

The Maxatawny Township Comprehensive Plan

July 2009

MAXATAWNY TOWNSHIP



Because of electronic formatting the official copy of this Plan shall be considered the hardcopy on file at the Maxatawny Township Municipal Office

Adopted: January 6, 2010

INTRODUCTION AND STATEMENT OF PURPOSE

The Comprehensive Plan includes discussion regarding improvements, goals, existing facilities and future land use considerations. However, the items pertaining to the Borough of Kutztown and the Borough of Lyons are strictly informational and are not included as a projection of the intention of the two Boroughs nor does it reflect any opinion that Maxatawny Township has relative to future or existing conditions in those two municipalities.

This Plan is exclusively related to Maxatawny Township. Any Plan Elements not related to Maxatawny Township should not be construed as being adopted by any other municipality nor should be construed as being the policy or adopted inclination as to Maxatawny Township's position as to those municipalities and the services and goals within each municipality. In the event that any matter within this Comprehensive Plan is adopted or fulfilled by any other municipalities and Maxatawny Township does not agree to said measures or said measures negatively impact Maxatawny Township, the Board of Supervisors or appropriate entity may take whatever action necessary to protect the rights of the Township and the citizens within the Township.

Finally, any reference contained herein to this document serving as a Joint Comprehensive Plan should be disregarded as this Plan is exclusively related to Maxatawny Township.

PART 1
PLAN ELEMENTS

CHAPTER 1

INTRODUCTION TO THE COMPREHENSIVE PLAN

Why This Comprehensive Plan?

Northeastern Berks is a special and unique place. It has beautiful, unspoiled rural areas that boast some of the richest farmland in the State; rolling hills which provide scenic views of the Sacony Creek Valley; a college town with a vibrant main street; traditional neighborhoods; an array of recreational opportunities in and along its parks, game lands, woodlands, trails, streams; attractive, historic rural churches; a vivid history and interesting historic resources; and a rich agricultural heritage. In the Kutztown, Maxatawny, and Lyons region, there is still an opportunity to really plan and make a difference. The purpose of this Comprehensive Plan is to proactively work to assure that the future of the region will be shaped by the municipalities' shared vision, rather than by reactions to forces acting upon the Boroughs and the Township. This plan will manage rather than react to growth, work to retain the vitality of its existing settlements, and protect its many assets and resources.

The Boroughs and the Township have prepared individual comprehensive plans in the past. This Comprehensive Plan is the first joint planning effort by all municipalities, and was initiated because of the recognized need to examine overall planning for the area in light of development trends and pressures in the Region; to determine common goals and objectives for land use, circulation, community facilities, housing (both transitional and permanent), open space and recreation, natural resources, municipal services, and resource preservation; to analyze interconnections with and connections to surrounding municipalities; to coordinate land use, housing, transportation, community facilities and utilities, economic development, and resource preservation planning; and recognize *Vision 2020*, the Comprehensive Plan for Berks County.

In 2000, Pennsylvania adopted amendments to the Municipalities Planning Code, specifically Acts 67 and 68, known as "Smart Growth" legislation. This new legislation allows municipalities to work together to plan regionally across municipal borders using 'Smart Growth Principles'. A Joint Comprehensive Plan can address both development and preservation issues with the flexibility of allocating land uses over the entire planning area. Planning jointly allows distribution of land uses, housing types, densities, and development patterns over the entire region, rather than trying to fit all types of uses and densities into each municipality. It also allows for coordinated land use planning along municipal boundaries; coordinated planning for trails, recreation and open space throughout the Region; and coordinated planning along the common road corridors in the Region. Coordinated input can be provided to County and State agencies. An overall approach to economic development can be provided, addressing retention of the major component of the economy, agriculture, and allowing for appropriate commercial and

industrial development which complements rather than detracts from existing downtowns at appropriate locations.

Contents of a Comprehensive Plan

The State allows local governments to address virtually any issue that is of municipal concern, but Act 247, the Pennsylvania Municipalities Planning Code, established certain minimum requirements. According to §301 of Act 247, a valid Comprehensive Plan must include

- a statement of objectives concerning future development;
- a plan for land use;
- a plan to meet the housing needs of present residents and of any anticipated increase of population;
- a plan for the movement of people and goods, which may address automobile travel, parking facilities, non-motorized trail systems, and public transportation facilities;
- a plan for community facilities and services, which may address public and private education, recreation, municipal buildings, fire and police services, libraries, hospitals, water supply and distribution, sewerage and solid waste management, storm drainage, and utilities;
- a statement of the inter-relationships among the components of the plan;
- a discussion of short-range and long-range implementation strategies for the plan objectives;
- a review of how compatible the plan is with the existing and proposed development and plans in contiguous portions of neighboring municipalities;
- a plan for the protection of natural and historic resources; and
- a plan for the reliable supply of water.

What does a Comprehensive Plan Accomplish?

The Comprehensive Plan contains a vision of what the Boroughs and the Township want to be and includes goals and objectives for realizing that vision. Through accomplishing those goals and objectives and realizing the vision, the quality of life for the Region's residents will be enhanced.

The Comprehensive Plan is also an educational document, providing discussion of conditions, strengths, issues, concerns, and opportunities, and identifying resources that are worthy of protection and preservation.

The Comprehensive Plan contains policies for land use, circulation and community facilities which will serve as a guide for public and private decision-making to accomplish the goals and objectives, and thus the vision, for the Boroughs and the Township. The appropriate location, amount, and pattern of development is established. Standards for developers to meet are identified.

The Comprehensive Plan provides a basis for implementation techniques, such as land use ordinances, administrative actions, official maps and capital improvements programs, which will implement the policies contained in this plan.

This Comprehensive Plan is a Living Document

This Comprehensive Plan is just a start. It is the foundation for the attainment of the goals and objectives established within the Plan, which can be accomplished only with the support of the municipal governments, municipal commissions, boards and committees, area businesses, area residents, and surrounding municipalities and regional planning groups.

The objective has been to prepare a Plan which will not sit on a shelf and gather dust, but a plan that will be implemented and used by municipal governing bodies, planning commissions and other groups within the municipalities to guide their actions in attaining the goals of this Plan.

This Plan presents a strategy to guide municipal officials and other agencies in making decisions that will assure that the Kutztown, Maxatawny, and Lyons area will continue to be an attractive place in which to live and work. This Comprehensive Plan is not an ordinance or regulation, but is a basis for proposing regulations and undertaking specific functional plans designed to implement the policies established within this plan. Implementation of the action plan is critical.

Need for Continuing Planning

Planning is an ongoing process and this Comprehensive Plan must be continually reviewed in light of development trends, the state of the economy, unforeseen influences, availability of public infrastructure, changes in community goals, and the appropriateness of the Plan's objectives, policies, and implementation program.

CHAPTER 2

COMMUNITY VISION, GOALS AND OBJECTIVES

Why a Vision Statement?

A vision statement is simply a 'snapshot' for a community's future. The vision provides the foundation for what a community wants to become. It should consider existing, required and proposed uses, as well as natural, historical, cultural, and rural resources the municipalities wish to preserve. It is the first step in organizing the communities' priorities which can be built upon through detailed objectives and policy statements. The Vision is attained first by setting goals and objectives, then setting policies to meet these goals and objectives, and finally by identifying implementation strategies to enact these policies.

Vision for the Kutztown, Maxatawny, Lyons Planning Area

The Kutztown, Maxatawny, Lyons region will remain an attractive and desirable community in which to live and work by preserving major features of the landscape, such as the Sacony Marsh, water courses and prime agricultural lands. Moderate residential growth will be managed and concentrated around existing Boroughs and Villages where public sewer and water can be made available. Limited industrial development will occur at designated locations along US 222 and Long Lane. Agriculture will remain an important part of the regional economy and additional tourism will be promoted. Recreational opportunities in the Region will be enhanced and expanded. There will be increased cooperation among the municipalities and the University in the provision of facilities and services for area residents. The cultural heritage of the community will be identified and made more accessible so the nature and history of the municipalities will be an integral part of and blended with the future of the Region.

GOALS AND OBJECTIVES

This chapter of the Comprehensive Plan presents the goals and objectives of the Township and the Boroughs. Goals are general statements indicating the desired direction for the communities, and reflect the long-term state they wish to establish or maintain. Objectives are more specific, relatively short-term policy guidelines for the municipalities to follow. Goals are achieved through accomplishment of one or more of the stated objectives. Though the Objectives can be interpreted as 'passive', the reader should assume the municipalities are the subject of the directives. A Joint Comprehensive Plan will identify goals and objectives of a regional nature; however, due to some obvious differences between the municipalities, some objectives are specifically aimed at an individual municipality and may not apply to all municipalities.

It should be noted that the goals and objectives contained in this chapter, as well as the Policies contained within Part II of this Plan, support the *American Planning Association* concept of **Smart Growth**. Smart Growth encourages a more efficient use of the land by encouraging a larger share of growth within urbanized or previously developed areas already served by public infrastructure. Smart Growth reduces the pressure of development on farmland, open space, and environmentally sensitive areas.

Smart Growth can be interpreted in many ways by different people and organizations. The United States Environmental Protection Agency (EPA) has developed a list of 10 **Smart Growth Principles** that have generally been accepted by planning professionals as a starting point:

1. 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

NATURAL, SCENIC, HISTORIC, CULTURAL AND AGRICULTURAL RESOURCES

Overall Goal: Recognize and respect the assets and limitations of the natural and built environment, protect and preserve those assets, and facilitate their incorporation into the daily lives of the Region's residents.

Natural Resources Goal:		Kutztown Borough			Maxatawny Township			Lyons Borough				
		Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term		
Protect the Natural Resources within the Region												
Objectives:												
1	Prevent the deterioration of the supply and quality of groundwater and surface water.											
2	Protect woodland											
3	Protect important Natural Areas identified in the Natural Areas Inventory											
4	Preserve watersheds, stream corridors, floodplains, and wetlands.											
5	Protect the Sacony Marsh											
6	Protect the Sacony Creek and its headwaters											
7	Protect groundwater aquifers and recharge areas											
8	Protect wellhead areas by implementing the Kutztown Area Wellhead Protection Study, as revised.											
9	Protect steep slopes											
10	Determine appropriate approaches toward development on slopes and ridgelines											
11	Preserve natural wildlife habitats											
12	Protect the night sky from excessive light pollution											
13	Prevent deterioration of air quality											

Scenic Resources Goal: Encourage the protection of the Scenic Resources within the Region.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
1			Protect scenic views, features and landscapes, and facilitate for future generations views of the scenic and natural beauty of the Region.						
2			Encourage the preservation of scenic, historic and cultural corridors, and viewsheds and resources along them.						
Historic and Cultural Resources Goal: Preserve, protect, and enhance historic and cultural resources and their context in the Region.									
Objectives:									
1			Preserve recognized historic sites and structures.						
2			Encourage responsible conservation and maintenance of vintage architecture by all property owners, including residents, local landlords, and absentee landlords.						
3			Consider the degree to which suggested historic preservation guidelines might be legally enforced through revised borough and township ordinances without unduly infringing on property owners' rights.						
4			Preserve local sites associated with aboriginal and indigenous cultures and/or insist that adequate archaeological investigation by recognized entities be conducted prior to any development of such tracts.						

Agricultural Resources Goal: Preserve agriculture as an important aspect in the life of the Region.		Kutztown Borough			Maxatawny Township			Lyons Borough		
		Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:										
1	Support the continuation of agricultural operations in the Region.									
2	Encourage continued and effective communication with the local agricultural community to maintain existing farmland.									
3	Establish policies for intensive agricultural activities "in accordance with state laws and regulations".									

LAND USE

Land Use Goal: Manage, control, and guide development in order to preserve natural, scenic, historic and cultural, and agricultural resource; enhance existing centers and neighborhoods, and provide a mix of small town atmosphere, suburban environment, and rural character within the Region.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
1 Identify and plan for primary development areas and growth areas where there is available or planned infrastructure capacity, and direct new development to those areas.									
2 Tie the type and intensity of development to the adequate provisions of transportation, water, sewerage, drainage, parks and recreation, and community facilities.									
3 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.									
4 Encourage protection of farmland through preservation efforts.									
5 Promote retention of the existing farming economy in the Region and address necessary alternatives and flexibility for farmers.									
6 Identify appropriate development techniques for use within the Region.									
7 Identify significant natural resource lands and stream corridors for perpetual open space conservation.									
8 Achieve a balance between the need for economic growth and the need for resource conservation and preservation.									
9 Require planned, concentrated development which emphasizes significant open space conservation.									

Land Use Goal Continued: Manage, control, and guide development in order to preserve natural, scenic, historic and cultural, and agricultural resources; enhance existing centers and neighborhoods, and provide a mix of small town atmosphere, suburban environment, and rural character within the Region.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
10 Encourage new residential development to take place as infill within existing settled areas and adjacent to those areas, when public water and sewer facilities of adequate capacity and functionality are available.									
11 Control sprawl.									
12 Respect and protect existing living environments in the community.									
13 Require well-designed developments, including public and semi-public development, in scale and character of the setting.									
14 Maintain connections to natural features and scenic vistas.									
15 Minimize strip development along existing roads.									
16 Improve the visual image of the community at entranceways and along road corridors.									
17 Plan for diversity within business development areas.									
18 Provide for a balance of land uses to meet the needs of existing and future residents.									
19 Provide for consistent and compatible land use along municipal boundaries within the Region.									
20 Maintain the character of rural areas.									
21 Allocate land uses over the entire Region in an appropriate manner.									

Land Use Goal Continued: Manage, control, and guide development in order to preserve natural, scenic, historic and cultural, and agricultural resources; enhance existing centers and neighborhoods, and provide a mix of small town atmosphere, suburban environment, and rural character within the Region.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
22 Promote infill and revitalization within existing centers, in conformity with the general character of the existing centers.									
23 Minimize the conflict between non-residential and residential uses and attain compatibility between present and future land uses.									
24 Identify appropriate locations for commercial and industrial areas in the Region.									
25 Encourage development with pedestrian scale.									
26 Encourage attractive streetscapes, visual continuity, cohesive appearance, retention of the traditional look and charm, and use of appropriate street furniture and design enhancements along the Boroughs' and Villages' main streets.									
27 Identify and encourage protection of historic contexts such as areas containing architecture of historical merit and Native American artifact discoveries.									
28 Encourage adaptive reuse of historic structures and/or maintenance of historic structures and context within contemporary developments where appropriate after review of the nature of the historic resources.									

HOUSING

Housing Goal:	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
<p>Promote opportunities for a broad range of housing types to consider the needs of all economic and demographic groups in the region.</p> <p>Objectives:</p>									
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HOUSING

Housing Goal Continued: Promote opportunities for a broad range of housing types to consider the needs of all economic and demographic groups in the region.		Kutztown Borough			Maxatawny Township			Lyons Borough				
		Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term		
Objectives:												
1	Encourage the municipalities to review and revise, as needed, ordinance structure relating to the citation of student rental housing in terms of both police activity and code violations so as to encourage the responsible maintenance of student rental properties and promote consistent community standards of conduct and living.											
2	Encourage cooperation among the Region's municipalities, Kutztown University, and the State System of Higher Education to address student housing issues, staff housing needs, and the continued proliferation of off-campus housing on a Regional basis.											
3	Subject rental units to the same standards of good repair as owner-occupied dwellings and perform adequate inspections to guarantee enforcement of existing codes.											

TRANSPORTATION

Objectives:	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
<p>Transportation Goal: Promote a safe, efficient, convenient, and cost effective transportation system to meet the needs of residents, business, and visitors.</p>									
1 Identify strategies for relieving congestion on the Region's roads.									
2 Address Route 222 congestion issues.									
3 Address College Boulevard/Main Street congestion issues and need for a new Bypass interchange.									
4 Identify and support appropriate alternatives to reliance upon automobile and truck travel.									
5 Facilitate movement through the Region and into and out of the Region's communities.									
6 Expand transit opportunities in the Region.									
7 Plan for safe and accessible routes of travel for pedestrians, bicyclists, individuals with disabilities, the elderly, and those without automobiles.									
8 Develop multi-modal facilities within the Region.									
9 Manage access along the Region's roads.									
10 Improve the efficiency of traffic flow and the safety of the Region's roads, and their intersections and interchanges.									
11 Maintain and enhance the capacity of the Region's road corridors.									
12 Coordinate land use and transportation planning.									
13 Establish developer responsibilities for transportation improvements.									

Objectives:	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
<p>Transportation Goal Continued: Promote a safe, efficient, convenient, and cost effective transportation system to meet the needs of residents, business, and visitors.</p>									
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Objectives:	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
<p>Transportation Goal Continued: Promote a safe, efficient, convenient, and cost effective transportation system to meet the needs of residents, business, and visitors.</p>									
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COMMUNITY FACILITIES, SERVICES, AND DEVELOPMENT

Community Facilities, Services, and Development: Plan for necessary community facilities and services for the Region's residents in an efficient, cost-effective and quality manner within the financial resources of the municipalities. Objectives:	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
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Community Facilities, Services, and Development Continued: Plan for necessary community facilities and services for the Region's residents in an efficient, cost-effective and quality manner within the financial resources of the municipalities. Objectives:	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
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Community Facilities, Services, and Development Continued: Plan for necessary community facilities and services for the Region's residents in an efficient, cost-effective and quality manner within the financial resources of the municipalities.		Kutztown Borough			Maxatawny Township			Lyons Borough		
		Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
23	Address stormwater management concerns through enforcement of the Sacony, Little Lehigh, and Maiden Creek Act 167 Stormwater Management Plans									
24	Monitor most efficient methods to provide police service within the Region and opportunities for regional police services.									

ECONOMIC DEVELOPMENT

Economic Development: Encourage appropriate economic development and achieve fiscal balance, while preserving and enhancing the quality of the living environment.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
1 Enhance tax revenue from business development to balance the residential share of the property tax base									
2 Promote job creation for local residents through cooperative efforts of municipalities, the county, economic development agencies, businesses, and educational institutions									
3 Protect the Region's resources as economic development occurs.									
4 Enhance the Boroughs as unique commercial and cultural destinations, emphasizing the unique character of the downtowns.									
5 Encourage the adaptive re-use of vacant and underutilized properties in the Boroughs and Township.									
6 Protect natural, cultural, and recreational resources in order to enable tourism that is based on nature and cultural, recreation, educational and family activities.									
7 Retain existing desirable businesses and industries.									
8 Identify and designate appropriate areas for future economic development and determine the types of economic development which are most appropriate for the Region.									
9 Identify strategies to attract desirable businesses.									
10 Relate economic development to available infrastructure.									
11 Establish developer responsibilities in providing improvements when they develop.									

