or police commission consisting of primarily elected officials from each participating municipality. This board appoints the chief, evaluates the chief's performance, sets policies and adopts the budget.

Consolidation Issues

Intergovernmental cooperation in municipal policing is probably more difficult to achieve than it is in any other area of municipal services. Cooperative agreements in solid waste disposal, sewage treatment, recreation, water services, purchasing, and other services are commonplace throughout Pennsylvania. In most instances,

the complete consolidation of the service takes place. However, until recently, elected officials have been reluctant to go the whole way in municipal policing.

The desire for local self-government is probably a barrier to police consolidation, but there is some question as to it being the most significant. The Department of Community and Economic Development, Governor's Center for Local Government Services, (through its police consulting services program) has been continuously involved in the issues of police consolidation since 1972. The department's efforts in this area indicate that there are many other areas of concern about consolidated police services.

Police officers involved are often unconvinced that they will not suffer some personal loss or diminished opportunity as a result of the merger.

Citizens are often unsure of what will actually result. It is not easy to convince citizens that regional police departments are self governing and that taking the community's name off their police cars, changing the location of police headquarters, or changing the telephone numbers do not make the police units alien or unresponsive to the communities the agencies serve. Therefore, it is often difficult to determine if public officials have firm support from their constituents to consolidate police departments.

It is difficult to satisfactorily address the question of whether or not services will improve. While it seems obvious on the surface that the coordination of area policing efforts will result in improved efficiency, it has been difficult to document this to the satisfaction of those concerned.

Without doubt, there are other problems associated with police consolidation which surface from time to time depending upon the community or area. However, increasing costs and demands for a fair return for the tax dollar spent tend to make what were large problems appear smaller.

Advantages of Police Consolidation or Regional Police Services

There are several specific advantages to police consolidation which may or may not result depending upon the administrative policy established for the operation of the police department, the existing geographic and social conditions of the area, the organization and structure of the newly created police department and the procedures used in implementation. Basically, the advantages are the following:

Improvement in the Uniformity and Consistency of Police Enforcement.

Policy, regulations, and local law governing police practices and performance often vary greatly from community to community. The implementation of a consolidated or regional police department requires the establishment of uniform

policies and regulations covering administrative and field operations. For example, the policy of high speed pursuits is made uniform through the service area.

Improvements in the Coordination of Law Enforcement Services. It is not uncommon within any given area of Pennsylvania for five or six police officers to be investigating a series of criminal offenses all committed by the same person when the investigation could be handled by one officer. They must do so simply because the offenses are committed in different political subdivisions. It is also not uncommon for each of those five or six municipal police departments to maintain their own radio dispatch systems, records system and other support services when one would be sufficient. Consolidation improves coordination of police efforts.

Improvement in the Distribution and Deployment of Police Personnel. Police personnel should be assigned to duty according to the highs and lows of police activity. If forty percent of the crime and police activity occurs during a particular period of time each day (on average), forty percent of the police patrol force should be working during that time. In a police department employing five police officers, little more can be accomplished than simply placing one officer on duty each shift of the day. Therefore, in an area where there are five or six small police departments with the need to have at least one officer on duty at all times, five or six officers may be patrolling an area that could be adequately covered by one or two during that time of the day. Merging of police departments through consolidation results in a better use of police personnel.

Improvement in Training and Personnel Efficiency. Providing proper and necessary police training can be very difficult in smaller police departments. Sending an officer to police training sessions often means not providing police patrol during certain periods of the day. Therefore, exposure to necessary training often does not occur. Properly trained police officers are much more efficient in their work and a higher quality police service results. Consolidating police services opens the door to improving training and efficiency.

Improved Police Management and Supervision. Because of limitations in time and personnel, police chiefs in smaller police departments often function in the capacity of a patrol officer and are unable to devote the necessary effort to developing sound management systems. Therefore, developing and implementing procedures which would result in maximum productivity and return of the tax dollar spent are often placed in the background. Experience has shown that increased efficiency in police department management has been a positive result from regional police programs.

Reduced Costs. The cost of providing police services is lower in communities served by consolidated police departments. This was established in an analysis of the ten consolidated police departments existing in Pennsylvania in 1988-89 conducted by the former Department of Community Affairs. Nine of the ten consolidated departments operated at an average twenty-four percent lower cost when compared to nearby traditional police departments serving communities comparable to those served by the consolidated department. Generally, lower costs result from the need for fewer officers, fewer vehicles, fewer ranking positions and fewer police headquarters facilities.

Improved Career Enhancement Opportunities for Police Officers. The larger police departments resulting from police consolidation provide greater opportunities for police officers to receive a wider range of training and opportunities to specialize in such areas as criminal investigation, youth services, traffic enforcement, and crime prevention activities. The potential for advancement and higher salaries is also greater in consolidated departments.

Negative Factors Involved in Police Consolidation

Arguments against consolidation of municipal police service are basically the same, regardless of the manner in which the police department is developed or the geographic conditions and social makeup of the area.

Loss of Local Nonenforcement Services. Police officers in Pennsylvania and elsewhere in the country perform many duties which cannot really be considered police functions but are often very much a part of the job of a police officer in the community. Collecting monies from parking meters, delivering messages and communications for other municipal officials, raising and lowering the flag, running errands, and issuing licenses and permits are some of them. Consequently, when police consolidation takes place these services are usually discontinued and the municipality must look for other ways of performing them. However, most soon find performing them with nonuniformed employees to be more cost effective.