Economic Development Continued: Encourage appropriate economic development and achieve fiscal balance, while preserving and enhancing the quality of the living environment.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
12 Work together on a regional basis to plan for appropriate economic development, and address infrastructure needs to support economic development.									
13 Establish standard to improve the design and appearance of new development and commercial areas.									
14 Provide alternatives to strip commercial development.									
15 Support revitalization efforts in Boroughs, including participation in Main Street and elm Street Programs.									
16 Encourage diversification of funding sources for municipal governments and school districts to achieve equitable taxation policies.									
17 Utilize Kutztown Borough's telecommunications network to promote economic development in the Region.									
18 Encourage resident-owned small businesses within existing mixed use commercial areas.									
19 Encourage the Boroughs to work with community-based action groups to pursue commonwealth funding as a bulwark to economic revitalization.									
20 Encourage property owners within the Boroughs' commercial districts to make every reasonable effort to find business tenants to occupy the storefronts of their buildings so that vacant storefronts do not begin to define the community as beyond economic revitalization									

Economic Development Continued: Encourage appropriate economic development and achieve fiscal balance, while preserving and enhancing the quality of the living environment.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
21 Devise a means by which temporarily unoccupied storefronts might be filled with community-based displays to enhance the visual appeal of Main Street and reinforce the image of a community that is concerned about its business district.									
22 Work with local chambers of commerce, tourism and visitors' bureaus, etc. to promote the idea of northeastern Berks as a weekend destination enclave, and work with those same entities, as well as local municipal governments, to attract and maintain businesses conducive to that end.									
23 Encourage the use of potential business and industrial sites as identified by the <i>Industrial Site Assessment for Berks County</i> , commonly known as the Leak-Goforth Study.									
24 Support the efforts of Maxatawny Township to create an Authority to operate the Kutztown Airport.									

PLANNING AND REGIONALIZATION EFFORTS

Planning and Regionalization Efforts: Establish a regional comprehensive plan containing a program for plan implementation.	Kutztown Borough			Maxatawny Township			Lyons Borough		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Objectives:									
1 Establish partnerships and create appropriate cooperative mechanisms to implement this Comprehensive Plan.									
2 Recognize the uniqueness of the Region and protect community character.									
3 Maintain and enhance the quality of life for the Region's residents.									
4 Identify opportunities for continued Intermunicipal cooperation and planning.									
5 Support efforts for interregional and regional/county cooperation in addressing transportation, economic development, and community development issues.									
6 Identify developers' responsibilities in efforts to accomplish the goals and objectives of this Plan.									
7 Identify specific techniques for implementation of this Plan.									
8 Resolve municipal boundary line issues.									

CHAPTER 3

FUTURE LAND USE AND HOUSING PLAN

The Future Land Use Plan is one of the most important elements of the comprehensive plan. It graphically brings together all of the chapters of the plan and evaluates all of the information that has been mapped and gathered during this planning process. Based on stated goals and objectives, this Plan will determine what future land uses would be most appropriate throughout the region and at what density. Factors such as existing land use, natural features, soil conditions, demographics, housing, economic development trends, road conditions, sewer and water capacities, and downtown and neighborhood vitality all play a role in the development of the Future Land Use Plan.

The Future Land Use Plan will serve as a guide for future municipal ordinance amendments and regulations. Municipal regulatory controls such as zoning, sewer and water facilities planning, transportation planning, and recreation planning should be based upon the recommendations of the Future Land Use Plan.

It is important to stress that the Future Land Use Plan is **not** a zoning map, nor does it change the zoning ordinances and maps that have been previously adopted by the Boroughs and Township. It is a reference tool to be used by municipal officials and planners when making decisions regarding future development.

Future Land Use recommendations are based on a variety of factors: The patterns of development and existing conditions within the municipalities; the anticipated path of future growth in the region; existing environmental conditions; capacity of public facilities and infrastructure; and goals of the Berks County Comprehensive Plan, *Vision 2020*.

The Future Land Use Plan Map for the Kutztown, Maxatawny, Lyons Area includes the following Land Use Categories:

- Agricultural
- Rural
- Managed Hillside Development
- Medium Density Residential
- High Density Residential
- Town Center / Mixed Use
- Village
- Business Development
- Commercial
- Limited Industrial

- General Industrial
- Institutional
- Major Public Facilities
- Route 222 Economic Development Corridor
- Limited Industrial Overlay District (contingent on College Blvd Interchange)

While categories of Major Public Facilities and Institutional have been included on the Future Land Use Plan to identify the location of existing land uses, zoning maps enacted pursuant to this Plan may not have Public and Institutional zoning districts. It is not the intent of this Plan to recommend that land be zoned only for public purposes.

Strategies to Support the Future Land Use Plan

1. Amend municipal zoning ordinances and maps to reflect the objectives of this Plan and be consistent with the designations of the Future Land Use Map.
2. Provide land development techniques that protect existing resources and preserve open space.
3. Provide development regulations that are consistent with the character and densities of existing development patterns.
4. Provide zoning regulations to minimize incompatibility of land uses and reduce friction between uses and require landscaping, buffering and isolation distances and other measures to mitigate conflicts where appropriate.
5. Include appropriate roadway access provisions for commercial areas.
6. Consider overlay zoning for the US 222 corridor.
7. Amend municipal subdivision and land development ordinances to reflect the objectives of this Plan.
8. Establish appropriate standards for driveway design and street access.
9. Administer stormwater management controls in accordance with the Sacony, Little Lehigh, and Maiden creek Act 167 Stormwater Management Plans.
10. Discourage future development within the 100 year floodplain.
11. Require buffering of natural and historic resources during the development process.

12. Require environmental assessment studies, hydrogeological studies, and historic resources impact studies.
13. Enact guidelines for development in wellhead protection and water re-charge areas.
14. Establish a permanent Regional Planning Committee, which would meet once a year or as needed. This group would be responsible to review all updates and amendments to the Comprehensive Plan as well as to review developments of regional significance, defined as developments that are five hundred (500') feet from a municipal border and/or five hundred (500') feet from a utility (sewer and water) service area. ~~includes equal representation from all three municipalities to monitor consistency issues between this Plan and municipal ordinances. Keep communication open with Kutztown University and maintain continued cooperation.~~
15. Kutztown should consider the merits of the Conservation Zoning District concept utilized in Pottstown.
16. Insure that Kutztown floodplain mapping is correct and that regulations are consistent with Borough objectives for utilization of industrial properties along the Sacony Creek floodplain.
17. Utilize property maintenance regulations to insure maintenance of vacant properties.
18. Support existing desirable land uses to avoid vacation of buildings and land. Work with landowners to increase utilization of vacant and underutilized land.

Agricultural Preservation Strategies:

1. The municipalities should identify the most viable agricultural lands. Lands that should receive priority include:
 - Land that is protected by existing restrictions and/ or easements against development, including lands that have been purchased through the Berks County Agricultural Conservation Easements (ACE) Program, or are adjacent to such lands;
 - Lands that are designated for protection by *Vision 2020*;
 - Land that is composed of capability class I, II, or III;
 - Land that is currently in agricultural use;
 - Land that is included within an approved Agricultural Security Area.

2. The municipalities should promote agriculture through the following administrative actions:

- Work with local farmers to encourage participation in County's Purchase of Agricultural Conservation Easements Program
- Promote the inclusion of farms in Agricultural Security Areas
- Support measures to relieve property tax burden for farmers
- Limit extension of public sewer and water facilities to agricultural areas
- Permit businesses which support agricultural operations
- Allow farmers to supplement incomes through home businesses, home occupations and farm related businesses
- Permit appropriate recreational activities, such as hayrides, corn mazes, and festivals
- Limit non-farm uses which could cause conflicts with agricultural practices and/or require buffers for non-farm uses around the perimeter of farms
- Allow conservation development through Smart Growth
- Promote enrollment in Act 319 tax relief program
- Allow and give incentives to compact development and higher densities where public sewer and water are available in areas designated for development.

Regulation of Intensive Agricultural Operations

As it is expected that agricultural operations will continue in the Township, the Township will have to consider the most appropriate approach to regulation of intensive agricultural operations in its zoning ordinance. Such regulation will be in accordance with the Pennsylvania Nutrient Management Act and applicable state and federal laws. Considerations include parcel size, intensity of operations, buffering of surrounding properties, mitigation of environmental impacts such as odor, nutrient management, landscaping, stormwater and erosion and sediment control, pesticide management, composting, and handling of food processing waste. The Township will determine where intensive agricultural operations will be permitted.

FUTURE LAND USE MAP CATEGORIES

Agricultural – The Agricultural areas are intended to have agriculture as the primary land use. These areas are agricultural now and it is the intent that this use would continue. Some areas are likely to have agricultural preservation zoning in place to support the continuation of agricultural activities, while in some areas methods such as encouraging participation in agricultural security areas and selling of agricultural conservation easements will support continuation of agriculture.

Rural – The Rural area currently contains a mixture of agricultural, woodland, and very low density residential land uses. Such a mix of uses would continue in the future. Only low densities of development would be expected because of general limitations to development from such factors as steep slopes, floodplains and wetlands.

Low Density Residential – This category reflects existing areas that have been developed at a low density. Any new lots would likely be for single family homes on lots one acre or larger.

Managed Hillside Development – This category recognizes predominantly undeveloped hillside areas north of Route 222 and Short Lane, that have limitations to development because of steep slopes, but have the potential for service by public sewer and water facilities. Care must be taken to prevent environmental disturbances by protecting steep slopes and clustering development on the areas presenting the fewest limitations to development. Density of development and types of dwelling units will depend upon the availability of public sewer and water.

Medium Density Residential – The Medium Density Residential areas are considered the major growth areas within the Region, and will allow for residential development at medium densities. The actual density of development will depend upon the availability of public sewer and water facilities, but will likely range from one to five dwelling units per acre. The Medium Density Residential area is likely to contain a range of zoning districts, from those allowing only single family homes to those allowing a range of one, two, and multiple family dwellings.

High Density Residential – The High Density area recognizes and allows expansion of an area containing multiple family dwellings. The density would be higher than in the Medium Density Residential areas.

Town Center Mixed Use – The Town Center Mixed Use area provides for the continuation of the mixing of Residential and Commercial uses in the center of Kutztown Borough. Dwelling types would vary with the zoning district. In some areas, conversion

of units to apartments would be permissible. The commercial uses would be those compatible with residences and serving the day-to-day needs of residents.

Village – The Village areas are established at the villages of Maxatawny and Bowers, and allow for further expansion and development of those villages. While some areas may be devoted only to residential uses, other areas in the villages will allow the continuation of a mixture of commercial and residential uses in a Village setting. Commercial uses would be those appropriate for a Village setting, where they are in close proximity to residences, serving the day-to-day needs of residents. Density would increase if public sewer and water became available in the future.

Borough Center – This recognizes the central portion of the Borough of Lyons. While some areas would remain exclusively residential, some areas would be devoted to a mix of commercial and residential uses or solely for commercial uses along the major road arteries. This area would be served by public sewer and water facilities.

Business Development – The Business Development area is located in the central portion of the Borough of Kutztown. Much of the area is currently devoted to industrial use, but some of the industrial buildings are older and may eventually be replaced or converted to other uses. The intent of the Business Development area is to allow for appropriate light industrial uses which will not adversely impact surrounding residential areas and natural resources, as well as other business development such as offices or limited commercial. In some cases, conversion of existing industrial buildings to residential uses or mixed residential, office and commercial uses, may be permitted.

Commercial – The intent of the Commercial areas is to provide for strictly commercial, office and service development along major roads leading from Kutztown Borough and adjoining areas of Maxatawny Township, where a core of such uses now exists.

Limited Industrial – The Limited Industrial areas are intended to provide for light industrial and office operations which will not have adverse environmental impacts.

General Industrial – General Industrial areas are intended to provide for a wider range of industrial and office activities, extractive activities, and other activities with potential impacts on residential areas.

Institutional – Institutional areas are intended to accommodate Kutztown University, related uses, and the Kutztown Fairgrounds.

Major Public Facilities – Major Public Facilities include such uses as public schools, cemeteries, major parks, municipal facilities, and other major publicly held lands.

Route 222 Economic Development Corridor – The intent of this area is to provide for economic development within the Region in an area served by major road access and intended to be served by public sewer and water facilities. Some areas may be intended for commercial uses, but the majority of the area is intended for development for light industrial, office, business incubator, and technology related enterprises.

Limited Industrial Overlay District – This area is intended to provide an area which could be used for limited Industrial activities should an interchange on US 222 be constructed at College Boulevard. If that interchange is constructed, it is considered more appropriate for this area to be developed for light industrial uses rather than residential uses.

- (a) **Designated Growth Area** - The Pennsylvania Municipalities Planning Code creates the concept of a Designated Growth Area, which is a region within a multi-municipal plan that preferably includes and surrounds a borough or village, and within which residential and mixed use development is permitted or planned for densities of one unit to the acre or more, commercial, industrial and institutional uses are permitted or planned for and public infra-structure services are provided or planned. The intent of the designated growth area is to provide for orderly and efficient development to accommodate the projected growth of the area, provide for the economic and employment needs of the area, and allow for increase of the tax base of the region.

In the Kutztown-Maxatawny-Lyons Region Designated Growth Areas include the Managed Hillside Development, Medium Density Residential, High Density Residential, Town Center Mixed Use, Village, Business Development, Commercial, Limited Industrial, and Route 222 Economic Development Corridor land use categories.

Housing

Provision for a variety of housing densities, housing types, and development patterns in appropriately designated areas is accomplished through the Land Use Plan and will be accomplished in zoning ordinances. Maintenance of the existing housing stock and adequacy of new housing can be accomplished through enforcement of building codes and utilization of property maintenance codes.

The existing character of residential areas can be maintained through appropriate zoning provisions and review of subdivision and land development plans.

As taxes and housing costs rise, there is always concern for the elderly. Long term residents of the area can find themselves in positions where it is increasingly difficult to maintain or keep their properties. The municipalities should work with older residents to identify various programs that are available to help them meet their housing expenses and

retain their homes. Provision will be made in the Region for age-qualified housing and development of housing options for senior citizens.

A particular concern in the region is to reverse the trends of conversion from owner-occupied to renter occupied units and conversion of single family homes to apartments. Programs to encourage owner-occupied homes should be enacted.

Livable Communities

The municipalities should explore what characteristics and elements constitute "Livable Communities", and work to incorporate those elements in municipal ordinances. The municipalities can 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 the community, what makes it special and unique, what elements create a sense of place for residents, and how the municipality 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.

CHAPTER 4

ECONOMIC DEVELOPMENT PLAN

The Kutztown, Maxatawny, and Lyons Planning Region must support conditions for innovative economic and community development. The municipalities must position themselves to maximize the skills of their workforce and create innovative opportunities for future economic development. A proactive approach to economic development is to increase the tax base by expanding and diversifying the economic base. Residents of the Region have expressed an interest in seeing additional professional and, to a lesser extent, commercial development in the area.

The citizen survey results were clear that the stability and vitality of the Region's tax base is a major concern for area residents. This concern is mirrored by those expressed by the Region's respondents regarding managing growth and the loss of rural areas to residential development. This suggests a coordinated economic development strategy whereby smaller-scale uses could be directed to the Boroughs as well as the Villages of Bowers and Maxatawny, and larger-scale enterprises are directed toward the US Route 222 corridor to the north and south of Kutztown, which is appropriate for larger-scale economic development activities.

The Costs of Land Use

As development has increased in and around the region, costs associated with that development, including traffic and road maintenance, public protection, sewer and water system development and expansion, and public education will also increase. Ultimately, these costs are reflected in higher taxes, which can be especially burdensome on those with fixed incomes. One way to address the issue of increased costs is a cooperative effort among the municipalities and volunteer organizations to identify ways to provide essential services in a more efficient manner, and to eliminate duplication of services among agencies.

Continued residential development within the Region needs a balance of non-residential development to ensure a healthy tax base and economy. The Penn State College of Agricultural Sciences Cooperative Extension has published a study entitled, "Fiscal Impacts of Different Land Uses, the Pennsylvania Experience." In the study, eight Pennsylvania townships were analyzed to determine the fiscal impact of land uses. The ratios of revenues to expenditures were calculated for residential, commercial, industrial, and farm and open land. Residential land, on average, required substantially more in expenditures, mainly due to school expenses and infrastructure costs. In some cases, there was an expense-to-revenue ratio of over 2-to-1 for residential uses. Commercial, industrial, and farm and open land provided more revenue than they required in expenditures. The study notes that these findings are consistent with those in other states.

Encouraging Economic Vitality

Municipalities can address the issue of economic vitality through their municipal ordinances. Amending zoning and subdivision/land development ordinances to allow additional commercial and business development, as well as adaptive reuse of older buildings is one method. Streetscape enhancement of commercial areas and entry or “gateway” enhancements are others. Municipalities must take advantage of the public/private partnerships that exist and provide leadership to the business community to help establish a common focus for future economic development.

A healthy economy requires a balance between residential and non-residential uses. It is important to preserve residential neighborhoods that support the commercial areas and provide the people for a workforce. It is also important to protect the productive farmland, as well as the agricultural industry found in the Region. Communities with high quality-of-life amenities attract more affluent and skilled workers and retain existing workforces better than communities with poor quality-of-life amenities. Preserving architecture, heritage, and culture helps a community maintain a sense of place and attract people and businesses to the Region.

Target Areas

Economic development planning is not only the responsibility of the municipal officials. Local economic groups, non-profit organizations, business and property owners, and local and State legislators all have a stake in the economic well-being of the Kutztown, Maxatawny, Lyons Region. The Region has received interest from several County economic development groups such as Berks County Industrial Development Authority, the Berks Economic Partnership, and the Berks County Chamber of Commerce. These local groups need to establish a consistent approach and common focus for future economic development and work closely with the public and private sectors to avoid duplication of efforts. The first step to improve the climate for economic development and develop a community-wide vision is to identify the crucial or “target areas” that present future economic development potential in the Region.

US Route 222 Corridor – Maxatawny Township

The Region’s most intense future economic development should occur along US 222 north of the Borough of Kutztown. This potential economic development area is depicted as ‘Route 222 Economic Development Corridor’ on the Future Land Use Map. The intent of this area is to provide for economic development within the Region in an area served by major road access and intended to be served by public sewer and water facilities. Some areas may be intended for commercial uses, but the majority of the area is intended for development for light industrial, office, business incubator, and technology related enterprises. This area presents an opportunity to adopt a specific plan

(described later in this chapter), that will regulate land use standards and ensure that the development is appropriate and consistent with the goals of this Plan.

Further north in the Maxatawny Village Area, commercial uses should be less intense, and should adhere to design standards which encourage visual consistency along this corridor by regulating signage, landscaping, setbacks, and streetscape improvements.

West Main Street - Borough of Kutztown

Main Street is the main thoroughfare through the Borough, and runs directly through the central business district as well as a portion of the Borough's historic district. West Main Street is shown on Future Land Use Map within the Town Center / Mixed Use area. Kutztown has historically served as a business center for the Region. Unfortunately, large volumes of thru traffic as well as competing commercial development in the Region threaten to undermine the economic vitality of the downtown. The Borough must strive to make the downtown a destination. Economic development follows people, so the downtown must become a gathering place. The downtown core must have a pedestrian-friendly design that accommodates informal gathering places mixed in with stores, restaurants, coffee shops, and office uses.

Streetscape improvements along Main Street have been initiated, including street lighting enhancements under the Hometown Streets program and shade tree plantings. Such streetscape enhancement projects should be continued to achieve visual continuity.

Foster a positive image through special events, programs, music and art festivals, and holiday decorations. Promote the historic and cultural heritage of the Region as a means to promote tourism. Marketing tools such as banners, brochures, and restaurant/shopping guides should be produced. Businesses may offer incentives to encourage Kutztown University students to patronize the downtown.

The provision of a sidewalk (or trail) system throughout the Borough is another method to enhance social interaction and the sense of place. Such a system could provide bicycle and pedestrian access to downtown Kutztown as well as recreational opportunities to students and residents in surrounding areas. The Borough could encourage this through provision of bicycle and pedestrian-friendly facilities, such as bike racks and benches, in the downtown area.

The Borough should continue to review its sidewalk policy to ensure it regulates gaps in the sidewalk system and that sidewalks are to be constructed or repaired when a property is sold or developed.

The survey results indicate that the Borough has a serious parking problem downtown. This situation should be monitored to determine if there is potential to develop additional

parking opportunities in the future. A lack of on-street parking within the business district can adversely affect future commercial investment or re-development.

Informally affiliated with the Borough of Kutztown, the Kutztown Community Partnership, a 501(c)(3) non-profit entity charged with the revitalization of the borough's Main Street business district and the enhancement of the quality of life of all borough residents, has made application to the Pennsylvania Department of Community and Economic Development (DCED) and undergone final review by representatives from the Pennsylvania Downtown Center (PDC). The Borough has been accepted into this program.

Kutztown Airport

At the writing of this Plan, a proposal to create an Airport Authority was being considered. This Authority would operate the Kutztown Airport, located in Maxatawny Township. The Authority could apply for State financial assistance to purchase the airport property, therefore ensuring it remain in operation. It is estimated that the airport generates \$500,000 per year towards the local economy.

The Township supports continuation of the Airport operations. Should the Airport cease operations, the Township believes the Airport site should be utilized for economic development. Limited industrial/business park development is considered appropriate.

Strategies:

- Zone areas for economic development pursuant to the Future Land Use Plan designations.
- Emphasize small business incubation, light industrial, research and development, high technology, office and service development to supplement the existing commercial development in the Region.
- Require 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.
- Generally direct economic development within major transportation corridors, near interchanges with highways, and within existing centers.
- Work with telecommunications companies to assure that adequate telecommunications facilities, including fiber optics, are available to businesses within the Region.

- Monitor opportunities to establish Keystone Opportunity Zones (KOZ's).
- Work with the Berks County Industrial Development Authority to secure funding for infrastructure improvements to support economic development in the Region.
- Work together as a Region, with cooperation from the Kutztown Area School District and state legislators, to attain a favorable tax structure in the Region, in order to remain attractive to new business development.
- Establish zoning policies for home employment and home occupations.
- Encourage appropriate adaptive re-use of vacant and underutilized buildings.
- Inform economic development agencies of areas and buildings zoned and available for commercial and industrial development in the Region.
- Work to provide necessary infrastructure to designated economic development areas.
- Investigate programs such as financial incentives for re-use of old buildings and tax lien forgiveness to "recycle" buildings, and preserve historic sites. Work with PADCED.
- Work to attract suppliers of and businesses related to existing businesses in the Region.
- Create a partnership with Kutztown University to establish a Keystone Innovation Zone (KIZ) to generate economic development and job growth.
- In recognition of the need to foster the economic viability of the Region, enhance the transportation systems within the Region pursuant to the Transportation action items.
- Support the necessary legislation to authorize impact fees in addition to those which can now be charged.
- Investigate opportunities for streamlining processes for economic development which will enhance the economy and quality of life of the Region.
- Target areas identified by the *Berks Vision 2020* Future Land Use Map and the Berks County Industrial Site Assessment Study as appropriate for industrial and/or business park development.

- Review opportunities created with recent passage of Pennsylvania's Economic Stimulus Package, including such programs as Business in Our Sites, and Tax Increment Financing Guarantee Program.
- Consider consistent policies on use of impact fees within the Region.
- Explore opportunities to develop a Specific Plan, as discussed in Section 1106 of the Municipalities Planning Code.
- Coordinate policies of governing bodies and municipal authorities on extensions of public sewer and water facilities with the Future Land Use Plan to assure consistency. Continue to support the development of the Sacony Authority Regional Sewage Treatment Plant.
- Work with the farm community to determine whether a Kutztown Farmers Market should be established.
- Maintain a sensitivity to impacts of any conflicts between neighboring land uses and address residents' concerns and mitigate problems.

ECONOMIC DEVELOPMENT PROGRAMS

KOZ – (Keystone Opportunity Zones)

Keystone Opportunity Zones are defined-parcel- specific areas with greatly reduced or no tax burden for property owners, residents and businesses.

Eligibility:

To be considered as a Keystone Opportunity Zone, a site must have:

- Displayed through a vision/strategy statement how this property through targeted growth could impact the aforementioned positively;
- Displayed evidence of adverse economic and socioeconomic conditions within the proposed zone such as high poverty rates, high unemployment rates, percentage of abandoned or underutilized property, and/or population loss;
- Passed binding resolutions or ordinances forgoing certain taxes; this included school districts, county and municipal governments.
- Public and private commitment of resources;

- Linkages to regional community and economic development activities including Team Pennsylvania and initiatives under the DCED's Center for Community Building;
- A written plan discussing the implementation of quality school improvements and local crime reduction measures;
- And a demonstrated cooperation from surrounding municipalities.

Where to Apply – DCED Customer Service Center 1-800-379-7448

Enterprise Zones

Summary - The purpose of an Enterprise Zone is to promote job growth and to help municipalities take advantage of business expansion opportunities when they arise. EZ's improve the capacity of local governments and business communities by encouraging them to form public/private partnerships. In turn, these partnerships boost business investment within the zone. Increased business investment, job creation and sustained community self-sufficiency are the primary goals of the Enterprise Zone program.

Eligibility - Local governments, redevelopment authorities, nonprofit economic development organizations, and other nonprofit organizations and business district authorities.

Eligible Uses - Enterprise Zone competitive grants-to-loans can be used for up to 30% of the total project investment to acquire machinery and equipment. They are available for new business construction or building improvements, site improvements, infrastructure, and in some special cases, for up to 40% of inventory or working capital needs. Competitive grants-to-loans also can be used toward the cost of preparing business lease space, especially for facilities with fiber optic wiring. Costs of public infrastructure development and hazardous waste testing may also be considered, if the lack of conventional funding sources for such costs is documented. Competitive grants may not exceed 30% of total project investment, and one full-time job must be created or retained for each \$30,000 of loan capital.

Where to Apply - DCED Customer Service Center

Amounts - Planning grants up to \$50,000 (one time only). Basic grants up to \$50,000 for up to 7 consecutive years. During this time period, basic grants may be increased up to \$75,000 on two occasions, only if the Enterprise Zone entity is undertaking a cluster analysis, or some other activity that uses analytical tools to enhance the zone's

development plans. This is not an entitlement program. Need and demonstrated progress must be documented prior to receiving these grants on a yearly basis. Competitive grants-to-loans up to \$500,000 which can be loaned to private sector firms in the zone.

Main Street Program

Summary - The Main Street Manager Component is a five-year program designed to help a community's downtown economic development effort through the establishment of a local organization dedicated to downtown revitalization and the management of downtown revitalization efforts by hiring a full-time professional downtown coordinator. The Downtown Reinvestment and Anchor Building components use business district strategies to support eligible commercial related projects located within a Village or neighborhood business district. This program has been merged into the New Communities Program.

Eligibility - Generally, a municipality is the applicant for the Main Street Manager Component. Municipalities and redevelopment authorities are the eligible applicants for the Downtown Reinvestment and Anchor Building components. In limited cases, a Main Street non-profit or Business District Authority with two years of audited records may apply for the funds.

Eligible Uses - For the Main Street Manager Component, administrative costs associated with the hiring of a coordinator and operating the office and design/facade are granted to private property owners within the target area. For the Downtown Reinvestment and Anchor Building components, physical improvements that are supported by a plan with clearly documented public benefit.

Where to Apply – DCED Customer Service Center

Amounts - Total of \$115,000 over a 5-year period. For Downtown Reinvestment and Anchor Building components, up to \$250,000 or one-third of the total development cost.

Terms - Match required for Main Street Component; For Downtown Reinvestment and Anchor Building components, leveraged funds should be committed to be competitive; Refer to the Program Guidelines

Elm Street Program

Summary - Grant funds for planning, technical assistance and physical improvements to residential and mixed use areas in proximity to central business districts.

Eligibility

- Municipalities
- Redevelopment Authorities
- Non – profit Main Street organizations
- Economic development organizations
- Neighborhood Improvement districts
- Business improvement districts

Eligible Uses - Revitalization of Residential and Mixed use Neighborhoods; Administration costs to support an Elm Street Program

Where to Apply - DCED single applications form; DCED Customer Service Center

Amounts - Up to \$250,000 is available.

Terms - Administrative costs associated with hiring a full-time manager and related office expenses over a maximum five-year program term (includes one planning year and four operational years.) Minimum 10% local match required; if a part time manager is appropriate a reduction in total grant and match will occur.

Additional Programs/Opportunities

The Pennsylvania Economic Stimulus Package has been recently passed and includes the following economic development programs and potential funding sources for the Region:

- 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.

The Pennsylvania Department of Community and Economic Development (DCED) is the primary contact for these programs.

Specific Plans

The Municipalities Planning Code enables municipalities who have participated in a multi-municipal plan to adopt specific plans. As part of the intergovernmental cooperative agreements, municipalities can choose to adopt specific plans individually or jointly. The MPC defines a specific plan as:

“a detailed plan for non-residential development of an area covered by a municipal or multi-municipal comprehensive plan, which when approved and adopted by the participating municipalities through ordinances and agreements, supersedes all other applications.”

A specific plan is a tool that can be used by municipal governments for the systematic implementation of a comprehensive plan. It establishes a link between the policies of the comprehensive plan and development proposals in a specifically defined area. Provisions of a specific plan shall include type, location and intensity of land uses, the design capability of infrastructure, the standards for preservation of natural resources, regulation

of land development, and financing of capital improvements. For example, one of the goals of this comprehensive plan for the Kutztown, Maxatawny, Lyons Region is economic development. A specific plan can be used to define the exact location that is most appropriate for economic development activities to occur, particularly the Route 222 Economic Development Corridor area found on the Future Land Use Map, and protect it through ordinance that would supersede all other ordinances. This Plan supports the preparation of a specific plan for the corridor.

All data collection involved in creating a specific plan is information required as a prerequisite for approval and recording of a final subdivision or land development plan. The specific plan acts as a vehicle for the planning and permitting, without having to wait for a development application. When an appropriate development proposal occurs, permitting will move directly to the final plan, since all requirements normally required for a preliminary plan (sewer, stormwater, sediment and erosion, highway occupancy, etc.) will already have been completed.

Economic Development Initiatives for Centers and Corridors

The key elements of programs to strengthen centers, such as Main Street Programs, are outlined below. Applicable in Boroughs, these elements could also be used in the Route 222 Corridor.

- **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. Tree planting programs and landscaping of parking lots should be considered important elements in improving streetscapes.
- **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, and greenway planning
- Managing road corridors
- 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. Continue to study needs and implement means of addressing those 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.

Economic Development Task	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 Advise 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					
Facade 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												

CHAPTER 5

COMMUNITY FACILITIES AND SERVICES PLAN

Introduction

The location of key community facilities such as water, sewer, schools, parks, and roads is important to the provision of the necessary services to residents and businesses. The provision of adequate facilities and services allows municipalities to develop at a higher density, in a more compact and efficient pattern, and is often tied to economic well-being. However, these facilities may also attract development to areas such as farmland and sensitive open space that are not appropriate for such high intensity uses. The challenge to municipal governments is to provide these services in an efficient and cost-effective manner, while still protecting the character of the Region.

Cooperative Efforts

Kutztown, Maxatawny, and Lyons should continue to review opportunities for regional cooperation in the provision of services and facilities as both the demand and the cost of such services increase. The municipalities can also work with the school district as well as Kutztown University in providing facilities and programs to area residents.

Potential opportunities for regional cooperation include the development of the Sacony Authority Regional Sewage Treatment Plant, purchase or use of equipment such as road equipment or road salt, emergency services planning and coordination, police and fire services, recreation facilities and programs, and building code administration.

Volunteer fire companies are finding it increasingly difficult to get personnel in adequate numbers. The municipalities should encourage cooperation among the departments, perhaps in areas such as recruiting and acquisition of compatible equipment in order to meet the fire protection needs of the community. Where necessary, water systems within the region should be created to address emergency situations and provide service to residents. Water planning should assure that water will be supplied at adequate volume and pressure to meet fire protection needs. Similarly the location and number of fire hydrants should also be planned.

If new school facilities are proposed by the Kutztown Area School District, the municipalities should work with the District to assure that school facilities are located to be consistent with the requirements of the Future Land Use Plan. Due to the lack of available large tracts of land in the Borough of Kutztown, any sizable new school facility will most likely be located at least in part in Maxatawny Township. A more detailed discussion is found in Chapter 8, Planning and Regionalization Efforts.

To facilitate implementation of this Joint Comprehensive Plan and to address the needs and possibilities for cooperation in the future, the municipalities should formalize the joint planning process that began with the formation of the Joint Municipal Planning Committee. A committee comprised of representatives from all the municipalities should be created that will meet on an annual basis to review this Comprehensive Plan, plans of regional significance as discussed in chapter 3, and to identify what steps should be taken to promote its implementation. The concept of using committees composed of area residents to address major issues of concern within the area may be used on other issues.

Monitoring of Needs

Monitoring the need and opportunity for additional, expanded, or improved community services and facilities will help the municipalities plan for their efficient and economical provision. The goal for community facilities and services is to plan for them on a coordinated, regional basis (where possible) to meet the existing and future needs of the residents of the Region in a manner consistent with their financial capacities.

The majority of respondents to the citizen survey indicated a high level of satisfaction with emergency services (i.e., police and fire protection), but also indicated concern that the quality level be sustained, and crime watch and police response times be improved.

Open Space and Recreation

As population increases within the region, so does the need for open space and recreation facilities. Communities that provide open space and recreation opportunities for their citizens enjoy a higher quality of life, which has a positive influence on the local economy. It is important to achieve a balance between active recreation facilities and open space and hiking trails for passive recreation.

Future Recreation Needs

The National Recreation and Parks Association (NRPA) Standards recommend a minimum of ten acres of local parkland for every 1000 residents. The Region currently contains 66 acres of total public open space and recreation land. The total population of the Region, according to the 2000 U.S. Census is 11,553 persons. Applying the NRPA Standards, the Region should contain a **minimum** of 115 acres of local parkland (see figure 5.1). There is a deficit of 49 acres at this time and continued high growth rates over the next ten to twenty years will add to this deficit quickly. The municipalities should continue to keep recreation and open space provision a high priority, and in addition, should implement the goals of the Berks County Open Space and Recreation, and Greenway Plan.

Chapter 14, Community Facilities, contains an inventory of existing recreation facilities in the Region.

Figure 5.1- Recommended Recreation Acreage

Municipality	Existing Acres	Minimum Recommended Acres (NRPA Standards)	Deficiency
Kutztown	42	50	-8
Maxatawny Twp	19	60	-41
Lyons	5	5	0
Total Region	66	115	-49

Greenways and Creek Conservation Corridors

A recommendation of The Berks County Open Space and Greenways Plan identified the Sacony Creek Corridor as a stream corridor to be preserved. This is to minimize disturbance of the land along the creek and to protect the water quality, since the Sacony Creek is recognized as an exceptional value stream. It also presents the opportunities for a greenway system in the future.

The municipalities should work toward the establishment of a greenway system, with highest priority given to linking of existing parks and open space facilities, as well as creating links to trail systems outside of the Region. Not all corridors will be developed as active greenways with trails, nor will they all exist along a creek -- these corridors should exist to preserve vital natural features, particularly ridge lines, woodlands, wetlands, and native vegetation.

Community Facilities / Open Space and Recreation Strategies:

- A. Implement action plans of Municipal and Regional Open Space plans, Berks County Open Space and Recreation Plan and the Draft Open Space and Greenways Plan. Implement the Kutztown Master Park Plan which will be prepared during 2007. This plan will identify proposed enhancements to Borough park facilities.

Support efforts of a Regional Open Space and Recreation Committee to plan for continued improvement and appropriate development of recreation facilities and programs in the Region.

- B. Maintain language in Subdivision and Land Development Ordinances to require developers to dedicate land or pay a fee in lieu of land for all new subdivisions.

Each subdivision or land development would have to be reviewed to determine whether the dedication of land or the fee in lieu of land would be more appropriate, based upon the size and location of the development and the Municipal and Regional Open Space and Recreation Plans.

Maintain standards for recreation facilities. Review standards of National Recreation and Park Association (NRPA) for appropriateness.