Loss of Local Control. In the traditional law enforcement situation where the municipality creates and maintains its own police department, the entire governing body is often directly involved in the day-to-day operations of the police department. Public safety or police committees often exist which establish policy, oversee budgeting, and control finances. In some municipalities, a member of the governing body is designated *Police Commissioner* and is delegated the responsibility of overseeing the operation of the police department. In boroughs, this responsibility is placed upon the mayor by state law. In consolidated or regional police departments, the municipality appoints one or more of its elected officials to a Regional Police Board or Police Commission which is responsible

for the effective operation of the police department. The municipality's representative(s) is its liaison to the police department through which all communications flow. Each community's control over the police department is diluted by the necessity to get general agreement on policies and finances.

Loss of Citizen Contact. Consolidating police departments often means a transfer of personnel from one jurisdiction to another because of a need to reestablish patrol zones and districts. Therefore, sometimes an attitude develops that the citizens of a participating municipality will not have as close a relationship with the police department. However, if this does occur it will be temporary and only exist until such time as police officers become acquainted with the area. This would be overcome as quickly as it takes a new officer on any police department to adjust to a new patrol zone.

Preliminary Feasibility Considerations

General Conditions

Existing Intergovernmental Cooperation. One of the best indicators of whether or not a consolidated or regional police department will be accepted within a certain area is the degree to which government cooperation has occurred in the past. If recreation, public works or other municipal services have been consolidated, it is very possible that the concept has proven itself. However, school systems should not be included since their consolidation was mandated by state law. Also, the fact that consolidated services are not present should not always be received negatively, since the need to consolidate other services may not have existed.

Geographic Conditions. In most areas of the Commonwealth, the geographic conditions will not present a problem and will not have to be considered. In limited situations, however, rivers, mountains, and the location of one municipality relative to another represent particular problems. Areas which are accessible by only one highway (or where it is necessary because of terrain to skirt large areas) make patrol difficult. Patrolling through municipalities which are not participants in the consolidated department is legally permissible although it is not desirable. If such conditions do exist, the ability to effectively patrol and respond to incidents and requests for service should be the measure used to determine whether to proceed.

Demographic Characteristics. Areas which are homogeneous in nature adapt more easily to consolidated police services. Policing needs and situations which are the same from community to community require little adjustment on the part of the police department. On the other hand, it is most difficult for a police department that has always serviced a residential community to suddenly become responsible for policing an industrial or commercial complex which has a high

volume of nonresident traffic. The adjustment will eventually take place, but at a slower rate. Vast differences in age of residents, income levels, and social climate also require different methods and procedures in policing.

Police Service Considerations

Adaptability of Police Department Operating Conditions. Major differences among existing police departments in fringe benefits and working conditions present obstacles to consolidation of police services. Excessive differences make it difficult to compromise and arrive at a personnel package that is acceptable to all communities.

Attitude of Police Officials. The success or failure of an effort to consolidate police departments may well depend upon the attitudes of the police officers affected by the consolidation. There will be those strongly in favor of the move and others who will be strongly opposed. Most officers will probably keep an open mind and want answers to many questions before they make a decision. In some communities, police officers are able to influence a large number of people including elected officials. People tend to be more attentive to the opinions of police officers since they are the group most affected by the move. The elected officials of an area considering a consolidated police department have an obligation to deal with the issues raised by police officers in an objective fashion. They must answer the questions relating to what will occur when the consolidation takes place. If the plan is sound, it will most likely be supported by the majority of police officers.

Public Opinion

Experience has shown that the citizens of any community basically want a police service that:

- Provides an atmosphere of personal safety and protection of property with a reasonable expectation of police intervention when a problem arises.
- An expectation that police will respond rapidly to any requests for police services.
- When a crime is committed, the expectation that the police will respond and institute a process of recording, investigating and solving the criminal offense.

It is important to know the opinions of the citizens. Some attempt should be made to assess that opinion specifically as it relates to the cost and efficiency of existing police service as opposed to a consolidated police department.

Appointment of a Regional Police Study Committee

The first step of any process to determine the feasibility of and to develop a plan for a consolidated or regional police department should be to establish the oversight unit. This is accomplished by each municipal governing body appointing one or more of its members to a Regional Police Study Committee. Other persons,

including persons from the professions, business, industry, government or other citizens may also be appointed to the committee, but at least one elected official should represent each government. This tends to give official sanction to the work of the committee and permits easier access to the police and municipal information that will be needed by the committee.

The basic tasks of the committee are normally to (1) determine the specific procedure to be used in undertaking the study; (2) gather the data and information that will be necessary from each municipality and its police department (if one exists); (3) analyze the data and information and from that analysis determine the feasibility of regional police service and precisely what method of regional policing (centralized support services, contract or purchase of services, or consolidation of police departments) would be most appropriate; and (4) establish the procedure and timetable for implementation.

The Regional Police Study Committee serves in the capacity of an advisory board and participating municipalities are not bound by the findings or recommendations of the committee. Committee members should elect a chairperson from their membership and any other officers they find appropriate. The committee may seek the assistance and advice of persons knowledgeable in various aspects of regional police services. The assistance of the Department of Community and Economic Development, Governor's Center for Local Government Services is available upon request. The committee may also choose to review the operation of an existing regional police department to gain an understanding of how it works on a first hand basis.

The study committee should seek to build community consensus by opening their process to the public and seeking the maximum possible coverage in the local media. Questions about a regional police proposal should be heard and the answers made available to the public at large.

APPENDIX 21

GOVERNMENTAL GRANT PROGRAMS

GOVERNMENTAL GRANT PROGRAMS TO FACILITATE IMPLEMENTATION

The following is a list of some of the state and federal programs for community and economic development. Programs can be modified or eliminated over time, so it is necessary to contact the responsible agency for availability and eligibility information.