- C. Where appropriate, work with PENNDOT to widen and improve road shoulders and require developers to improve shoulders along their properties in order to accommodate pedestrian and bicycle facilities.
- D. Maintain a dialog with the Kutztown Area School District regarding development activities, school facilities needs, location of school facilities, and school bus routes.
- E. Work with the School District to assure availability of school district facilities to the Region's residents.
- F. Promote and support efforts of community organizations to provide recreational facilities and programs for area residents and services and programs for seniors and youth. Work to establish a senior citizen center in the Region.
- G. Provide for public areas within the Region through provision of open spaces, village greens, recreation facilities, greenways, improved pathways, and indoor facilities.
- H. Enforce Sewage Management Ordinances and State mandates to manage (including monitoring and maintaining) on-lot sewage disposal facilities in the Region and assure the best available technology is used.
- I. Encourage the Berks County Solid Waste Authority to plan for solid waste management in a cost effective manner with consideration of municipal concerns.
- J. Involve local fire company and notify school district personnel in review of subdivision and land development plans, where appropriate.
- K. Continue and expand cooperation and dialog between the Township, the Boroughs, and community entities such as the Berks-Lehigh Regional and Kutztown Borough Police Departments, local fire companies, authorities,

Kutztown University, and the School District 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.

- L. Encourage volunteerism for non-profit agencies and increased coordination of volunteer services among agencies.
- M. Work to establish additional recycling centers which are convenient and well managed.
- N. Continue to support the Louisa Gonser Community Library in Kutztown Borough.
- O. Address the need for fire personnel as fewer volunteers are available and cooperate regionally to assure adequate fire service throughout the Region.
- P. Coordinate policies of governing bodies and municipal authorities on extensions of public sewer and water facilities with the Future Land Use Plan to assure consistency. Build the Sacony Creek Regional Authority Sewage Treatment Plant.
- Q. 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.
- R. Involve the Region's residents and business community in committees to address major issues of concern within the Region.
- S. Work with Kutztown University to provide expanded offerings to the Region's residents.
- T. Promote involvement of new residents in community programs.
- U. Maintain current and workable emergency operations plans.
- V. Require all wastes to be treated and/or disposed of in an approved, environmentally responsible manner.
- W. Promote efficient, effective, and professional management of public facilities. Identify opportunities for technological enhancements for municipal government.
- X. Determine the most efficient way to address the need for additional police service in Kutztown.

- Y. Establish and maintain a regular inspection program of the Kutztown storm sewer system, in the short term. In the long term, develop and follow a program of regular inspection, replacement, and upgrading of the storm sewer system. Correct flooding problems from storm drainage system deficiencies.
- Z. Utilize capital improvement programs to address capital needs.
- AA. The Borough of Kutztown should review opportunities which arise within the Borough to acquire vacated properties for future public use.
- BB. Update the regional wellhead protection study.
- CC. Identify and maintain an emergency water supply source for the Lyons areas.

Plan for the Reliable Supply of Water

The 2000 amendments to the Municipalities Planning Code (MPC) state that a County or multi-municipal comprehensive plan *shall* include a plan for the reliable supply of water. Chapter 19, Natural Resources, provides a detailed description of the geology and groundwater of the Region.

Where 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 region.

Where watershed areas are used for public recreation purposes, public access and usage should be consistent with the need to protect water supplies.

Efforts to protect groundwater resources need to occur at all levels of government. Special consideration to the types and densities of permitted land uses should apply in areas that offer little natural protection to groundwater. This should also apply where the protection level is unknown. Groundwater quality is also a concern since domestic water for nearly all of the residents of the Region outside of the few community water service areas are supplied through individual wells.

Land use regulations, land acquisition, and education programs can play a key role in protecting groundwater. Examples of land use control activities include the following:

- Land use plans which take into account groundwater vulnerability;

- Zoning ordinance and site plan review standards related to aboveground secondary containment, interior floor drains, and other topics;
- Purchase of land and/or conservation easements to provide a wellhead protection buffer around municipal wellfields; and
- Public education through public meetings, school-based classroom programs, library displays, cable television videos, public information flyers, and municipal newsletters.

Protection of groundwater resources requires efforts on several fronts, including the need for regional planning, land planning for individual sites, and technological advances that may offer alternative solutions. Regional planning must be based on the entire Watershed; it will do little good for one community to implement solutions to its problems only to find that neighboring communities do not. Groundwater has no respect for community boundaries.

From a land planning perspective, simply requiring larger lots does little or nothing to enhance groundwater quality. One of the few readily available solutions to polluted wells or failed septic systems is to obtain public water and sewer. With the larger lots sizes and frontages prevalent in many of the communities within the Region, the costs to provide water and sewer services to homes are likely to be very expensive. On the other hand, where lot frontages are lower, so too will be the cost to provide public utilities.

Municipal Zoning Ordinances can contain provisions to protect sources of water supply through the following techniques:

1. Natural resource protection standards (net out provisions) protecting floodplains, wetlands, wetland margins, steep slopes, watercourses, water bodies, and lake and pond shores.
2. Lot averaging provisions to allow flexibility in lot layout so houses may be sited away from natural features and resources.
3. As municipal water supplies are developed, wellhead protection provisions pursuant to Wellhead Protection Ordinances should be adhered to.
4. Stream Corridor Overlay Zoning
5. Floodplain, wetland, and hydric soil protection provisions.
6. Environmental performance standards and environmental assessment requirements for industrial and commercial uses. Businesses should have Spill and Pollution Prevention Plans.

7. Minimize impervious cover.

When development plans are reviewed, developers should be required to manage stormwater runoff as well as erosion and sedimentation in a manner that will protect local water resources.

In accordance with current best management practices, stormwater management should be considered as part of the hydrologic cycle with less emphasis on detention and more emphasis on infiltration in order to reduce both the volume and the rate of runoff, to reduce pollution, and to reduce thermal impacts. Developers should also be required to identify the resources within their tracts, to analyze the impacts of development, and to mitigate those impacts. Natural resources should be incorporated into the open space system.

It should be noted that lawful activities such as extraction of minerals impact water supply sources. Such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities.

The following chart (Figure 5.2) provides a convenient reference for zoning ordinance policy recommendations and water resource protection techniques.

Figure 5.2 - Recommendations for Protecting Water Supplies

Stream Corridor Overlay Zoning	Zoning Policies	Water Resource Protection Provisions	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 based on soil types • Innovative stormwater management techniques 	<ul style="list-style-type: none"> • Encourage development where have public sewer and water, discourage on-site sewer and water • Limit impervious surfaces • Establish performance standards for uses • Protect aquifers through controlling uses and potential polluting activities • Overlay protection zone 	<ul style="list-style-type: none"> • Regulation/restriction of potential contaminating uses • Regulation/restriction of potential contaminating substances • Performance standards • Design standards • Operating requirements • Review process • Wellhead protection ordinance 	<ul style="list-style-type: none"> • 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

Overlay Zoning

Overlay zoning is the application of an additional set of regulations to an established zoning district. Overlay zones supplement, but do not replace, the existing applicable zoning regulations. Overlay zones can be used for any number of objectives, ranging from commercial corridor improvement to stream corridor and wellhead protection efforts. Areas commonly targeted for overlay zoning include: floodplains, watersheds, environmental areas, stream corridors, historic districts, and economic revitalization areas. The use of an overlay zone can be especially effective to ensure consistent regulation of land uses within multiple zoning districts.

Lot Averaging

Lot averaging permits one or more lots in subdivision to be undersized, provided that the same number of lots in the subdivision are oversized by an equal or greater area. Lot averaging can be used as a "scaled down" version of clustering to address situations that may not warrant requiring the submission of more extensive cluster plans. Varying the size of lots allow the developer to take into consideration natural amenities such as topography and other environmental features and constraints.

CHAPTER 6

TRANSPORTATION PLAN

INTRODUCTION

Transportation is an important issue facing the Region. As residential and commercial development continues to occur and traffic volumes increase, if minimal improvements are made to the transportation system which has served the Region for decades, congestion increases. This decreases the quality of life for residents, and can negatively impact existing employers and decisions to locate in the Region. Addressing transportation issues has important ramifications for the Region:

- It increases the quality of life for the Region's residents by facilitating circulation throughout the Region and making travel safer.
- A well-functioning multi-modal transportation system consisting of the roadway system, transit systems, and pedestrian and bicycle systems can support optimum economic development.

Berks County, PENNDOT, developers, and the municipalities will have to work together to improve the existing transportation system, while promoting pedestrian, bicycle, and transit alternatives to typical motor vehicle travel.

Land use and transportation are intertwined. Land use patterns influence the demand on the transportation system, and the available transportation system affects land use policies. Approaches to minimizing land use impacts on the transportation system include:

- Growth can be managed and directed to designated growth areas
- Existing centers in the Region can be enhanced and infilled
- Road corridors can be managed to mitigate or avoid congestion
- Alternatives to automobile traffic can be enhanced
- Walkability in the Region can be improved and incorporated into development
- Mixed use can be permitted where appropriate
- Use of public sewer and water and systems with resulting compact development patterns can be encouraged

- Developers can be expected to address the transportation impacts of their developments through the making of necessary improvements and/or payment of fees.

If existing centers are enhanced and infilled and mixed use is utilized, vehicular trip reduction can be realized. These two policies, plus directing growth to designated growth areas, and encouraging compact development patterns, may enhance the feasibility of expanded transit systems.

A large burden, however, may fall on developers:

- Developers should analyze the impacts of their developments and address the impacts of their developments through road improvements and/or financial contributions.
- Developers should incorporate alternative modes of travel into their developments.
- Developers should incorporate access management techniques into their developments, based upon municipal ordinances and requirements, with support from PENNDOT.
- Developers should interconnect roads and walkways.
- Developers should provide adequate parking, primary access, and emergency access.

INTERRELATIONSHIPS OF POLICIES WITH THE TRANSPORTATION SYSTEM

1. Land Use Policies

- a. Public land acquisition, open space preservation, and agricultural and other conservation easements can reduce the amount of land available for development.
- b. Limiting designated growth areas to areas which are or can readily be served by public sewer can concentrate development, making alternative transportation needs more feasible as well as resulting in reduced trips in areas with roads not suited for higher traffic volumes and without alternative travel modes.
- c. Reducing density of development outside growth areas can reduce trips in areas with roads not suited for higher traffic volumes and without alternative travel modes.

Development outside growth areas isolates uses and increases reliance on automobile travel between low density, single use areas.

- d. Encouraging development within existing centers with mixed use within and among buildings (to reduce vehicle trips), supports multi-modal travel and pedestrian and bicycle scale possibilities.

2. Public Sewer and Water Policies

- a. Coordinating public sewer and public water extensions within designated growth areas allows concentrated development.

3. Requiring developers to pay their way can help fund transportation improvements

- a. Require on-site improvements and frontage improvements
- b. Consider traffic impact fee studies and ordinances on an individual and/or multi-municipal basis.
- c. Consider charging of traffic impact fees

4. Trip Reduction and Modification Policies

- a. Encouraging Mixed Use – Residential/retail/employment mixed within and/or among buildings where appropriate in centers and corridors.
- b. Balancing retail/office/industrial uses in centers and corridors, to retain vitality but avoid concentrations of solely retail uses.
- c. Fostering Congestion Management strategies
 - (1) Encourage employers to institute employee trip reduction plans where appropriate.
 - (2) Consider need for Transportation Management Associations of municipalities and businesses in the future, in which employers will consider
 - (a) Encouraging carpooling and public transit use, including subsidies of employees
 - (b) Staggering work hours
 - (c) Encouraging bicycle and pedestrian travel
 - (d) Funding Paratransit/van pool operations
 - (3) Encourage telecommuting by employees
- d. Supporting Transit Oriented Development at Transit Hubs where appropriate
 - (1) Permit mixed residential/commercial/office uses

5. Supporting Alternative Travel Systems

- a. Enhanced pedestrian and bicycle systems through trail, sidewalk and pavement planning
- b. Enhanced bus service, when appropriate, considering:
 - (1) Additional routes

- (2) Increased service frequency
 - (3) Express bus service
 - (4) Shuttle services
 - (5) Improved information to users
 - (6) More bus pullouts and shelters
 - (7) Shelter improvements
6. Instituting Traffic Calming on routes where through traffic is not encouraged
- a. Active speed reduction (physical changes)
 - b. Passive speed reduction (signage)
 - c. Streetside design
7. Applying Corridor Management, with support from PENNDOT
- a. Access management techniques 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 the following. Appropriate techniques will depend upon each individual case.
- (1) Utilizing shared driveways for adjacent parcels, and cross access among adjoining businesses as alternatives to individual curb cuts.
 - (2) Requiring developers to provide a connected and sufficient local road system to minimize using the main arterial that is designed to accommodate through traffic.
 - (3) Reducing/limiting the number of curb cuts by considering the location, design, and spacing of driveways.
 - (4) Requiring shared access points and connectivity between parcels.

- (5) Permitting shared parking arrangements among individual businesses.
- (6) Aligning driveways and creating regular offsets.
- (7) Relating driveway design to travel speeds and traffic volumes.
- (8) Prohibiting direct parking access from parking spaces.
- (9) Providing pedestrian friendly design.
- (10) Providing adequate driveway length to allow stacking.
- (11) Requiring connections between parking lots and building entrances.
- (12) Providing incentives for smaller and fewer signs by allowing a reduced setback from roads.
- (13) Encouraging attractive, interesting building design.
- (14) Requiring traffic impact studies for new developments, and master planning for large tracts of land.
- (15) Ensuring adequate parking lot/internal circulation design in developments.
- (16) Redesigning existing strip development areas.
- (17) Utilizing left and right turn lanes where appropriate.
- (18) Utilizing acceleration and deceleration lanes where appropriate.
- (19) Signalizing high volume driveways.
- (20) Prohibiting inappropriate turning movements.
- (21) Requiring common service roads for commercial development.

Access management techniques can be achieved through requirements in subdivision and land development ordinances, site plan review and approval, or during new development or redevelopment efforts. The municipalities should retain the option of requiring the techniques listed above.

- b. Corridor Overlay zoning incorporates:
 - (1) Access management standards
 - (2) Enhanced design/landscaping/signage requirements
 - c. Consider Transportation Development Districts when appropriate
 - d. Optimize and coordinate traffic signal timing when necessary
8. Working to secure sufficient and enhanced Park and Ride facilities at bus hubs
9. Considering additional appropriate parking management techniques within Boroughs to increase parking opportunities as needed. Some of the approaches which can be used are:
- a. Shared parking (multiple users sharing a parking facility)
 - b. Consolidation of private parking areas
 - c. Monitoring needs for additional public facilities
 - d. Minimize driveway design which eliminates on-street spaces
 - e. Provision for bicycle parking
 - f. Parking facility design standards
 - g. Off-site parking options to required parking (rather than require parking on site, allow parking to be provided at an accessible location off site)
 - h. Fee-in-lieu of parking spaces as option (rather than require off-street parking, permit a contribution to a fund to be used to provide public parking facilities within the Boroughs)
 - i. Landscaping requirements
 - j. Coordinated design of adjoining parking
 - k. Public/private cooperation
 - l. Prime space policies to increase availability to patrons

- m. Signage for identification of and directions to facilities
- 10. Supporting Regional transportation improvements
- 11. Utilizing the Long Range Transportation Plan to complete essential projects
- 12. Programming bridge replacements/improvements
- 13. Using Official Map/Right-of-way Acquisition to facilitate improvements by placing improvements on official maps and beginning to acquire necessary rights-of-way. Adequate building setback standards should be used to facilitate future construction. Developer dedications can be used to acquire additional right-of-way.

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 eventual transit improvements.

- 14. Implementing Capital Improvements Plans for Transportation projects
- 15. Discouraging curb cuts over sidewalks in mixed use areas, such as on Main Street in Kutztown, where pedestrian activity is high, in order to limit pedestrian/vehicular conflicts

RECOMMENDED STRATEGIES

The completion of these tasks can help the municipalities achieve their community Vision that was presented earlier in this Plan. Each municipality will consider the recommended actions and determine whether to implement them. In no event shall the adoption or approval of this Plan obligate any participating municipality to comply with the recommendations set forth herein.

1. Update zoning ordinances as necessary.
 - a. Include access management standards within zoning ordinances and/or subdivision and land development ordinances as determined by the municipality:
 - (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 222 corridor, access should be managed along all roads within the Region. Access points and traffic lights along Route 222 should be limited because traffic lights create points of congestion in the corridor.

In mixed use areas, such as Main Street in Kutztown, where pedestrian activity is high, discourage curb cuts over sidewalks to limit pedestrian/vehicular conflict.

2. Update subdivision and land development ordinances as necessary.
 - a. Establish appropriate road design standards for each functional classification of road. Consider 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.
 - b. 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.
 - c. 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.
 - d. Require developers to recognize existing trails and to provide for new trails where planned or required by municipalities. 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.
 - e. Require appropriate ultimate rights-of-way along roads.
 - f. Require necessary roadway improvements along the frontage of developments.
3. Adopt Official Maps designating proposed public facilities, streets and interchanges, road improvements, and trails.

4. Implement the Capital Improvements Programs recommended by this plan.
5. Establish pedestrian pathway improvement programs to enhance walkability in the Region, such as completion of gaps in and extensions of the sidewalk and trail system to provide improved access to schools, Kutztown University, day-to-day shopping facilities, community facilities, 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, 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.
6. Continue planning for greenways and riparian buffers along the streams in the Region pursuant to the Berks County Open Space and Recreation Plan and the Draft Open Space and Greenways Plan.

Provision should be made for benches and other amenities along pathway and trail systems.

7. Work with PENNDOT to assure adequate maintenance of roads which receive substantial volumes of truck and school bus traffic in addition to automobile traffic.
8. Determine whether Transportation Impact Fee ordinances will be used by individual municipalities and/or jointly and require land developers to address needed transportation improvements in the Region as they develop.
9. Monitor the need for, and work to institute appropriate traffic calming techniques in the Boroughs, Villages, and residential neighborhoods.

Work with PENNDOT to establish appropriate speed limits, reducing them as necessary, in existing developed areas.

10. Prepare multi-year programs for street maintenance.
11. Work with PENNDOT to keep traffic signal timing current and optimized.
12. 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.

13. Work to connect transportation modes to one another. Cooperate with BARTA; Kutztown University and private transit companies to assure adequate bus service and the appropriate location and attractiveness of bus stops. Coordinate in the provision of park and ride facilities and multi-modal facilities. Coordinate expanded bus service to appropriate locations in the Township where it can reduce vehicle trips, but not contribute to sprawl.

Implement a circulator system through cooperation with BARTA and area businesses, the school districts, and community groups to increase the mobility of the elderly, physically impaired, and those who do not own or lease an automobile, and provide an alternative to automobile use.