▪ PENNSYLVANIA DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT (DCED)

- **Communities of Opportunity** – This program is for state-funded grants for community revitalization and economic development and the development or rehabilitation of low-income housing.
- **Infrastructure Development Program** – This program provides grants and low interest financing for the construction of public and private infrastructure needed for business to locate or expand to a specific site. It also provides financing for infrastructure costs to redevelop former industrial sites, including site clearance costs.
- **Industrial Sites Reuse Program (Brownfields)** – This program provides grant and low interest loan financing for environmental site assessment and remediation work at former industrial sites.
- **Community Revitalization Program** – This program is intended to fund infrastructure improvements, community revitalization, building rehabilitation, and demolition of blighted structures, in order to increase community tax base and promote community stability.
- **New Communities/Main Street Program** – This program is intended to help a community's downtown economic development effort.
- **Elm Street Program** – This program is intended to help revitalize residential neighborhoods near Main Street areas.
- **HOME Program** – This program provides loan and technical assistance to municipalities for expanding the housing supply for low income persons.
- **Small Business Development Centers** – Work with small firms to help them compete and grow.
- **Small Business First Program** – This program provides low interest loans for projects such as site acquisition, building construction, machinery, and working capital for small businesses of less than 100 employees.
- **Local Government Capital Projects Loan Program** – This program provides low interest loans for equipment and municipal facilities.

- **Land Use Planning and Technical Assistance Program (LUPTAP)** – This program provides grant funds for the preparation of community comprehensive plans and the ordinances to implement them.
- **Regional Police Assistance Grant Program** – This program provides grants for the start-up of consolidated police departments.
- **Shared Municipal Services Program Code Enforcement Initiative Grants** – This program assists local governments in the initial administrative expenses of a shared or multi-municipal codes enforcement program.
- **Shared Municipal Services Program** – This program provides matching grants for cooperative municipal efforts to increase the efficiency of public services.
- **Local Economic Revitalization Tax Assistance Act (LERTA)** – Local municipalities, school districts, and counties can offer tax abatements on improvements to property for up to 10 years.
- **Pennsylvania Industrial Development Authority (PIDA)** – Low-interest loan financing through industrial development corporations for land and building acquisition, construction and renovation resulting in the retention or the creation of jobs. Loans up to \$1.25 million (\$1.75 million for areas within Keystone Opportunity Zones, Act 47 Communities, Brownfield Sites, and Enterprise Zones).
- **Floodplain Land Use Assistance Program** – Provides grants and technical assistance to encourage the proper use of floodplains. Local governments may apply for up to 50% of eligible costs.
- **Weatherization Assistance Program** – Works to minimize the adverse effects of high energy costs on low-income, elderly, and handicapped citizens. Local governments and non-profit organizations are eligible.
- **Enterprise Zone Grant Program** – Provides grants to financially disadvantaged communities for business development strategies within Municipal Enterprise Zones. Municipal and redevelopment authorities are eligible.
- **Community Development Block Grants (CDBG)** – Provides grant and technical assistance to aid municipalities in community and economic development efforts.
- **Emergency Shelter Grants** – Provides grants to local governments and non-profit organizations to create or rehabilitate shelter space for the homeless.

- **Act 47 – Municipalities Financial Recovery Act** – Provides loans and grant funds to financially distressed local governments and technical assistance to formulate financial recovery Plans

- **PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY**
 - **Pennsylvania Conservation Corps (PCC) Project Grant Program** – Grants for projects related to recreation, conservation, and historic preservation. Municipalities and school districts must provide a 25% match.

- **PENNSYLVANIA COMMISSION ON CRIME AND DELINQUENCY (PCCD)**
 - **Local Law Enforcement Block Grant Program** – Provides local governments with funds to hire and train additional law enforcement personnel; establish special task forces; and establish crime prevention programs.

- **PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES** – The Community Conservation Partnerships Program (C2P2) includes the following elements:
 - **Community Recreation Grant Program** – This program provides grants for comprehensive recreation and park planning, greenways and master site development planning. Acquisition and Development Grants can be used for the rehabilitation and development of parks and recreation facilities and acquisition of land for park and conservation purposes.

 - **Rivers Conservation Grant Program** – This program provides grants for river conservation plans and non-acquisition, non-development implementation projects. Acquisition and Development Grants can be used for land acquisition and the development of river conservation projects.

 - **Heritage Parks Grant Program** – This program promotes public/private partnerships to preserve and enhance natural, cultural, historical and recreational resources to stimulate economic development through heritage tourism. Grants are awarded for purposes such as feasibility studies, development of management action plans, specialized studies, and implementation projects and management grants.

 - **Recreational Trail Program** – This program provides matching funding for the acquisition, development and maintenance of motorized and non-motorized trails.

 - **Rails to Trails, PA Program** – This program provides matching grants for feasibility studies, plans, acquisition and improvement of former railroad lines for recreational trails.

PA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)

- **Stream Improvement Program** – This program provides design and construction projects to eliminate imminent threats due to flooding and stream bank erosion.
- **Stormwater Management Program** – This program provides grants for cooperative watershed level planning and municipal implementation programs.
- **Non-Point Source Pollution Control Program** – This program provides funding for projects that implement innovative practices to control non-point source pollution for impaired waters.
- **Pennsylvania Source Water Assessment and Protection Program (SWAP)** – This program provides grants for wellhead protection and watershed protection,
- **Environmental Stewardship and Watershed Protection Grant Program** – This program makes funds available to protect and restore watersheds.
- **Pennsylvania Green Project Bank** – This program is an interactive online marketplace where organizations seeking funding for environmental projects can be matched with organizations seeking to fund such projects.
- **Alternative Fuels Incentive Grant** – Grants for municipalities for costs associated with implementing alternative fuel program.
- **New or Innovative Technology Grants** – Funds to improve existing drinking water and sewage treatment facilities through new or innovative technology.
- **Sewage Management Grants (Act 537)** – reimbursements for municipalities completing sewage facilities planning and enforcement.
- **Recycling (Act 101)** – Municipalities are eligible for 90 percent reimbursement toward establishing a recycling program.
- **Act 108 (HSCA) Host Municipality Siting** – Payments to municipalities serving as hosts for hazardous waste facilities.
- **Act 198 Resource Recovery Development Fund** – Grants for municipalities and authorities to establish new and innovative resource recovery demonstration projects.
- **Waste Tire Remediation and Market Development Grants** – Reimbursement for cleanup and / or reuse of waste tires.
- **Formation of Water Authorities Grant Program** – Available to two or more municipalities or counties interested in forming a joint water authority.