14. Within physical constraints and the need to provide parking facilities, try to accommodate mixed use activity centers near auto/bus/bike/pedestrian hubs, park and ride facilities, bike and ride facilities, and walk and ride facilities.
15. Encourage landowners to cooperate with PENNDOT and the municipalities in the redesign of existing strip development areas to manage access and improve streetscapes.
16. Monitor the need for Transportation Development Districts
17. Coordinate utility and road improvements so utilities are constructed before road improvements are made.
18. Require property owners to keep street rights-of-way available for required improvements and pedestrian systems.
19. Work with employers within the Region to encourage employee trip reduction plans and foster telecommuting. As necessary, form transportation management associations of municipalities and businesses to address needs along the Route 222 corridor.
20. Work together as a Region with the County, Legislators, and PENNDOT to list needed transportation improvements on the Long Range Transportation Plan.
21. Work with transportation organizations and agencies providing services to seniors to facilitate mobility of seniors by determining desired destinations and means of providing access to those destinations.
22. Promote the improvement of US 222 North as limited access from the Kutztown Bypass to the Lehigh County line.

23. Accommodate horse and buggy traffic
24. Coordinate with the Reading Area Transportation Study (RATS) to include a College Boulevard Interchange at the Route 222 Bypass on the Long Range Transportation Plan and T.I.P.
25. Implement the Sacony Creek Trail.
26. Improve access from western portion of Kutztown to Route 222 Economic Development corridor.
27. Extend road access from Kutztown into Maxatawny Township and remove Hartman Road bridge.
28. Provide road access between Sharadin Road and College Boulevard.
29. Support improvement of circulation within Kutztown University Campus.
30. Consider need for extension of Constitution Boulevard to Koffee Lane to facilitate access to School District property.
31. Monitor opportunities for park and ride facilities, linked to transit, pedestrian, and bicycle facilities, near the Route 222 Bypass.
32. Investigate opportunities for park and ride facilities, linked to transit, pedestrian, and bicycle facilities, near the Route 222 Bypass.
33. Continue to work to reduce speed limit on Main Street in Kutztown. Address traffic speed issues in Lyons.
34. Work with PENNDOT to reduce congestion at Long Lane intersection and improve intersections with Route 222.
35. In conjunction with Main Street Streetscape planning in Kutztown, determine viability of traffic calming measures and making the street more pedestrian friendly.
36. Work with PENNDOT to develop a plan to manage access to Route 222. Facilitate vehicular circulation within Route 222 economic development corridor through appropriate planning of the area. This will involve limiting access points and consideration of parallel access roads. Specific plans and official mapping can be techniques to plan for the road corridor.

37. Investigate opportunities to connect developments south of Lyons, to provide access between Lyons and Bowers Roads.
38. Work with PENNDOT to prepare a truck routing plan for the Region and plan for necessary road improvements.
39. Continue to encourage business employees to park away from Main Street to keep parking spaces open to potential customers.
40. Designate appropriate spaces for short-term parking near active public destinations as needed.
41. Continue to address issues of having adequate parking provided for rental housing and housing conversions.
42. Implement traffic controls to improve the safety of the Normal Avenue-Sander Alley intersection.
43. Pursue permission from PENNDOT to install left turn signalization on Main Street at College Boulevard.
44. Directional signs should be installed to provide easy access to all public buildings. Provide a regional map. Distribute maps to schools competing at a local gym or participating in a program at an auditorium or public building, as well as to new people moving into the region when signing up for any municipal service.
45. The walking trail system within the Borough should connect to walkways in the Borough Park, to the Sacony Marsh, to the old Borough swimming pool property, and provide a walkway around the Borough's perimeter.
46. Encourage study of use of the Borough railroad line for tourist excursions.

PEDESTRIAN CIRCULATION

Sidewalk policy and the Sacony Creek Trail are discussed in Chapter 16, Pedestrian Circulation. Other trails may be planned within the Region. When planning a trail system, certain items must be considered.

Issues to Address in Detailed Planning for a Trail System

The first item to address is establishing destinations for the trail system. The conceptual trail plan has generally done this, but the destinations to be reached would have to be finalized and prioritized.

It also has to be determined what routes would be used to reach the destinations. The trail system could follow roads, creeks, railbeds, pipeline rights-of-way, sanitary sewer easements, electric company rights-of-way, and drainage easements.

It will also be necessary to determine the users to be accommodated, whether it be hikers, walkers, bikers, or horseback riders, or a combination.

Trail design studies would be necessary to actually design the trails. These studies would determine the actual locations, the extent to which existing pathways and sidewalks would be incorporated into the system, materials of the trails, and the width of trails.

It will be necessary to determine costs, including construction costs, land costs, and maintenance. It will also be necessary to determine what method would be used to control the area necessary for the trail, including usage of existing or dedicated road rights-of-way, donations, easements, lease or purchase.

Sources of funding for trail construction would have to be identified, such as Keystone Grants, TEA, and Land and Water Conservation Fund.

If roadside lanes will be utilized, standards for road design should be established 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 providing the trails. 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. PENNDOT could be requested to pave wider shoulders where the rights-of-way permit. Developers should be required to build sections of the trails within their developments. Appropriate shoulder improvements should be required along the frontage of tracts and open areas should be retained along stream corridors.

TRAFFIC CALMING

As development in the Region continues to occur and traffic volumes increase, there will be increased traffic flow on residential streets. It is hoped that some of the road system

improvements detailed earlier in this Plan will encourage through traffic to use roads outside residential neighborhoods. Other identified methods of accomplishing this include internalized trips within the Region through mixed use providing increased opportunities for pedestrian and bicycle traffic, and access management. If those steps are not successful, traffic calming techniques can 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)

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.

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.

For new road segments, the municipalities can consider whether revised street design standards should be used to slow traffic down. This could include techniques such as reduced street widths, center planting strips, and design speeds to encourage reduction in travel speeds.

GATEWAY AND STREETScape ENHANCEMENTS

Gateway enhancements can be considered at the entrances to the Boroughs and the villages within the Region. A gateway is an entrance corridor that defines the arrival point as a destination. Gateway planning concerns arranging the landscape and visual experiences to help create a sense of arrival at the destination and provide a positive image of the destination. The municipalities can work with property owners to enhance commercial areas through coordinated landscaping, signage, lighting, street furniture, paving materials, design of site improvements, building facades, and window displays. Streetscape plans should be considered.

When infill, redevelopment, or new development occurs, developers could be required to comply with performance and design standards, which would require them to address these elements. When new parking facilities are constructed, they should be landscaped, buffered, and placed to the side or, preferably, the rear of buildings.

Signage should be minimal, and appropriate to the character of the municipalities.

Property owners should be encouraged to maintain and improve properties, particularly those that may have negative impacts on surrounding properties. Where the rear of commercial properties face or abut residential properties, attention should be paid to the appearance of the commercial property and its impact on the residences. Existing shopping areas should receive streetscape enhancements.

Voluntary design guidelines addressing the following elements could also be suggested within the Borough and Villages, unless the Boroughs would consider mandatory design guidelines. Such guidelines could:

- Discouraging the use of drive-thru facilities
- Encouraging new development to be compatible with, and integrated into, existing streetscapes by addressing:

- Maintaining appropriate siting patterns, such as setbacks of buildings 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 the building. 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.
- Using similar roof shapes
- Maintaining similar footprints of buildings and rooflines (matching facade masses with existing buildings)
- Using similar building heights
- Having store fronts of commercial buildings compatible with existing buildings

The use of coverage, density, intensity, and yard bonuses for architectural treatments, building design, amenities, street furniture, open spaces, and desired parking designs could be considered in the Borough and Villages. The intent of bonuses is to provide incentives to developers, not just regulation, to allow economic use of property.

Areas of particular concern for gateway treatments include maintenance of the historic character of the University area approaching Kutztown, the area of Elm Street along Main Street, and the area of the Airport should airport operations cease.

ROUTE 222/COLLEGE BOULEVARD ENTRANCE/EXIT RAMPS PROJECT

In November 1999, the Borough of Kutztown prepared a project submission to the State Transportation Commission for the Transportation Improvement Program for the Route 222/College Boulevard Exit/Entrance Ramps. The submission report is available from

the Borough. This Comprehensive Plan supports the Route 222/College Boulevard Exit/Entrance Ramps project.

College Boulevard has become a congested street due to all the traffic from Kutztown University, Sacony Cross, Briarcliff, the Fairgrounds, and Carl R. Bieber Tourways. Along with the potential future housing developments adjacent to College Boulevard and the Bypass, which would provide additional vehicles, the increase in vehicular accidents on this street and the impact it has on the Main Street intersection must be addressed.

Recommendations

Short term: Cooperate with Maxatawny Township in intelligently planning solutions to the Kutztown University traffic flow problems. Support the University and Maxatawny Township attempts to provide a loop road through the University taking traffic from old 222 before it reaches College Hill.

Long term: The addition of on-off ramps from the Bypass to College Boulevard would help ease the majority of all this congestion, diverting traffic from the Main Street intersection and out of the residential areas. Efforts must continue to support this project and to urge the State to acquire sufficient land.

KUTZTOWN UNIVERSITY CAMPUS MASTER PLANNING

Kutztown University periodically updates the traffic and parking elements of its Campus Master Plan. Such planning should be coordinated with the municipalities participating in this regional comprehensive plan.

BRIDGE IMPROVEMENTS

Bridge maintenance is an ongoing process to keep bridges open to traffic. The required maintenance for each bridge differs and some repairs may include removal of debris or resurfacing. Bridge improvement plans should be assessed each time development intensity increases. When a traffic study examines the effects a proposed development has on an existing road network, that study should be extended to cover the bridge conditions and limitation providing access to the proposed development.

PARKING ISSUES IN KUTZTOWN

With the increased volume of vehicles in town, parking has become a huge problem, especially in the commercial district and in those residential areas which are in close proximity to the University and have a high concentration of student housing. New parking areas are desperately needed to help revitalize and strengthen the commercial core.

Recommendations

Short term: Enforce two-hour parking limits in business district when businesses are open. Designate several one-hour or 30-minute spaces within each block of the business area. Encourage use of the Borough's all-day lot. Encourage business employers to have their employees park away from Main Street, keeping that area open to potential customers.

Establish a parking committee consisting of representatives of the Borough, the University, County Economic Development Board and local business people to study parking trends in both residential areas and the commercial district to identify problem areas and recommend solutions. Permit parking in residential areas should be updated as parking trends change.

Long term: Have the proposed parking committee do a long term study and seek seed money to purchase appropriate land for new parking lots, without destroying the integrity of existing neighborhoods.

Encourage removal of deteriorating outbuildings and construction of parking spaces in areas of need. Encourage consolidation of small private parking areas.

Pursue opportunities for increased utilization of existing parking areas, such as those at St. Paul's UCC and Trinity Lutheran Church.

SIDEWALK ISSUES IN KUTZTOWN BOROUGH

The lack of sidewalks in some areas of the Borough and the poor condition of sidewalks in other areas are matters of big concern for reasons of safety and convenience. With the high concentration of pedestrian traffic due to University students, a growing Borough population (increasing because of new housing for families being offered in such areas as Carriage Point Estates) and the growing popularity of walking for health, safe sidewalks should be provided within the Borough limits.

Recommendations

Short term: Enforce sidewalk ordinance already enacted by Borough Council in order that sidewalks be constructed and/or repaired where required. See sidewalks map in Chapter 16. (Adhere to Americans with Disabilities Act and Planning Commission recommendations.)

Long term: Require sidewalks for all properties within the Borough limits to ensure safety for everyone. Implement the four-phase sidewalk plan to upgrade sidewalk conditions previously submitted to Borough Council by the Planning Commission.

PUBLIC RESTROOM ISSUES IN KUTZTOWN BOROUGH

Two problems relative to public restrooms have been noted in the Borough. On the one hand, there are few restroom facilities available for use by customers of businesses in the commercial areas (the Constitution Boulevard shopping center and along West Main Street). On the other hand, residents and businesses, especially along Main Street, are annoyed by people who, finding no facilities available late at night, urinate or vomit in yards and alleyways.

Recommendations

Short term: Enforce statutes prohibiting public urination. Encourage business establishments to install public restrooms and clearly mark those which exist.

Long term: Encourage new businesses (especially food businesses) to locate in the Constitution Boulevard and/or Main Street areas, on the theory that such establishments traditionally provide and maintain good restrooms. Strictly enforce Code requirements for providing restroom facilities whenever the opportunity arises (e.g., when renovations to existing businesses are planned).

BIKEWAY SYSTEM PLANNING

There is a national trend toward increasing bike usage. Providing bike lanes in a municipality could increase bike riding, not only for recreational use, but for transportation use to get to and from work, school, shopping, as well as many other errands such as banking. As more and more people become aware of increased pollution from automobiles and people become more health conscious, they are turning to bikes as

a healthy alternative. Since the Region has a large student population and Mennonite population, who already ride bikes, the following recommendations are appropriate:

Recommendations

Short term: Designate a bike lane on College Boulevard (from Briarcliff to Main Street), across Main Street and along Normal Avenue to South Laurel Street, continuing along South Laurel Street to the Kutztown Park. Add bike racks to the Village Shopping Center.

Long term: Develop bike trails around the perimeter of the Borough which would connect to the old Borough swimming pool site. Plan other bike trails pursuant to a master plan.

SPEED LIMIT CONCERNS IN KUTZTOWN BOROUGH

Besides serving as the Borough's main traffic link, Main Street serves other purposes. It traverses the business district, provides much needed parallel parking (along its curbs) and is the location of community facilities.

Noble Street not only has a high concentration of residential housing units (including student housing), but it also serves as headquarters of the local fire company. It is a State route but also serves as a collector road and the main access road to Lyon Station.

Greenwich Street also serves as both a State Route and a collector road. It has a high concentration of residential properties, but also serves several businesses. This street is Kutztown's main access road to the Kutztown By-Pass, to Route 22/78 and to the Kempton area.

While these streets serve so many purposes, the control of local problem areas with proper speed limits or signs is imperative.

Recommendations

Short term: A traffic study should be conducted as an ongoing program by the Borough to provide maximum safety, with the possible intent to post speed limits (such as 25 MPH on Main, Noble and Greenwich Streets) and any other streets as needed. Also recommended is the posting of a warning sign at the curve on Normal Avenue near West Main Street, e.g., "Slow, Dangerous Intersection."

Long term: Slow down traffic and stress safety. Continue the traffic study by the Borough as noted above in the Short term Recommendation.

MONITORING TRANSPORTATION NEEDS OF ALL REGIONAL RESIDENTS

It will be necessary to monitor how well the transportation system serves the needs of all age and income groups within the Region. Of particular concern, just as with housing, will be younger families in the Region, seniors, and low and moderate income families with workers employed in the Region. The transportation system should facilitate access to facilities such as senior centers, recreation, medical offices, and employment opportunities. Improvements to the transportation system will help. Fostering alternative modes of travel, particularly transit, will also help.

Alternative modes of transportation, such as bicycling and walking, in addition to facilitating mobility, also can have a relationship to public health issues, by providing exercise opportunities for all residents of the Region.

CHAPTER 7

PLAN FOR THE PROTECTION OF NATURAL AND HISTORIC RESOURCES

INTRODUCTION

The Pennsylvania Municipalities Planning Code (MPC) requires that municipal Comprehensive Plans address resource preservation, specifically identifying natural, cultural, and historic resources. The natural resources noted by the MPC are wetlands and other aquifer recharge zones, woodlands, steep slope areas, prime agricultural land, floodplains, and "unique natural areas." The MPC adds that municipalities are not limited by this list, but may provide for the protection of other resources of local importance.

Historic Resources

The Region's history is reflected in its architecture, people, and character. Historic resources connect us to the past, emphasize our sense of community, and often provide aesthetic value. In addition, historic resources can provide tourism benefits which often lead to economic development opportunities. Planning for the protection of historic resources is especially important because historical resources are not renewable. See Chapter 21 for a discussion of historic resources in the Region.

Historic Districts

Local historic districts are areas in which historic buildings and their settings are protected by public review. Historic district ordinances are local laws adopted by communities using powers granted by the state. Historic districts consist of the Region's significant historic and architectural resources. Inclusion in a historic district signifies that a property contributes to a group of structures that is worth protecting because of its historic importance or architectural quality. See Chapter 21 for a discussion of proposed historic districts in the Region.

National Register of Historic Places

The National Register of Historic Places is the nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering and culture. See Chapter 21 for a list of National Register properties in the Region.

Cultural Resources

Cultural resources are the special characteristics that make a community unique. A community that takes pride in and respects its traditions is typically a community with a well-defined character. The Region contains a rich, diverse heritage with significant cultural resources that should be embraced and preserved.

Historic and Cultural Resource Strategies:

- A. Update zoning ordinances as necessary to protect historic resources and community character. Options include:
 1. Adopt Historic Resource Overlay Zoning. Concentrate on the Historic Overlay District, as depicted on the Future Land Use Map.
 - a. Create historical commissions and / or committees where they do not exist or a joint historical commission
 - b. Identify historic resources
 - c. Require developers to analyze:
 - Nature of historic resources on and near property
 - Impact of proposals on historic resources, and
 - Mitigation measures
 - d. Encourage adaptive reuse of historic buildings
 - e. Establish 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 to the area
 2. Adopt Demolition by Neglect Provisions:
 - a. Require property owners to protect and maintain historic properties to avoid demolition by vandalism or the elements by requiring unoccupied structures to be sealed or secured by fencing

3. Identify provisions to protect the character of villages, and have streets, buildings, and public spaces integrated to create a sense of place with pedestrian scale. Consideration can be given to adopting the following as standards or promoting them through incentives:
 - a. Allow only appropriate uses in scale with, and compatible with, existing appropriate uses, discouraging uses that would transform the character of the areas.
 - b. Establish 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 necessary improvements to be made by 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 area.
 - 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 streetscapes when appropriate, with consideration of:
 - Appropriate siting patterns, such as setbacks of buildings on lots
 - Materials of similar appearance and texture to those on existing buildings
 - Similar architectural details as other buildings in the neighborhood
 - 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

- Similar roof shapes
- Similar footprints of buildings and rooflines (matching façade masses with existing buildings)
- Similar building heights

4. Regulate and minimize conversions of buildings, addressing:

- Locations where permitted
- The procedural treatment of the use
- The type of building that can be converted
- Density of converted units
- Lot size for converted building
- Impervious surface/open space requirements
- Units allowed per structure
- Structure size requirements
- Minimum size of dwelling units
- Neighborhood compatibility standards
- Adequate parking requirements
- Screening of parking and common areas
- Limits on the structural revisions for buildings
- Minimum size of converted dwelling unit

B. Appoint historical commissions which are actively involved in historic preservation. The commission would be instrumental in administration of any historic resource overlay zoning that is adopted. The commissions would:

1. Identify, evaluate, mark and foster awareness of historic resources
2. Investigate participation in Certified Local Government Program
3. Encourage retention, restoration, enhancement and appropriate adaptive re-use of historic resources and discourage removal of historic structures
4. Develop programs, events and interpretive signage and exhibits that emphasize the history of the Region

5. 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.
- C. Support the activities of individuals and groups that identify, document, evaluate, and protect historical resources and increase public awareness of the area's history and historic resources.
 - D. Work with Kutztown University to determine the most appropriate future of historical buildings on the University campus.

HISTORIC PRESERVATION AT THE STATE AND LOCAL LEVEL

Establishing a local Historic District 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. Taking such an assessment enables the designating community to take 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. A requirement of establishing a local district, provided it was created pursuant to Act 167, the Historic District Act, is the establishment of a Historic Architectural Review Board (HARB). The HARB reviews all proposed erection, reconstruction, alteration, restoration, or demolition of buildings within the district before the issuance of any municipal permits pursuant to these actions. HARB reviews and recommendations must be consistent with the design guidelines established at the enactment of the Historic District. The governing body has the right to incorporate any of the HARB's recommendations into the permit requirements, but they may also override those recommendations. Municipalities whose districts are not created under Act 167 are not required to have a HARB, but instead may appoint a Historic District Commission or Committee.

Two Pennsylvania laws provide the legal foundation for municipalities to adopt historic ordinances and regulatory measures.

Act 247 – The Pennsylvania Municipalities Planning Code (MPC)

Acts 67 and 68 of 2001 amended the MPC, strengthening the ability of local governments to protect historic resources through their Comprehensive Plans, Zoning Ordinances and Subdivision and Land Development Ordinances. The following passages and paraphrases from the MPC are the most critical sections regarding this power.

- §603(C)(7) – Zoning ordinances may promote and preserve prime agricultural land, environmentally sensitive areas, and areas of historic significance.

- §603(G)(2) - Zoning ordinances are required to protect natural and historic resources.
- §702(1)(ii) – The governing body of each municipality may enact, amend and repeal provisions of a zoning ordinance in order to fix standards and conditions for traditional neighborhood development. In the case of either an outgrowth or extension of existing development or urban infill, a traditional neighborhood development designation may be either in the form of an overlay zone, or as an outright designation, whichever the municipality decides. Outgrowths or extensions of existing development may include development of a contiguous municipality.
- §1106(a)(6) – Multi-municipal Comprehensive Plans shall consider the conservation and enhancement of natural, scenic, historic, and aesthetic resources in their municipalities.

A Historic Overlay Zoning District, unlike the protection offered through the establishment of an Act 167 Historic District (discussed below), can include individual sites as well as clusters, as long as the resources are documented and identified on a historic resources map. A 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, building height, and bulk could help to preserve the character of the neighborhood.

Act 167 - The Historic District Act (1961)

Municipalities may create historic districts within their borders to protect the historic character through regulation of the erection, reconstruction, alteration, restoration, demolition, or razing of buildings in the district. The Pennsylvania Historical and Museum Commission must certify districts, including a *determination of eligibility* for the National Register of Historic Places. In this way, historic districts established pursuant to Act 167 have the same protection from federal projects as do National Register properties. Act 167 also requires appointment of a HARB.

Historical and Museum Commission Act 1945

Act No. 446, approved June 6, 1945, created the Pennsylvania Historical and Museum Commission (PHMC) by consolidating the functions of the Pennsylvania Historical Commission, The State Museum, and the State Archives. The PHMC is an independent administrative board, consisting of 14 members: 9 citizens of the Commonwealth appointed by the Governor, the Secretary of Education (ex officio), 2 members of the Senate, and 2 members of the House of Representatives. The Executive Director is appointed by the Commission and is an ex officio member of three groups: the Environmental Quality Board, County Records Committee, and the Local Government Records Committee.

The PHMC is the official agency 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 PHMC is funded partially through an annual legislative appropriation, federal grants, 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 Pennsylvania 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 there are nearly 1,900 such markers across the state.

The Office of Historic Preservation is an arm of the PHMC responsible for assisting the public and private sectors in implementing the Commonwealth's policy to "protect and enhance our irreplaceable resources." To this end, the Office has implemented a five-point program:

- Registering historically and architecturally significant sites and structures on the National Register of Historic Places and on the Pennsylvania Inventory of Historic Places;
- Advising and guiding individuals and organizations regarding historic preservation and its funding;
- Reviewing applications for federal preservation grants;
- Working for legislation at the state level to provide effective tools for historic preservation; and
- Working with other governmental agencies to review the impact of projects, such as highways, on the Commonwealth's historic resources.

Pennsylvania Bureau for Historic Preservation

The Bureau is an agency of the PHMC. The Executive Director of the Bureau is designated as the State Historic Preservation Officer (SHPO).

The Bureau provides technical assistance for the preservation, rehabilitation, and restoration of historic buildings. 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 for historic buildings. To inform the public, public agencies, local governments, and other stewards of historic properties, the Bureau assists in the development and distribution of materials on applying the Secretary of the Interior's *Standards for Rehabilitation* when repairing historic buildings.

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 programs for encouraging private investment in the rehabilitation of historic properties. Since the establishment of the PHMC 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 also administers the State's Historic Preservation Program as authorized by the Pennsylvania History Code and National Historic Preservation Act of 1966. The program is guided by advisory boards as well as the Pennsylvania Historic Preservation Plan.

The Pennsylvania General Assembly is 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. Possible conditions for eligibility include the following:

- The building must serve as the owner's principal residence,
- The building must be listed in the National Register of Historic Places or be determined to be a contributing building in a listed National Register Historic District,
- The building must 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, and
- All rehabilitation work must conform to the U.S. Secretary of Interior's *Standards for the Treatment of Historic Properties*.

NATIONAL EFFORTS AND LEGISLATION FOR HISTORIC PRESERVATION

Federal programs encouraging historic preservation include:

- the National Register of Historic Places,

- Historic Preservation Tax Credits on federal income tax for qualifying rehabilitation and adaptive reuse of historic buildings used for income-producing purposes,
- Section 106 Review of federally funded or assisted projects that impact historic resources, and
- the Certified Local Government Program, which facilitates 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 the 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 of 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, the

NHPA encourages State and local preservation programs. States may prepare and submit programs for historic preservation to the Secretary of the Interior for approval. Approval can be granted if they:

- designate 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.

Since 1966, the Congress has strengthened national preservation policy through other statutes, including the National Environmental Policy Act, several transportation acts, and statutes directed toward the protection and preservation of archeological resources. These laws all require Federal agencies to consider historic resources in their 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 determine which properties in the project area are listed on or are eligible for the National Register of Historic Places,
- determine how those historic properties might be affected by the project in question,
- explore alternatives to avoid or reduce any negative effect upon those historic properties, and
- reach agreement with the SHPO on specific measures to mitigate any adverse effects.

The Executive Branch has also expressed support for preservation through several Executive Orders. Examples include Executive Order No. 11593 of 1971, which instituted procedures for Federal agencies to follow in their property management activities. Executive Order No. 13006 encourages the location of Federal offices and facilities in historic districts and properties within the 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. Executive Order, No. 13007, signed in 1996, expressed 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 (not owner-occupied buildings). In addition, the Act allows 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 non-residential, non-historic 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 is administered 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 for:

- Direct participation in the federal historic preservation program,
- Greater access to historic preservation funds,

- Greater level of information exchange with the State Historic Preservation Office (SHPO),
- Access to technical assistance and training from the SHPO, and
- A higher degree of participation in statewide preservation programs and planning.

This program 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 their historic preservation responsibilities (survey, inventory, designation and protection of their historic resources). To achieve CLG status in Pennsylvania, a municipality applies to the Bureau for Historic Preservation. All states are required to set aside 10% of their 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.

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,
- provide continuing in-service historic preservation training for HARB and Historical Commission members (8 hours training annually per member),
- a good faith effort to appoint HARB members with appropriate professional qualifications for historic preservation backgrounds,
- submit an annual report of the municipality's historic preservation activities, and
- enforce the historic district ordinance.

NATURAL RESOURCES PLAN

Natural resources contribute to the economic activity, environmental health, and quality of life of a community. Parks, open space, woodlands, steep slopes, streams, wetlands, and farmlands are all resources that are aesthetically pleasing, and provide economic as well as environmental benefits. One example of this is the way that floodplains and wetlands act as natural storage basins in periods of high water and help to improve water quality by filtering out sediment and pollutants.

Natural Resources Strategies:

- A. Update zoning ordinances as necessary, and consider adopting official maps to reflect the resource protection Goal and Objectives of this Plan and to be consistent with the Future Land Use Map. The resource protection provisions of municipal zoning ordinances vary, and the approach taken by each municipality will vary. Options include:
 1. Adopt Natural Resource Protection Standards and/or Net-Out Provisions for the following resources:
 - a. Floodplains
 - b. Wetlands
 - c. Wetland Margins (buffers)
 - d. Watercourses
 - e. Water bodies
 - f. Greater than 25% slope
 - g. 15-25% slope
 2. Adopt Steep Slope Protection Provisions:
 - a. Control and limit development on steep slopes
 - Require larger lot sizes and impose stricter impervious restrictions for steep slopes of 15 to 25%
 - Prohibit or severely restrict development on slopes greater than 25%

3. Adopt Groundwater Protection Provisions:
 - a. Protect aquifers through design standards, construction guidelines, use restrictions, impervious limits, and permit submission requirements.
4. Adopt Tree and Woodland Protection, Management and Planting Provisions:
 - a. Limit clearance for development in both subdivisions and land developments.
 - b. Require tree protection, especially mature and high-quality/high-value trees and require equivalent tree replacement during development.
 - c. Encourage the use of native species in landscaping. Discourage invasive species.
 - d. Establish limited clearance buffer zones around the perimeter of new developments
5. Adopt provisions for Wetland, Wetland Buffer, and Hydric Soil Protection:
 - a. Restrict development in wetlands.
 - b. Establish consistent wetland, wet area, and water body buffer (margin) requirements, such as 50 feet or 100 feet.
 - c. Require wetland delineation in hydric soil areas.
6. Adopt Floodplain Protection Provisions:
 - a. Severely restrict development in floodplains to compatible open space uses in accordance with governmental regulations including regulations of the Federal Emergency Management Agency and the Pennsylvania Environmental Protection Agency.
7. Establish Stream Corridor Overlay Zoning and require Riparian Buffers:
 - a. Restrict development and impervious surfaces.

- b. Require riparian (vegetative) buffers to prevent artificial changes in water temperature, protect wildlife habitats, control sedimentation, and reduce pollution.
 - c. Require greenways.
 - d. Utilize the Best Management Practices where practical, and implement the Act 167 Stormwater Management Plans.
 - e. Protect the Region's streams.
8. Adopt Outdoor Lighting Standards to control light pollution and protect the night sky:
- a. Establish illumination levels that are adequate but not excessive.
 - b. Require impacts on surrounding streets and properties to be mitigated by directing light down, not up or out to sides of fixtures.
 - c. Control glare.
9. Adopt Forestry Regulations consistent with the Municipalities Planning Code:
- a. Require accepted silvicultural (forestry) practices.
 - b. Require a forestry management plan.
 - c. Require stormwater and erosion and sedimentation control.
 - d. Require properly constructed internal logging roads and protection of public roads.
 - e. Require soil erosion protection during steep slope forestry.
- B. Update subdivision and land development ordinances as necessary. Options include the following:
- 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.

3. Require environmental assessment studies; hydrogeologic 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.
4. 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 to ensure 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.

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

5. Establish development guidelines for development in groundwater recharge areas, including limits on impervious cover and limits on on-site sewage disposal.
 6. Require protection of vegetation during site work.
- C. Create municipal Environmental Advisory Councils to work with the Governing Body to preserve key tracts of open space, protect environmental resources in the Region, and implement 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 commissions, park and recreation boards, and elected officials on matters dealing with the protection, conservation, management, promotion, and use of natural resources located in 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;

- Keep an index of all open space, publicly and privately owned, including flood-prone areas, and other unique natural areas, for the purpose of obtaining information on the proper use of such areas;
 - 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.
- D. Encourage formation of groups within the community to adopt a stream and provide monitoring and oversight along the stream corridor.
- E. Pursue joint watershed planning opportunities under the Growing Greener initiative and other programs in order to protect community water resources.

Green Infrastructure

Green Infrastructure is a strategically planned and managed network of wilderness, parks, greenways, conservation easements, and working lands with conservation value that supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to the health and quality of life of the community.

The Green Infrastructure network encompasses a wide range of landscape elements, including natural areas such as wetlands, woodlands, waterways, and wildlife habitat; public and private conservation lands such as nature preserves, wildlife corridors, greenways, and parks; and public and private working lands of conservation value such as forests and farms. It also incorporates outdoor recreation and trail networks.

Riparian Buffers

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. The 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 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.

Greenways and Creek Conservation Corridors

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, ridgelines, 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

Greenways can have a number of benefits:

- Protect natural, cultural, and scenic resources.
- Link communities together.
- Provide for recreational opportunities such as walking, biking, picnicking, camping, skiing, fishing, equestrian trails, snowmobile trails, and links to recreation resources.
- Enhance the quality of life and promote revitalization in communities.
- Provide educational and interpretive opportunities.
- Enhance tourism and economic development opportunities.
- Maintain habitat linkages (wildlife corridors) 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.
- Provide linkages to trails of regional significance.

The municipalities should work toward the establishment of a greenway system within the Region. Not all corridors will be developed as active greenways with trails, nor will they all exist along a creek – these corridors should exist to preserve vital natural features, particularly ridge lines, woodlands, wetlands, and native vegetation.

SIGNIFICANCE OF NATURAL FEATURES

Natural features such as floodplains, wetlands, geologic formations, watersheds and watercourses are important to the protection of soil resources, groundwater recharge, and retention of the quality of surface and groundwater resources. The importance of protecting these natural features is 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.

Protection Importance:

Prohibiting and limiting development within the floodplain provides for protection of people and property from flood damage and minimizes downstream flood heights.

Retention of natural stream/river floodplain corridors increases groundwater recharge and decreases stormwater runoff.

Vegetated riparian corridors serve as buffers to sustain and improve water quality via nutrient removal and erosion and sedimentation control.

Floodplain wildlife and plant habitats often support wetlands.

Floodplain habitats can provide important open space and recreation areas.

Development Implications:

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.

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.

Removal of the natural vegetated riparian buffer along streams and rivers increases potential for water contamination from surface runoff and erosion.

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.

Development hinders aesthetic and recreational value of the waterway.

Protection Strategies:

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.

Limit impervious surfaces in developments adjacent to floodways through conservation zoning.

Prohibit mobile home developments from floodplain areas.

Monitor current developments for poor management practices and offer planning assistance.

Purchase conservation easements along streams to protect the floodplains and water quality.

Cooperate with watershed associations and conservancies to promote education and outreach and conduct watershed studies.

Forests

A forest by definition is an area densely populated by trees and other woody plants.

Protection Importance:

Forest canopy along stream and river corridors provides shade to minimize the warming of stream temperatures and reduce impacts to fish and other aquatic species.

Forested riparian corridors help sustain stream and lake water quality by acting as nutrient filters and by stabilizing soil against erosion.

Forested lands are part of the rural character and scenic relief.

Undeveloped, forested landscapes allow for relatively high rates of infiltration or groundwater recharge and decrease stormwater runoff.

Development Implications:

Development of forested lands can fragment habitat for plant and animal species.

Removal of forested riparian corridors has implications on water quality and clarity.

Loss of these resources could have implications on quality of life.

Improper development and management of forest resources can allow invasive species to proliferate.

Protection Strategies:

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.

Involving DCNR Bureau of Forestry prior to development to assess land and determine best management of resources during development and/or timbering.

Create a municipal Best Management Practice guide for development along steep slopes, ridgelines and stream/river corridors.

Provide for maximum lot coverage requirements and minimum open space areas in residential subdivisions.

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.
<p>Protection Importance: Groundwater is a source of potable water supply.</p> <p>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.</p>	<p>Development Implications: Maintenance of both quality and quantity of groundwater reserves sufficient for providing potable water supplies will require proper management as development occurs.</p> <p>Increased impervious surfaces affect the ‘recharge’ zone for groundwater supplies increasing the potential groundwater may become contaminated.</p> <p>Potential underground and surface water sources of contamination can directly impact groundwater quality.</p> <p>Increased withdrawals from groundwater aquifers can affect existing supplies and stress future provision of adequate supplies.</p> <p>Improper siting and construction of wells during development can impact potential for groundwater contamination.</p>
<p>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.</p>	

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: 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: 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: Provide ordinance standards requiring wetland delineations by qualified professionals. Consider buffers for wetlands.</p>		

Steep Slopes	Steep Slopes of 15-25% have 15-25 feet of vertical change in elevation over 100 feet or 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.</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>	

Protection Strategies:

- Identify ridgelines and scenic views as conservation areas.
- Link zoning standards to protecting land values and local economy.
- Limit development on slopes greater than 25%.
- Require detailed engineering plans for any developments proposed on steep slopes.
- Require stormwater managements for individual building lots.
- Require deduction of steep slopes from minimum lot size.
- Make use of conservation subdivision design to focus development away from steep slopes.

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.

Protection Importance:

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.

Wetlands are important groundwater recharge areas.

Wetland areas reduce potential flooding by detaining and infiltrating stormwater.

Many unique species of plants and animals are only capable of survival in wetland habitats.

Development Implications:

Potential encroachment into, filling in or draining of wetlands during development inhibits the continued important values and functions of wetlands.

Disturbance of wetlands and surrounding areas by development increases the potential for introduction of non-native invasive plant species that crowd out beneficial native wetland plants.

Development adjacent to wetlands can release pollutants that impact the water quality and the groundwater recharge capacity of wetlands.

Groundwater withdrawals can impact water levels that would otherwise sustain wetlands, particularly during dry periods

Protection Strategies:

- Create buffer areas adjacent to wetland areas to supplement state and federal regulations.
- Provide ordinance standards requiring wetland delineations by qualified professionals before development.
- Limit the amount of impervious surface permitted in developments adjacent to wetland areas.
- Inventory the plant and animal species in wetland habitats to monitor changes caused by development.