- **Small Water Systems Regionalization Grant Program** – Reimbursement for feasibility studies by small water systems to study regionalization.

- **PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION**

- **Keystone Historic Preservation Grants** – This program provides matching grants to local government and nonprofit organizations that are rehabilitating or restoring historic properties on or eligible for the National Register.
- **Certified Local Government Grants** – This program provides matching grants and technical assistance to protect historic resources.
- **Historical Marker Program** – Nominations for historical markers are reviewed. When approved, staff works with nominator to prepare text and arrange ceremonies. Limited matching grants are available for markers.

- **PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES**

- **Software Licensing Program** – Program for local governments to save money on software purchases.
- **Cooperative Purchasing Program (Act 57 of 1998)** – Permits local governments to jointly participate in contracts for supplies, services, or construction.

- **PENNSYLVANIA DEPARTMENT OF TRANSPORTATION**

- **Transportation Enhancements Program (TEA 21)**

The program provides funding for programs such as provision of facilities for pedestrians and bicycles; acquisition of scenic easements or historic sites; landscaping or other scenic beautification; historic preservation; rehabilitation and operation of historic transportation buildings, structures or facilities.

- **Transit Assistance Programs** – A variety of programs provide assistance for Public Transportation
- **Home Town Streets** – This program includes a variety of streetscape improvements that are vital to reestablishing downtown and commercial centers. These projects include activities undertaken within a defined “downtown” area that collectively enhance that environment and promote positive interactions with people in the area. Projects may include sidewalk improvements, planters, benches, street lighting, pedestrian crossings, transit bus shelters, traffic calming, bicycle amenities, kiosks, signage and other visual elements.
- **Safe Routes to School** – This program is designed to work with both school districts and pedestrian and bicycle safety advocates to make physical improvements that promote safe walking and biking passages to schools.

Collectively, these efforts would save on school busing costs and promote a healthy lifestyle for children. In addition, some funding may be used for pedestrian education efforts. Examples of these types of improvements include: sidewalks, crosswalks, bike lanes or trails, traffic diversion improvements, curb extensions, traffic circles and raised median islands.

- **PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY** – PENNVEST provides financing for drinking water, stormwater, and wastewater projects.
- **PENNSYLVANIA LEGISLATIVE INITIATIVE PROGRAM** – This program provides discretion to State legislators to award limited amounts of State funds for projects in their home district.

APPENDIX 22

ELEMENTS OF CORRIDOR IMPROVEMENT PROGRAMS

POTENTIAL ELEMENTS OF CORRIDOR IMPROVEMENT PROGRAMS

The Congested Corridor Improvement Program U.S. 6/U.S. 209 Corridor outlines actions to address congestion in that corridor. The general concept presented could be applied as appropriate in other corridors in Pike County as traffic volumes increase, and these concepts are outlined here:

- Coordination of traffic signals.
- Construction of a center turn lane or left turn bays to decrease queuing and create space for emergency vehicle travel.
- Construction of a bike path or multi-use trail running parallel to the corridor.
- Evaluation of a transit shuttle that will run along the corridor.
- Employ land use tools:
 - Comprehensive Plans which address how to balance mobility with access.
 - Traditional Neighborhood Development (TND) to help preserve transportation capacity (sprawl isolates uses and increases reliance on automobile travel between low density, single use areas). TND's, with a mix of residential, commercial, and professional uses within walking distance of each other, could reduce the need for automobile trips.
 - Site plan guidelines

Site design guidelines and standards are important in corridor management programs, and include:

- Lots that do not require direct access to the arterial.
- Siting commercial buildings nearer to roads and provide for parking to the rear of lots with access to secondary roads and/or interconnected parking areas (requiring cross-easements over properties for common use of areas).
- Providing adequate driveway length to allow stacking.
- Establishing limits for vertical alignment of major roadways at curb cuts.
- Installing mid-block crossings for pedestrians and bicyclists.

- Requiring connections between parking lots and building entrances.
 - Limiting service road widths and curb radii and minimizing the number of conflict points.
 - Providing incentives for smaller and fewer signs by allowing a reduced setback from roads.
 - Encouraging attractive, interesting building design.

– Access management plans

Access management plans address provision of access to adjacent land while simultaneously preserving the flow of traffic on the road system in terms of safety, capacity, and speed. Intent is to increase capacity of transportation infrastructure, create shorter travel times, and prolong functional life of the infrastructure.

Typical access management strategies include:

- Utilizing service roads with limited access points, shared driveways for adjacent parcels, and cross access among adjoining businesses as alternatives to individual curb cuts.
- Requiring developers to provide a connected and sufficient local road system to minimize using the main arterial that is designed to accommodate through traffic.
- Reducing/limiting the number of curb cuts by considering the location, design, and spacing of driveways.
- Requiring shared access points and connectivity between parcels.
- Reducing the number of parking spaces by permitting shared parking arrangements among individual businesses.
- Planning for a new street network.
- Aligning driveways and creating regular offsets.
- Relating driveway designs to travel speeds and traffic volumes.
- Prohibiting direct parking access from a parking space to the road.

- Providing pedestrian and transit friendly accommodations, and
 - Planning for public parking.
- Corridor preservation techniques to allow for future capacity improvements.

Corridor preservation techniques minimize or prevent development in areas likely to be needed to meet future transportation needs, such as capacity expansion of roadways, parallel service roads, and bicycle, pedestrian, and transit improvements.

Methods of corridor preservation include:

- Purchase of land
- Official Mapping
- Building Setback Standards
- Developer Dedications
- Traffic impact fees
- Land use policies to provide and operate infrastructure more efficiently
 - mixed development
 - residential, commercial and industrial growth in close proximity
 - range of housing types and use of clustering to provide open space
 - compact activity centers which encourage alternative travel patterns and provide cross-access at arterials
- Avoid the creation of narrow, commercial strips along the corridor by focusing development on major intersections;
- Encourage mixed uses and higher densities in the TNDs;
- Redesign existing strip development areas and adjacent land areas;
- Plan for an integrated, community street network that links to adjacent areas;
- Require master planning for large tracts of land;

- Identify critical areas for open space conservation and create natural buffers between activity centers;
- Reflect the desired community character;
- Use corridor preservation techniques to allow for future capacity improvements.

APPENDIX 23

USDA NRCS – PIKE COUNTY SOILS

- **ACREAGE/PERCENTAGE**
- **SOIL FEATURES**
- **PRIME FARMLAND SOILS**
- **HYDRIC SOILS**
- **ON-LOT SEWAGE LIMITATIONS**

*United States Department of Agriculture
Natural Resources Conservation Service
Soil Survey Staff
Soil Survey of Pike County, PA
["http://soildatamart.nrcs.usda.gov/Survey.aspx?State=PA"](http://soildatamart.nrcs.usda.gov/Survey.aspx?State=PA)*

Acreage and Proportionate Extent of the Soils

Pike County, Pennsylvania

Map symbol	Map unit name	Acres	Percent
5B	Suncook loamy sand, 0 to 8 percent slopes	282	*
7B	Shohola-Edgemere complex, 0 to 8 percent slopes, very rubbly	6,086	1.7
7C	Shohola-Edgemere complex, 8 to 15 percent slopes, very rubbly	5,044	1.4
9B	Craigsville-Wyoming complex, 0 to 8 percent slopes, extremely stony	1,901	0.5
11A	Edgemere extremely stony loam, 0 to 3 percent slopes, very rubbly	9,078	2.5
12	Gleneyre-Kimbles complex, 0 to 2 percent slopes	3,406	0.9
14	Braceville fine sandy loam	196	*
15	Pope fine sandy loam	208	*
18	Paupack mucky peat	2,883	0.8
19B	Morris very channery loam, 0 to 8 percent slopes, very stony	7,784	2.1
19C	Morris very channery loam, 8 to 15 percent slopes, very stony	733	0.2
20	Freetown mucky peat	10,838	3.0
21B	Manlius very channery silt loam, 3 to 8 percent slopes, very bouldery	1,714	0.5
21C	Manlius very channery silt loam, 8 to 15 percent slopes, very bouldery	1,520	0.4
24A	Delaware fine sandy loam, 0 to 3 percent slopes	1,721	0.5
24B	Delaware fine sandy loam, 3 to 8 percent slopes	767	0.2
24C	Delaware fine sandy loam, 8 to 20 percent slopes	416	0.1
25B	Wurtsboro channery fine sandy loam, 0 to 8 percent slopes, stony	2,226	0.6
25C	Wurtsboro channery fine sandy loam, 8 to 15 percent slopes, stony	477	0.1
26	Philo loam	1,365	0.4
27	Barbour fine sandy loam	749	0.2
28B	Wellsboro stony loam, 0 to 8 percent slopes, extremely stony	14,182	3.9
28C	Wellsboro stony loam, 8 to 15 percent slopes, extremely stony	8,363	2.3
28D	Wellsboro stony loam, 15 to 25 percent slopes, extremely stony	1,461	0.4
29B	Wellsboro channery loam, 0 to 8 percent slopes, stony	2,094	0.6
29C	Wellsboro channery loam, 8 to 15 percent slopes, stony	672	0.2
30B	Wurtsboro stony fine sandy loam, 0 to 8 percent slopes, extremely stony	40,895	11.3
30C	Wurtsboro stony fine sandy loam, 8 to 15 percent slopes, extremely stony	20,301	5.6
30D	Wurtsboro stony fine sandy loam, 15 to 25 percent slopes, extremely stony	3,177	0.9
38B	Swartswood stony fine sandy loam, 0 to 8 percent slopes, extremely stony	30,294	8.4
38C	Swartswood stony fine sandy loam, 8 to 15 percent slopes, extremely stony	11,009	3.0
38D	Swartswood stony fine sandy loam, 15 to 30 percent slopes, extremely stony	3,268	0.9
50C	Wasnot very flaggy sandy loam, 3 to 15 percent slopes, very rocky	602	0.2
50E	Wasnot very flaggy sandy loam, 15 to 35 percent slopes, very rocky	241	*
58C	Skytop very flaggy sandy loam, 8 to 15 percent slopes, extremely stony	1,095	0.3
58E	Skytop very flaggy sandy loam, 15 to 35 percent slopes, extremely stony	328	*

60B	Mardin channery silt loam, 0 to 8 percent slopes, stony	1,464	0.4
60C	Mardin channery silt loam, 8 to 15 percent slopes, stony	646	0.2
61B	Mardin stony loam, 0 to 8 percent slopes, extremely stony	3,980	1.1
61C	Mardin stony loam, 8 to 15 percent slopes, extremely stony	3,497	1.0
75	Unadilla silt loam	279	*
89B	Chenango gravelly fine sandy loam, 0 to 8 percent slopes	4,391	1.2
89C	Chenango gravelly fine sandy loam, 8 to 15 percent slopes	516	0.1

* See footnote at end of table.