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>Water resources serve an important role in protecting and increasing land values.</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 smart growth for developments along streams.</p>		

CHAPTER 8

ACTION PLAN

The Action Plan is critical to the success of this Comprehensive Plan because it lists the actions to be taken to implement policies, accomplish goals and objectives, and realize the Vision for the Region. The changes to the Pennsylvania Municipalities Planning Code (MPC) enable municipalities to plan together to undertake this challenge. The first step to implementing a multi-municipal comprehensive plan is for the municipalities to adopt an intergovernmental cooperative agreement that will establish future actions, such as revision of ordinances to achieve consistency with the Plan.

Article XI of the MPC allows municipalities to cooperate in the regional allocation of land uses through multi-municipal planning. The Article also stresses general consistency between the multi-municipal plan and the County Comprehensive Plan, as well as local zoning and subdivision ordinances. The Action Plan recommends the adoption of implementation agreements as well as the establishment of a permanent Regional Planning Committee to review consistency issues.

The completion of these tasks can help the municipalities achieve their community Vision that was presented earlier in this Plan. Each municipality will consider the recommended actions and determine whether to implement them. In no event shall the adoption or approval of this Plan obligate any participating municipality to comply with the recommendations set forth herein.

Cooperation between the Governing Bodies, as well as between Planning Commissions and other local groups interested in the community is vital to the success of this Plan. The citizens of the Region must also stay involved in the planning process. The Objectives of this Plan should be monitored, and updated when necessary. The Comprehensive Plan is a living document, and should remain a valuable tool for future decision making.

NATURAL, SCENIC, HISTORIC AND CULTURAL RESOURCES

Natural Resources Strategies:

- A. Update zoning ordinances as necessary to reflect the resource protection Goal and Objectives of this Plan. The resource protection provisions of municipal zoning ordinances vary and the approach taken by each municipality will vary. Options include:

1. Adopt Natural Resource Protection Standards for the following resources:
 - a. Floodplains
 - b. Wetlands
 - c. Wetland Margins (buffers)
 - d. >25% slope
 - e. 15-25% slope
 - f. Watercourses
 - g. Waterbodies

2. Adopt Steep Slope Protection Provisions:
 - a. Control and limit development on steep slopes
 - Require larger lot sizes and impose stricter impervious restrictions for steep slopes 15-25%
 - Prohibit or severely restrict development on slopes >25%

3. Implement the Provisions of Wellhead Protection Ordinances:
 - 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

4. Adopt Groundwater Protection Provisions:
 - a. Protect aquifers through design standards, construction guidelines, use restrictions, impervious limits, and permit submission requirements.
5. Adopt Tree and Woodland Protection, Management and Planting Provisions:
 - 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
6. Adopt provisions for Wetland, Wetland Buffer, and Hydric Soil Protection:
 - a. Restrict development in wetlands
 - b. Establish consistent wetland, wet area, and water body buffer (margin) requirements, such as 25 feet or 100 feet
 - c. Require wetland delineation in hydric soil areas
7. Adopt Floodplain Protection Provisions:
 - a. Severely restrict development in floodplains to compatible open space uses
8. 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
 - c. Require greenways

- d. Utilize the Best Management Practices where practical, and implement the Sacony, Little Lehigh and Maiden creek Act 167 Stormwater Management Plans
9. Adopt Outdoor Lighting Standards to control light pollution and protect the night sky:
 - 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
10. In remaining agricultural areas, allow farmers to supplement income through home businesses, home occupations and farm related businesses; allow farm support businesses and businesses which market or process farm products; require buffering around the perimeter of agricultural areas by non-agricultural uses; establish appropriate controls on intensive agricultural operations and sludge (biosolids); permit appropriate recreational activities, such as hayrides, corn mazes, and festivals.
11. Adopt Forestry Regulations:
 - a. Require accepted silvicultural (forestry) practices.
 - b. Require a forestry management plan.
 - c. Require stormwater and erosion and sedimentation control.
 - d. Require properly constructed internal logging roads and protection of public roads.
 - e. Require soil erosion protection during steep slope forestry.
- B. Update subdivision and land development ordinances as necessary at a minimum of once every ten years. Options include:
 1. Expand plan data requirements to include a specific listing of environmental, scenic, historic and cultural resources.

2. Require residential, commercial and industrial 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 residential, commercial and industrial 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 the Conservation Corridors and provide for greenways identified in open space and recreation plans.

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 recharge areas, including limits on impervious cover and limits on on-site sewage disposal.
 5. Require protection of vegetation during site work.
- C. Support efforts of The Berks County Conservancy, Wildlands Conservancy, and other agencies to preserve tracts of environmental significance.
- D. Encourage the creation of municipal Environmental Advisory Councils to work with governing bodies to preserve key tracts of open space, protect environmental resources in the Region, and implement 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.
- E. Support efforts of the Berks 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 (where applicable), and agriculture, and promote stream bank improvements, restoration, and stabilization. Cooperate in securing easements along the streams.
- F. Encourage formation of groups within the community to adopt a stream and provide monitoring and oversight along the stream corridor.
- G. Pursue joint wellhead protection and watershed planning opportunities under the Growing Greener initiative and other programs in order to protect community water supplies.
- H. Support Associations such as the Friends of the Sacony Marsh.

Scenic Resources Strategies:

- A. Update zoning ordinances as necessary to protect scenic resources. Options include:
1. Update Sign Regulations:
 - a. Regulate billboards

- b. Adopt consistent and appropriate signage standards along road corridors in the Region
 - c. Encourage appropriate signage in existing settlements with consideration of:
 - Sign materials compatible with the building style
 - Signs' colors complement building façades
 - Hardware for projecting signs is integrated into the building architecture
 - Lettering compatible with the building façade
 - Sign purpose primarily for identification
 - Off-premises advertising signs restricted
 - Lighting of signs illuminates the sign area only
 - Signs which do not obscure architectural features or windows
 - Roof-top signs are not permitted
 - Window signs do not obscure displays
 - Flashing lights, neon lights, moving lights, and unshielded light bulbs are restricted or prohibited
2. Require landscaping and buffering within commercial and industrial developments.
- B. Update subdivision and land development ordinances as necessary. Options include:
1. Establish development guidelines for development near scenic roads and vistas.
 2. Require tree plantings along streets, including use of native species, in both major and minor developments and both residential and non-residential developments.

- C. Establish tree planting and landscaping programs
- D. Encourage landscaping of cleared/open areas in existing developments
- E. Minimize visual blight along the road corridors in the Region to enhance the business climate and tourism. Work with Berks County 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.

Historic and Cultural Resource Strategies:

- A. Update zoning ordinances as necessary to protect historic resources and community character. Options include:
 1. Adopt Historic Resource Overlay Zoning:
 - a. Create historical commissions where they do not exist or a joint historical commission
 - b. Identify historic resources
 - c. Require developers to do analyses:
 - Nature of historic resources on and near property
 - Impact of proposals on historic resources
 - Mitigation measures
 - d. Encourage adaptive reuse of historic buildings
 - e. Discourage removal of historic structures
 - f. 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
 - g. Encourage architecture, materials, and development patterns characteristic of the area
 - h. Discourage uses likely to result in demolition of historic resources and uses inappropriate in historic areas
 2. Adopt Demolition by Neglect Provisions:
 - a. Require property owners to protect and maintain 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
 3. Identify provisions to protect the character of the Boroughs and Villages, and have streets, buildings, and public spaces integrated to create a sense of

place with pedestrian scale. Consideration can be given to adopting the following as standards or promoting them through incentives:

- a. Allow only appropriate uses in scale with, and compatible with, existing appropriate uses, discouraging uses which would transform the character of the areas.
- 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 area.
- 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, such as setbacks of buildings 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
- Using similar roof shapes
- Maintaining similar footprints of buildings and rooflines (matching façade masses with existing buildings)
- Using similar building heights
- Having store fronts, upper facades, and cornices of commercial buildings compatible with existing buildings

4. 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
- Minimum size of converted dwelling unit

B. Appoint historical commissions 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 continue to:

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 Region
 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).
 7. Utilize the resources and expertise of Kutztown University where appropriate
- C. Support the activities of individuals and groups which identify, document, evaluate and protect historical resources and increase public awareness of the area's history and historic resources.
- D. Support the planning of trails to link historic sites and erect informative markers and exhibits at historic resources.
- E. Support the integrity of Historic Districts in the Region
- F. The Borough of Kutztown should pursue participation in the Elm Street program to enhance residential neighborhoods near its Main Street area.
- G. Work with Kutztown University to determine the most appropriate future of historical buildings on the University campus.
- H. Support creation of the Kutztown Historic District.
- I. Support creation of historic districts in the Region.

LAND USE AND AGRICULTURAL RESOURCES

- A. Update zoning maps and zoning district provisions, to reflect the Future Land Use Plan as necessary, reviewing the zoning ordinance a minimum of once every ten years.
- B. Update Statements of Community Development Objectives contained in municipal zoning ordinances to be consistent with this Plan.
- C. In zoning ordinances, provide for land development techniques designed to protect existing resources, provide open spaces, enhance streetscapes, and protect the character of existing centers.
 - 1. Address Smart Growth in the Township:
 - 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
 - 2. Lot averaging, as appropriate in the Township, 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
 - 3. Traditional Neighborhood Development (Neotraditional Development), Village Extension, and Village Design within the Boroughs and Villages. 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
4. Adopt corridor zoning techniques along major commercial roads, such as Route 222, Route 737, and Lyons Road to enhance the appearance of these corridors, enhance safety and traffic movement, and maintain economic viability. Such techniques would address:
- a. Coordinate landscaping, signage, lighting, street furniture, paving materials, design of site improvements, building façade and windows displays 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. Provide safe bus stops with shelters, with pedestrian connections to buildings
- D. In zoning ordinances, require areas for economic development to be developed through coordinated, attractive commercial and business parks and discourage additional strip commercial development. Special consideration should be give to the 222 Corridor north of Kutztown for economic development activities.
- E. Within zoning district provisions, considering the entire Region as a whole, 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.
- F. Address architectural and related issues within zoning ordinances. For example:
- 1. In some zoning districts, such as but not limited to neighborhood commercial and village zoning districts, limits on building size will be appropriate to maintain existing character.
 - 2. In some zoning districts, emphasis should be placed on encouraging architecture consistent with existing community and/or architectural character.
 - 3. In some or all Commercial districts, typical "big box" architecture should be discouraged through architectural treatments of building facades.
 - 4. Kutztown should consider the merits of the Conservation Zoning District concept utilized in Pottstown.

G. Additional zoning actions include:

1. Require buffers and/or performance and design standards where there will be potentially conflicting uses.
2. Requiring impact statements (environmental, traffic, services, fiscal, etc.) with requested zoning amendments requiring 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, rather than development served by package/private systems or individual systems.
4. Require sufficiently large lots when on-lot sewage disposal will be used.

H. Update municipal Subdivision and Land Development Ordinances, as necessary. Options include:

1. Require street furniture/pedestrian amenities as required improvements pursuant to municipal streetscape plans in the Boroughs.
2. Stormwater management ordinances prepared through the Sacony Creek, Little Lehigh, and Maiden Creek Act 167 Stormwater Management Plans should be consistent with the objectives of this Plan.

I. Municipal Act 537 plans and water supply planning should be coordinated with this plan, particularly the Future Land Use Plan, to promote compact, efficient, orderly, and phased development within and contiguous to existing developed areas. The Sacony Authority Regional Sewage Treatment Plant should be developed.

J. The municipalities should continue to monitor zoning along municipal boundaries to provide for compatible zoning districts.

K. Streetscape Plans for Kutztown and Lyons should be prepared, 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. Coordinate such efforts with PADCED and PENNDOT. Work toward coordination between Kutztown Borough and Kutztown University.

- L. Insure that Kutztown floodplain mapping is correct and that regulations are consistent with Borough objectives for utilization of industrial properties along the Sacony Creek floodplain.
- M. Utilize property maintenance regulations to insure maintenance of vacant properties.
- N. Support existing desirable land uses to avoid vacation of buildings and land. Work with landowners to increase utilization of vacant and underutilized land.
- O. The municipalities should address issues concerning student housing and conduct as discussed in Chapter 3.

Agricultural Resources Strategies

- A. The municipalities should identify and preserve the most viable agricultural lands. Lands that should receive priority include:
 - Land that is protected by existing restrictions and/ or easements against development, including lands that have been purchased through the Berks County Agricultural Conservation Easements (ACE) Program, or are adjacent to such lands;
 - Lands that are designated for protection by *Vision 2020*;
 - Land that is composed of capability class I, II, III, as defined by the USDA.
 - Land that is currently in agricultural use.
 - Land that is included within an approved Agricultural Security Area.
- B. The municipalities should preserve agriculture through the following administrative actions:
 1. Work with local farmers to promote participation in County's Purchase of Agricultural Conservation Easements Program
 2. Promote the inclusion of farms in Agricultural Security Areas.
 3. Support measures to relieve property tax burden for farmers
 4. Limit extension of public sewer and water facilities to agricultural areas
 5. Permit businesses which support agricultural operations

6. Allow farmers to supplement incomes through home businesses, home occupations and farm related businesses
 7. Permit appropriate recreational activities, such as hayrides, corn mazes, and festivals
 8. Limit non-farm uses which could cause conflicts with agricultural practices and/or require buffers for non-farm uses around the perimeter of farms
 9. Promote smart growth.
 10. Promote enrollment in Act 319 tax relief program
 11. Allow and give incentives to compact development and higher densities where public sewer and water are available in areas designated for development.
- C. Appropriate regulations on intensive agricultural operations should be adopted by the Township.

TRANSPORTATION

Strategies:

- A. Update zoning ordinances as necessary.
 - 1. Include access management standards within zoning ordinances and/or subdivision and land development ordinances as determined by the municipality:
 - a. Establish access location standards
 - b. Establish access point separation requirements
 - c. Require access to streets of lower functional classification
 - d. Require internal road systems
 - e. Require coordinated/shared ingress and egress
 - f. Require interconnection of properties – access, parking, loading
 - g. Establish separations from intersections
 - h. Require coordinated traffic movements
 - i. Require acceleration and deceleration lanes where appropriate
 - j. Require left and right turn lanes where appropriate
 - k. Establish design standards for intersections, driveways, internal circulation, and parking lot design
 - l. Minimize entrances to roads
 - m. Prohibit inappropriate turning movements
 - n. Require signalization of high volume driveways

While particularly crucial along the Route 222 corridor, access should be managed along all roads within the Region.

In mixed use areas, such as Main Street in Kutztown, where pedestrian activity is high, discourage curb cuts over sidewalks to limit pedestrian/vehicular conflict.

B. Update subdivision and land development ordinances as necessary.

1. Establish appropriate road design standards for each functional classification of road. Consider 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 where planned or required by municipalities. 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. Require appropriate ultimate rights-of-way along roads.
 6. Require necessary roadway improvements along the frontage of developments.
 7. Require developers to interconnect roads.
 8. Require developers to provide adequate primary and emergency access.
- C. Adopt Official Maps designating proposed public facilities, streets and interchanges, road improvements, parallel roads, and trails.
- D. Implement the Capital Improvements Programs recommended by this plan.

- E. Establish pedestrian pathway improvement programs to enhance walkability in the Region, such as completion of gaps in and extensions of the sidewalk and trail system to provide improved access to schools, Kutztown University, day-to-day shopping facilities, community facilities, 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, 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.

Address sidewalk issues outlined in Chapter 6. Implement the Kutztown sidewalk plan (see Chapter 16).

- F. Continue planning for greenways and riparian buffers along the streams in the Region pursuant to the Berks County Open Space and Recreation Plan and the Draft Open Space and Greenways Plan.

Provision should be made for benches and other amenities along pathway and trail systems.

- G. Work with PENNDOT to assure adequate maintenance of roads which receive substantial volumes of truck and school bus traffic in addition to automobile traffic.

- H. Determine whether Transportation Impact Fee ordinances will be used by individual municipalities and/or jointly and require land developers to address needed transportation improvements in the Region as they develop.

- I. Monitor the need for, and work to institute appropriate traffic calming techniques in the Boroughs, Villages, and residential neighborhoods.

Work with PENNDOT to establish appropriate speed limits, reducing them as necessary, in existing developed areas.

- J. Prepare multi-year programs for street maintenance.

- K. Work with PENNDOT to keep traffic signal timing current and optimized.

L. 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.

M. Work to connect transportation modes to one another. Cooperate with BARTA; Kutztown University and private transit companies to assure adequate bus service and the appropriate location and attractiveness of bus stops. Coordinate in the provision of park and ride facilities and multi-modal facilities. Coordinate expanded bus service to appropriate locations in the Township where it can reduce vehicle trips, but not contribute to sprawl.

Implement a circulator system through cooperation with BARTA and area businesses, the school districts, and community groups to increase the mobility of the elderly, physically impaired, and those who do not own or lease an automobile, and provide an alternative to automobile use.

N. Within physical constraints and the need to provide parking facilities, try to accommodate mixed use activity centers near auto/bus/bike/pedestrian hubs, park and ride facilities, bike and ride facilities, and walk and ride facilities.

O. Encourage landowners to cooperate with PENNDOT and the municipalities in the redesign of existing strip development areas to manage access and improve streetscapes.

P. Monitor the need for Transportation Development Districts

Q. Coordinate utility and road improvements so utilities are constructed before road improvements are made.

R. Require property owners to keep street rights-of-way available for required improvements and pedestrian systems.

S. Work with employers within the Region to encourage employee trip reduction plans and foster telecommuting. As necessary, form transportation management associations of municipalities and businesses to address needs along the Route 222 corridor.

T. Work together as a Region with the County, Legislators, and PENNDOT to list needed transportation improvements on the Long Range Transportation Plan.

U. Work with transportation organizations and agencies providing services to seniors to facilitate mobility of seniors by determining desired destinations and means of providing access to those destinations.

- V. Promote the improvement of US 222 North as limited access from the Kutztown Bypass to the Lehigh County line.
- W. Accommodate horse and buggy traffic
- X. Coordinate with the Reading Area Transportation Study (RATS) to include a College Boulevard Interchange at the Route 222 Bypass on the Long Range Transportation Plan and T.I.P.
- Y. Implement the Sacony Creek Trail.
- Z. Improve access from western portion of Kutztown to Route 222 Economic Development corridor.
- AA. Extend road access from Kutztown into Maxatawny Township and remove Hartman Road bridge.
- BB. Provide road access between Sharadin Road and College Boulevard.
- CC. Support improvement of circulation within Kutztown University Campus.
- DD. Consider need for extension of Constitution Boulevard to Koffee Lane to facilitate access to School District property.
- EE. Monitor opportunities for park and ride facilities, linked to transit, pedestrian, and bicycle facilities, near the Route 222 Bypass.
- FF. Investigate opportunities for park and ride facilities, linked to transit, pedestrian, and bicycle facilities, near the Route 222 Bypass.
- GG. Continue to work to reduce speed limit on Main Street in Kutztown. Address traffic speed issues in Lyons and as noted in Chapter 6.
- HH. Work with PennDOT to reduce congestion at Long Lane intersection and improve intersections with Route 222.
- II. In conjunction with Main Street Streetscape planning in Kutztown, determine viability of traffic calming measures and making the street more pedestrian friendly.