Acreage and Proportionate Extent of the Soils

Pike County, Pennsylvania

Map symbol	Map unit name	Acres	Percent
89D	Chenango gravelly fine sandy loam, 15 to 25 percent slopes	398	0.1
97B	Lordstown very channery loam, 3 to 8 percent slopes, very stony	6,493	1.8
97C	Lordstown very channery loam, 8 to 15 percent slopes, very stony	751	0.2
108B	Wyoming and Chenango soils, 0 to 8 percent slopes	1,694	0.5
108C	Wyoming and Chenango soils, 8 to 15 percent slopes	402	0.1
111B	Edgemere-Shohola complex, 3 to 15 percent slopes, very rubbly	13,373	3.7
121D	Manlius-Arnot-Rock outcrop complex, 15 to 30 percent slopes, rubbly	3,879	1.1
121F	Manlius-Arnot-Rock outcrop complex, 30 to 80 percent slopes, rubbly	7,635	2.1
143	Wyalusing fine sandy loam	617	0.2
239B	Oquaga very stony loam, 0 to 8 percent slopes, extremely bouldery	9,478	2.6
239C	Oquaga very stony loam, 8 to 15 percent slopes, extremely bouldery	6,661	1.8
239D	Oquaga very stony loam, 15 to 30 percent slopes, extremely bouldery	8,182	2.3
240F	Oquaga-Arnot-Rock outcrop complex, 20 to 60 percent slopes, very rubbly	22,572	6.2
258F	Skytop-Wasnot-Rock outcrop complex, 15 to 60 percent slopes, very rubbly	869	0.2
320B	Lackawanna channery loam, 3 to 8 percent slopes, stony	1,455	0.4
320C	Lackawanna channery loam, 8 to 15 percent slopes, stony	458	0.1
321B	Lackawanna channery loam, 3 to 8 percent slopes, extremely stony	7,001	1.9
321C	Lackawanna channery loam, 8 to 15 percent slopes, extremely stony	4,369	1.2
321D	Lackawanna channery loam, 15 to 30 percent slopes, extremely stony	2,136	0.6
402C	Arnot very channery loam, 3 to 15 percent slopes, very rocky	5,121	1.4
402E	Arnot very channery loam, 15 to 35 percent slopes, very rocky	3,278	0.9
442B	Wyoming very cobbly sandy loam, 3 to 8 percent slopes	3,323	0.9
442C	Wyoming very cobbly sandy loam, 8 to 15 percent slopes	1,408	0.4
442D	Wyoming very cobbly sandy loam, 15 to 30 percent slopes	575	0.2
897B	Lordstown-Swatswood complex, 0 to 8 percent slopes, extremely stony	12,973	3.6
897C	Lordstown-Swatswood complex, 8 to 15 percent slopes, extremely stony	8,089	2.2
897D	Lordstown-Swatswood complex, 15 to 30 percent slopes, extremely stony	2,311	0.6
BP	Pits, Shale, and Gravel	596	0.2
DAMS	Dams and impoundment structures	21	*
QA	Quarry, rock	78	*
W	Water	14,170	3.9
Total		362,515	100.0

* Less than 0.1 percent.

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
5B: Suncook	---	---	---	---	0	---	Low	Low	High
7B: Shohola	Fragipan	18-30	---	Very weakly cemented	0	---	High	High	Moderate
Edgemere	Fragipan	15-25	---	Very weakly cemented	0	---	High	High	Moderate
7C: Shohola	Fragipan	18-30	---	Very weakly cemented	0	---	High	High	Moderate
Edgemere	Fragipan	15-25	---	Very weakly cemented	0	---	High	High	Moderate
9B: Craigsville	---	---	---	---	0	---	Moderate	Low	Moderate
Wyoming	---	---	---	---	0	---	Low	Low	High
11A: Edgemere	Fragipan	15-25	---	Very weakly cemented	0	---	High	High	Moderate
12: Gleneyre	---	---	---	---	0	---	High	High	Moderate
Kimbles	---	---	---	---	0	---	High	High	Moderate
14: Braceville	Fragipan	15-30	---	Very weakly cemented	---	---	Moderate	Moderate	Moderate

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
15: Pope	---	---	---	---	0	---	Moderate	Low	High
18: Paupack	---	---	---	---	---	15-40	High	Moderate	Low
19B: Morris	Fragipan	10-22	---	Very weakly cemented	0	---	High	High	Moderate
19C: Morris	Fragipan	10-22	---	Very weakly cemented	0	---	High	High	Moderate
20: Freetown	---	---	---	---	0	---	High	High	High
21B: Manlius	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
21C: Manlius	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
24A: Delaware	---	---	---	---	0	---	Moderate	Low	Moderate
24B: Delaware	---	---	---	---	0	---	Moderate	Low	Moderate
24C: Delaware	---	---	---	---	0	---	Moderate	Low	Moderate

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
25B: Wurtsboro	Fragipan	17-28	---	Very weakly cemented	0	---	Moderate	High	High
25C: Wurtsboro	Fragipan	17-28	---	Very weakly cemented	0	---	Moderate	High	High
26: Philo	---	---	---	---	---	---	Moderate	Low	High
27: Barbour	---	---	---	---	0	---	Moderate	Low	Moderate
28B: Wellsboro	Fragipan	16-30	---	Very weakly cemented	0	---	High	High	Moderate
28C: Wellsboro	Fragipan	16-30	---	Very weakly cemented	0	---	High	High	Moderate
28D: Wellsboro	Fragipan	16-30	---	Very weakly cemented	0	---	High	High	Moderate
29B: Wellsboro	Fragipan	16-30	---	Very weakly cemented	0	---	High	High	Moderate
29C: Wellsboro	Fragipan	16-30	---	Very weakly cemented	0	---	High	High	Moderate
30B: Wurtsboro	Fragipan	17-28	---	Very weakly cemented	0	---	Moderate	High	High

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
30C: Wurtsboro	Fragipan	17-28	---	Very weakly cemented	0	---	Moderate	High	High
30D: Wurtsboro	Fragipan	17-28	---	Very weakly cemented	0	---	Moderate	High	High
38B: Swartswood	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	High
38C: Swartswood	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	High
38D: Swartswood	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	High
50C: Wasnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Low	Moderate	High
50E: Wasnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Low	Moderate	High
58C: Skytop	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Low	Moderate	High
58E: Skytop	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Low	Moderate	High

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
		Kind	Depth to top <i>In</i>	Thickness <i>In</i>	Hardness	Initial <i>In</i>	Total <i>In</i>	Uncoated steel	Concrete
60B: Mardin	Fragipan		14-26	---	Very weakly cemented	0	---	Moderate	Moderate Low
60C: Mardin	Fragipan		14-26	---	Very weakly cemented	0	---	Moderate	Moderate Low
61B: Mardin	Fragipan		14-26	---	Very weakly cemented	0	---	Moderate	Moderate Low
61C: Mardin	Fragipan		14-26	---	Very weakly cemented	0	---	Moderate	Moderate Low
75: Unadilla		---	---	---	---	---	---	High	Low Moderate
89B: Chenango		---	---	---	---	---	---	Moderate	Low Moderate
89C: Chenango		---	---	---	---	---	---	Moderate	Low Moderate
89D: Chenango		---	---	---	---	---	---	Moderate	Low Moderate
97B: Lordstown	Bedrock (lithic)		20-40	---	Very strongly cemented	0	---	Moderate	Low High
97C: Lordstown	Bedrock (lithic)		20-40	---	Very strongly cemented	0	---	Moderate	Low High

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
108B: Chenango	---	---	---	---	---	---	Moderate	Low	Moderate
Wyoming	---	---	---	---	0	---	Low	Low	High
108C: Chenango	---	---	---	---	---	---	Moderate	Low	Moderate
Wyoming	---	---	---	---	0	---	Low	Low	High
111B: Edgemere	Fragipan	15-25	---	Very weakly cemented	0	---	High	High	Moderate
Shohola	Fragipan	18-30	---	Very weakly cemented	0	---	High	High	Moderate
121D: Manlius	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
Arnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Moderate	Low	High
ROCK OUTCROP	---	---	---	---	---	---	---	---	---
121F: Manlius	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
Arnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Moderate	Low	High

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top <i>In</i>	Thickness <i>In</i>	Hardness	Initial <i>In</i>	Total <i>In</i>		Uncoated steel	Concrete
121F: ROCK OUTCROP	---	---	---	---	---	---	---	---	---
143: Wyalusing	---	---	---	---	0	---	High	High	Moderate
239B: Oquaga	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
239C: Oquaga	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
239D: Oquaga	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
240F: Oquaga	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	Moderate
Arnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Moderate	Low	High
Rock outcrop	---	---	---	---	---	---	---	---	---
258F: Skytop	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Low	Moderate	High

Soil Features
Pike County, Pennsylvania

Map symbol and soil name		Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion		
		Kind	Depth to top	Thickness	Hardness	Initial		Total	Uncoated steel	Concrete
			<i>In</i>	<i>In</i>		<i>In</i>		<i>In</i>		
258F: Wasnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Low	Moderate	High	
ROCK OUTCROP	---	---	---	---	---	---	---	---	---	
320B: Lackawanna	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	Moderate	
320C: Lackawanna	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	Moderate	
321B: Lackawanna	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	Moderate	
321C: Lackawanna	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	Moderate	
321D: Lackawanna	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	Moderate	
402C: Arnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Moderate	Low	High	
402E: Arnot	Bedrock (lithic)	10-20	---	Very strongly cemented	0	---	Moderate	Low	High	
442B: Wyoming	---	---	---	---	0	---	Low	Low	High	

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
442C: Wyoming	---	---	---	---	0	---	Low	Low	High
442D: Wyoming	---	---	---	---	0	---	Low	Low	High
897B: Lordstown	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	High
Swartswood	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	High
897C: Lordstown	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	High
Swartswood	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	High
897D: Lordstown	Bedrock (lithic)	20-40	---	Very strongly cemented	0	---	Moderate	Low	High
Swartswood	Fragipan	28-36	---	Very weakly cemented	0	---	Moderate	Low	High
BP: Pits, shale	Bedrock (paralithic)	0-2	---	Very strongly cemented	---	---	Low	Low	High
Pits, gravel	---	---	---	---	---	---	Low	Low	High

Soil Features
Pike County, Pennsylvania

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
DAMS: Dams	---	---	---	---	---	---	---	---	---
QA: Rock quarry	Bedrock (lithic)	0-1	---	Indurated	---	---	---	---	---
W: WATER	---	---	---	---	---	---	---	---	---

USDA Natural Resources
Conservation Service

Tabular Data Version: 2
Tabular Data Version Date: 12/02/2005

This report shows only the major soils in each map unit. Others may exist.

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Prime and other Important Farmlands

Pike County, Pennsylvania

Map symbol	Map unit name	Farmland classification
14	Braceville fine sandy loam	All areas are prime farmland
15	Pope fine sandy loam	All areas are prime farmland
24A	Delaware fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
24B	Delaware fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
25B	Wurtsboro channery fine sandy loam, 0 to 8 percent slopes, stony	All areas are prime farmland
26	Philo loam	All areas are prime farmland
27	Barbour fine sandy loam	All areas are prime farmland
29B	Wellsboro channery loam, 0 to 8 percent slopes, stony	All areas are prime farmland
60B	Mardin channery silt loam, 0 to 8 percent slopes, stony	All areas are prime farmland
75	Unadilla silt loam	All areas are prime farmland
89B	Chenango gravelly fine sandy loam, 0 to 8 percent slopes	All areas are prime farmland
320B	Lackawanna channery loam, 3 to 8 percent slopes, stony	All areas are prime farmland
5B	Suncook loamy sand, 0 to 8 percent slopes	Farmland of statewide importance
25C	Wurtsboro channery fine sandy loam, 8 to 15 percent slopes, stony	Farmland of statewide importance
29C	Wellsboro channery loam, 8 to 15 percent slopes, stony	Farmland of statewide importance
60C	Mardin channery silt loam, 8 to 15 percent slopes, stony	Farmland of statewide importance
89C	Chenango gravelly fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
108B	Wyoming and Chenango soils, 0 to 8 percent slopes	Farmland of statewide importance
108C	Wyoming and Chenango soils, 8 to 15 percent slopes	Farmland of statewide importance
320C	Lackawanna channery loam, 8 to 15 percent slopes, stony	Farmland of statewide importance

Hydric Soils
Pike County, Pennsylvania

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
5B: Suncook loamy sand, 0 to 8 percent 2B2, 4 slopes	Wyalusing	4	---	Yes	
7B: Shohola-Edgemere complex, 0 to 8 2B3, 3 percent slopes, very rubbly	Edgemere	29	---	Yes	
7C: Shohola-Edgemere complex, 8 to 15 2B3, 3 percent slopes, very rubbly	Edgemere	29	---	Yes	
9B: Craigsville-Wyoming complex, 0 to 8 2B2, 4 percent slopes, extremely stony	Wyalusing	6	---	Yes	
11A: Edgemere extremely stony loam, 0 to 3 2B3, 3 percent slopes, very rubbly	Edgemere	75	---	Yes	
3	Freetown	4	---	Yes	1,
	Wyalusing 2B2, 4	4	---	Yes	
12: Gleneyre-Kimbles complex, 0 to 2 2B3, 3, 4 percent slopes	Gleneyre	50	---	Yes	
3	Kimbles 2B3	30	---	Yes	
	Paupack	8	---	Yes	1
	Edgemere 2B3, 3	6	---	Yes	
	Freetown	4	---	Yes	1,
18: Paupack mucky peat	Paupack Edgemere 2B3, 3	90 8	--- ---	Yes Yes	1
19B: Morris very channery loam, 0 to 8 2B3, 3 percent slopes, very stony	Edgemere	3	---	Yes	
19C: Morris very channery loam, 8 to 15 2B3, 3 percent slopes, very stony	Edgemere	3	---	Yes	

Hydric Soils
Pike County, Pennsylvania

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
20: Freetown mucky peat 3	Freetown	92	---	Yes	1,
	Gleneyre 2B3, 3, 4	4	---	Yes	
	Edgemere 2B3, 3	1	---	Yes	
21B: Manlius very channery silt loam, 3 to 8 2B3, 3 percent slopes, very bouldery	Edgemere	2	---	Yes	
21C: Manlius very channery silt loam, 8 to 15 2B3, 3 percent slopes, very bouldery	Edgemere	2	---	Yes	
25B: Wurtsboro channery fine sandy loam, 0 2B3, 3 to 8 percent slopes, stony	Edgemere	3	---	Yes	
25C: Wurtsboro channery fine sandy loam, 8 2B3, 3 to 15 percent slopes, stony	Edgemere	2	---	Yes	
26: Philo loam 2B2, 4	Wyalusing	2	---	Yes	
28B: Wellsboro stony loam, 0 to 8 percent 2B3, 3 slopes, extremely stony	Edgemere	2	---	Yes	
28C: Wellsboro stony loam, 8 to 15 percent 2B3, 3 slopes, extremely stony	Edgemere	2	---	Yes	
29B: Wellsboro channery loam, 0 to 8 2B3, 3 percent slopes, stony	Edgemere	2	---	Yes	
29C: Wellsboro channery loam, 8 to 15 2B3, 3 percent slopes, stony	Edgemere	2	---	Yes	
30B: Wurtsboro stony fine sandy loam, 0 to 2B3, 3 8 percent slopes, extremely stony	Edgemere	3	---	Yes	
30C: Wurtsboro stony fine sandy loam, 8 to 2B3, 3 15 percent slopes, extremely stony	Edgemere	1	---	Yes	
30D: Wurtsboro stony fine sandy loam, 15 to 2B3, 3 25 percent slopes, extremely stony	Edgemere	1	---	Yes	

Hydric Soils
Pike County, Pennsylvania

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
60B: Mardin channery silt loam, 0 to 8 2B3, 3 percent slopes, stony	Edgemere	3	---	Yes	
60C: Mardin channery silt loam, 8 to 15 2B3, 3 percent slopes, stony	Edgemere	3	---	Yes	
61B: Mardin stony loam, 0 to 8 percent 2B3, 3 slopes, extremely stony	Edgemere	3	---	Yes	
61C: Mardin stony loam, 8 to 15 percent 2B3, 3 slopes, extremely stony	Edgemere	3	---	Yes	
108B: Wyoming and Chenango soils, 0 to 8 2B2, 4 percent slopes	Wyalusing	4	---	Yes	
111B: Edgemere-Shohola complex, 3 to 15 2B3, 3 percent slopes, very rubbly	Edgemere	41	---	Yes	
3	Freetown	5	---	Yes	1,
143: Wyalusing fine sandy loam 2B2, 4	Wyalusing	85	---	Yes	

Explanation of hydric criteria codes:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
 - B. are poorly drained or very poorly drained and have either:
 - 1.) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
 - 2.) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
 - 3.) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.