- JJ. Work with PennDOT to develop a plan to manage access to Route 222. Facilitate vehicular circulation within Route 222 economic development corridor through appropriate planning of the area.
- KK. Investigate opportunities to connect developments south of Lyons, to provide access between Lyons and Bowers Roads.
- LL. Work with PennDOT to prepare a truck routing plan for the Region and plan for necessary road improvements.
- MM. Continue to encourage business employees to park away from Main Street to keep parking spaces open to potential customers.
- NN. Designate appropriate spaces for short-term parking near active public destinations as needed.
- OO. Continue to address issues of having adequate parking provided for rental housing and housing conversions.
- PP. Implement traffic controls to improve the safety of the Normal Avenue-Sander Alley intersection.
- QQ. Pursue permission from PennDOT to install left turn signalization on Main Street at College Boulevard.
- RR. Working to secure sufficient and enhanced Park and Ride facilities at bus hubs
- SS. Consider parking management techniques and initiatives outlined in Chapter 6.
- TT. Discouraging curb cuts over sidewalks in mixed use areas, such as on Main Street in Kutztown, where pedestrian activity is high, in order to limit pedestrian/vehicular conflicts.
- UU. Directional signs should be installed to provide easy access to all public buildings. Provide a regional map. Distribute maps to schools competing at a local gym or participating in a program at an auditorium or public building, as well as to new people moving into the region when signing up for any municipal service.
- VV. The walking trail system within the Borough should connect to walkways in the Borough Park, to the Sacony Marsh, to the old Borough swimming pool property, and provide a walkway around the Borough's perimeter.
- WW. Encourage study of use of the Borough railroad line for tourist excursions.

XX. Support development of the Alburdis-Auburn Recreational Trail.

YY. Implement gateway and streetscape enhancements as discussed in Chapter 6.

ZZ. As determined by the Township, implement road improvements listed in Chapter 6.

AAA. Address bikeway system planning issues discussed in Chapter 6.

COMMUNITY FACILITIES, SERVICES, AND DEVELOPMENT

Strategies:

- A. Implement action plans of Municipal and Regional Open Space plans, Berks County Open Space and Recreation Plan and the Draft Open Space and Greenways Plan. Implement the Kutztown Master Park Plan.

Support efforts of a Regional Open Space and Recreation Committee to plan for continued improvement and appropriate development, use, and maintenance of recreation facilities and programs and trails in the Region.

- B. Maintain language in Subdivision and Land Development Ordinances to require developers to dedicate land or pay a fee in lieu of land for all new subdivisions.

Each subdivision or land development would have to be reviewed to determine whether the dedication of land or the fee in lieu of land would be more appropriate, based upon the size and location of the development and the Municipal and Regional Open Space and Recreation Plans.

Maintain standards for recreation facilities. Review standards of National Recreation and Park Association (NRPA) for appropriateness.

- C. Where appropriate, work with PENNDOT to widen and improve road shoulders and require developers to improve shoulders along their properties in order to accommodate pedestrian and bicycle facilities.

- D. Maintain a dialog with the Kutztown Area School District regarding development activities, school facilities needs, location of school facilities, and school bus routes.

- E. Work with the School District to assure availability of school district facilities to the Region's residents.

- F. Promote and support efforts of community organizations to provide recreational facilities and programs for area residents and services and programs for seniors and youth. Work to establish a senior citizen center in the Region.

- G. Provide for public areas within the Region through provision of open spaces, village greens, recreation facilities, greenways, improved pathways, and indoor facilities.

- H. Enforce Sewage Management Ordinances and State mandates to manage (including monitoring and maintaining) on-lot sewage disposal facilities in the Region and assure the best available technology is used.
- I. Encourage the Berks County Solid Waste Authority to plan for solid waste management in a cost effective manner with consideration of municipal concerns.
- J. Involve local fire company and school district personnel in review of subdivision and land development plans, where appropriate.
- K. Continue and expand cooperation and dialog between the Township, the Boroughs, and community entities such as the Berks-Lehigh Regional and Kutztown Borough Police Departments, local fire companies, authorities, Kutztown University, and the School District 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.
- L. Encourage volunteerism for non-profit agencies and increased coordination of volunteer services among agencies.
- M. Work to establish additional recycling centers which are convenient and well managed.
- N. Continue to support the Louisa Gonser Community Library in Kutztown Borough.
- O. Address the need for fire personnel as fewer volunteers are available and cooperate regionally to assure adequate fire service throughout the Region.
- P. Coordinate policies of governing bodies and municipal authorities on extensions of public sewer and water facilities with the Future Land Use Plan to assure consistency. Continue to support the development of the Sacony Authority Regional Sewage Treatment Plant.
- Q. 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.
- R. Involve the Region's residents and business community in committees to address major issues of concern within the Region.

- S. Work with Kutztown University to identify how educational opportunities for the Region's residents could be enhanced.
- T. Promote involvement of new residents in community programs.
- U. Maintain current and workable emergency operations plans, consistent with Berks County, Pennsylvania, and Federal Emergency Management Agency regulations and directives.
- V. Require all wastes to be treated and/or disposed of in an approved, environmentally responsible manner.
- W. Promote efficient, effective, and professional management of public facilities. Identify opportunities for technological enhancements for municipal government.
- X. Encourage existing development to correct or eliminate environmental quality problems.
- Y. Monitor additional development affecting storm drainage points of interest to assure developers will not contribute to existing drainage problems.
- Z. Continue to address flooding problems in the Region and avoid future problems by restricting development in floodplain and wetland areas.
- AA. Acquire land between South Kemp Road and South Laurel Street for school and joint recreation purposes.
- BB. Utilize old Kutztown swimming pool site for recreational purposes, and facilitate pedestrian access to the site.
- CC. Investigate sources of funding for full-time day fire personnel in the Region.
- DD. Plan for expanded library service to the community on a regional basis, including municipalities, School District, and University. Investigate opportunities for expanding community center facilities in the Region.
- EE. Restore the Kutztown railroad station and use it as a meeting room for Borough and community use.
- FF. Continue discussions for new garage facilities for Borough of Lyons.
- GG. Encourage additional public restrooms in commercial areas in Kutztown.

- HH. Determine the most efficient way to address the need for additional police service in Kutztown.
- II. Establish and maintain a regular inspection program of the Kutztown storm sewer system, in the short term. In the long term, develop and follow a program of regular inspection, replacement, and upgrading of the storm sewer system. Correct flooding problems from storm drainage system deficiencies.
- JJ. Utilize capital improvement programs to address capital needs.
- KK. The Borough of Kutztown should review opportunities which arise within the Borough to acquire vacated properties for future public use.
- LL. Update the regional wellhead protection study.
- MM. Identify and maintain an emergency water supply source for the Lyons areas.

ECONOMIC DEVELOPMENT

Strategies:

- A. Zone areas for economic development pursuant to the Future Land Use Plan designations.

Emphasize small business incubation, light industrial, research and development, high technology, office and service development to supplement the existing commercial development in the Region.

Require 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.

Generally direct economic development within major transportation corridors, near interchanges with highways, and within existing centers.

- B. 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 Region is positive.
- C. Work with telecommunications companies to assure that adequate telecommunications facilities, including fiber optics, are available to businesses within the Region. Expand fiber options capacity to Township.
- D. Monitor opportunities to establish Keystone Opportunity Zones (KOZ's).
- E. Work with the Berks County Industrial Development Authority to secure funding for infrastructure improvements to support economic development in the Region.
- F. Work together as a Region, with cooperation from the Kutztown Area School District and state legislators, to attain a favorable tax structure in the Region, in order to remain attractive to new business development.
- G. Establish zoning policies for home employment and home occupations.
- H. Encourage appropriate adaptive re-use of vacant and underutilized buildings.
- I. Inform economic development agencies of areas and buildings zoned and available for commercial and industrial development in the Region.

- J. Work to provide necessary infrastructure to designated economic development areas.
- K. Investigate programs such as financial incentives for re-use of old buildings and tax lien forgiveness to “recycle” buildings, and preserve historic sites. Work with PADCED.
- L. Work to attract suppliers of and businesses related to existing businesses in the Region.
- M. Create a partnership with Kutztown University to establish a Keystone Innovation Zone (KIZ) to generate economic development and job growth.
- N. In recognition of the need to foster the economic viability of the Region, enhance the transportation systems within the Region pursuant to the Transportation action items.
- O. Support the necessary legislation to authorize impact fees in addition to those which can now be charged.
- P. Investigate opportunities for streamlining processes for economic development which will enhance the economy and quality of life of the Region.
- Q. Target areas identified by the *Berks Vision 2020* Future Land Use Map and the Berks County Industrial Site Assessment Study as appropriate for industrial and/or business park development.
- R. Review opportunities created with recent passage of Pennsylvania’s Economic Stimulus Package, including such programs as Business in Our Sites, and Tax Increment Financing Guarantee Program.
- S. Work to establish consistent policies on use of impact fees within the Region.
- T. Explore opportunities to develop a Specific Plan, as discussed in Section 1106 of the Municipalities Planning Code.
- U. Coordinate policies of governing bodies and municipal authorities on extensions of public sewer and water facilities with the Future Land Use Plan to assure consistency. Continue to support the development of the Sacony Authority Regional Sewage Treatment Plant.
- V. Work with the farm community to determine whether a Kutztown Farmers Market should be established.

W. Maintain a sensitivity to impacts of any conflicts between neighboring land uses and address residents' concerns and mitigate problems.

HOUSING

Strategies:

- A. Maintain adequate housing and property maintenance codes and zoning ordinance provisions as necessary to maintain the building stock and properties within the region.
- B. Foster programs which encourage home renovation and rehabilitation in existing neighborhoods.
- C. Foster programs which provide and facilitate affordable senior and family housing.
- D. Work with residents of the Region and regional taxing entities to identify programs and policies that will help residents maintain and enhance their properties, and meet housing expenses and retain their homes as owner-occupied single family residences.
- E. Address student housing issues within the Boroughs with the University as they arise. Enforce building codes.
- F. Regulate housing conversions through zoning provisions and require adequate parking to be provided.
- G. Provide for a variety of housing types and densities through zoning.

PLANNING AND REGIONALIZATION EFFORTS

Strategies:

- A. Complete an Intergovernmental Cooperative Agreement and establish a Regional Planning Committee. The highest priority for implementation of this Plan is adoption of an intergovernmental agreement by the governing bodies of the three municipalities.

Section 1104 of the Pennsylvania Municipalities Planning Code grants municipalities and counties the authority to enter into intergovernmental cooperative agreements. Such agreements are to:

1. Establish the process that the participating municipalities will use to achieve general consistency between the multi-municipal 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 multi-municipal 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 the Code will be retained by the municipality in which the property is located and where the approval is being sought. Under no circumstances shall a subdivision or land development applicant be required to undergo more than one approval process. ~~The participating municipalities will determine what constitutes a development of regional significance.~~
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 the Governing Body of each participating municipality 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.
 - B. The municipalities should continuously jointly monitor the availability of grants for planning, recreation, economic development, and other elements and pursue such grants.
 - C. Each year the Planning Commission and the Governing Body of each municipality should meet to discuss trends in the municipality, surrounding municipalities and the Region; progress of meeting the goals set forth in this plan; the effectiveness of this plan; and implementation of the plan. Specific actions determined to be necessary to implement the plan should be identified and action programs for the following year established. Directives for tasks should be given to appropriate boards, committees and commissions. Key stakeholders could be involved in these meetings.
 - D. This Comprehensive Plan should be given a thorough review by the regional planning committee in five years, with consideration of trends at that time and development events over those five years.

CHAPTER 9

PLAN INTERRELATIONSHIPS

RELATIONSHIP OF PLAN COMPONENTS

The Future Land Use Plan allocates general land uses and specifies the recommended types of land uses and densities for those uses. The availability of sanitary sewer and water facilities influence the shaping of development patterns, including location and density. It is critical to coordinate land use and infrastructure planning so future land use reflects the availability of public sewer and water facilities and public sewer and water facilities are not proposed for those areas not intended for future development.

Through land use planning, such as designation of the Agricultural and Rural, recharge areas for community water supplies can be established. Intensive residential development is not proposed where sewer infrastructure is not planned, available, or in close proximity.

It is important that community facilities, including recreation and open space, are available to serve the residents of the area. The Community Facilities Plan notes the need for additional recreational facilities in the Region. The Plan discusses potential trails for recreational purposes and to better link residential areas to community facilities. Future public facilities should be sited to be consistent with the objectives of the Future Land Use Plan, such as maintaining areas of rural character.

The Future Land Use Plan encourages economic vitality by providing areas for commercial and industrial development and agricultural activities. Preservation of residential neighborhoods can provide support for local businesses and provide a work force. Providing for open space and preservation of community resources supports the quality of life in the area and can encourage additional investment.

It is necessary to maintain a circulation system, which can accommodate generated traffic volumes. In turn, future development should not adversely affect the circulation system. 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 roads are expected to perform. Existing rural and 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 network. Efforts to link the various modes of transportation, such as pedestrian trails, local bus service and multi-modal facilities should explored and encouraged.

PART 2

BACKGROUND STUDIES

CHAPTER 10

REGIONAL SETTING AND INFLUENCES

Introduction

Although the jurisdiction of local government ends at the municipal line, the surrounding communities unavoidably affect the daily lives of the residents. Wise planning requires us to identify and to evaluate the effect of various features beyond the borders of Kutztown, Maxatawny and Lyons. This chapter will place the Region within the context of the larger community and will identify those regional features that have the most direct impact upon residents. This chapter also includes an analysis of the Comprehensive Plans for those portions of the surrounding municipalities that are adjacent to the Kutztown, Maxatawny, Lyons planning region.

Geographic Setting and Influences

The Borough of Kutztown contains a variety of land uses. Kutztown Borough was one of the first settlements in Berks County and much of the layout is in a grid pattern, giving way to a "Main Street" containing a variety of land uses including commercial and offices on the ground-level, and residential uses on the top floors of the historic buildings. This provides a "downtown center" for people to live, work, shop, eat and socialize. Kutztown Borough has a large amount of the land in the "Public/Non-Profit" category due to the presence of the Kutztown University, member of Pennsylvania's State System of Higher Education, which enrolls approximately 10,000 full and part-time students per year. There is a large amount of land dedicated to provide for student housing. There is a concentration of industrial uses along the Kutztown-owned railroad and other scattered commercial uses outside the downtown area. Kutztown also owns a Borough Park providing both active and passive recreation opportunities.

Lyons Borough is mostly residential with a few commercial establishments. These commercial uses are not concentrated in a center like Kutztown Borough, but spread throughout the Borough. A large portion of the Borough bordering Richmond Township is devoted to industry where a portion of East Penn Manufacturing Company, Inc. (Deka Battery) is located. Lyons Borough also owns a community park, providing Borough citizens a variety of active and passive recreation opportunities.

Maxatawny Township is mostly agricultural and rural in nature. Pockets of commercial uses exist throughout the Township and there is a potential growth area for business and industrial uses along Route 222, east of Kutztown Borough. There are also pockets of residential developments, mostly single-family dwelling units, existing in villages and dotting the local roadsides. The north and northeast portion of Maxatawny Township is wooded and contains some steep slopes due to the rolling hills located in this region. The

campus of Kutztown University is located within Maxatawny Township directly adjacent to Kutztown Borough. DeLong Park is located near Bowers.

REGIONAL PLANNING

Vision 2020 - The Berks County Comprehensive Plan

The Berks County Comprehensive Plan designates the Region as a mix of Future and Designated Growth Areas, Rural Conservation, and Agricultural Preservation. The Future and Designated Growth Areas are located immediately surrounding both Kutztown and Lyons, generally following the public sewer and water service areas. In Maxatawny Township, the Future Growth Areas are located along the north side of US 222 from the Borough of Kutztown to Long Lane. The Village of Maxatawny also contains a small Future Growth Area. The remainder of the Township is designated as Rural Conservation and Agricultural Preservation. The Rural Conservation Areas are predominately in the hilly northern part of the Township, and the Agricultural Preservation areas encompass the majority of the Township between US 222 and the Borough of Lyons, and all along the border of Longswamp Township.

The following is a synopsis of the categories contained in *Vision 2020*, which were referenced above:

Agricultural Preservation Area - areas with existing agricultural productivity that are part of large contiguous land areas (minimum of 500 acres) that are devoted primarily to agricultural activities. Farms preserved by conservation easements are included regardless of the location and/or size of the parcel. The primary objective of this designation is to preserve the agricultural land base and promote the long term viability of the agricultural economy.

Rural Conservation Area - areas characterized by prominent woodland coverage, natural areas, slopes of 15% to 25%, and small pockets of prime farmland. These areas are also appropriate for low intensity development, provided the development patterns respect any environmental constraints. Village expansion within Rural Conservation Areas is encouraged to follow the historical pattern of growth and respect the scale and character of the existing area.

Designated Growth Area - areas that are immediately adjacent to existing development within which higher density development including residential, commercial, industrial, institutional, and mixed use is appropriate. Generally, public sewer and water service is in place or planned for the near future.

Future Growth Area - areas outside of and adjacent to Designated Growth Areas, or in rural areas (where public infrastructure is planned) adjacent to existing development.

These areas are appropriate for future development at medium to higher densities provided it accompanies an orderly expansion of public sewer and water services.

Relevant goals from the Berks County Plan include:

- Preserve and promote the agri-business system, agricultural community, and rural character of Berks County.
- There should be an orderly expansion of infrastructure with respect to land capabilities. Growth should be fiscally-efficient, environmentally-sensible, compact urban form.
- Municipalities should seek regional solutions to the increased demand for services.
- Municipalities are encouraged to enact land use regulations that promote sensitive and flexible design techniques.
- The built environment should be strengthened as multi-purpose centers and remain attractive and desirable places to live, work, and recreate.

Comprehensive Plan for Lehigh and Northampton Counties

The Kutztown, Maxatawny, Lyons Planning area is bordered to the northeast by Upper Macungie Township, Lehigh County. The Lehigh/Northampton Comprehensive Plan designates Upper Macungie Township as a "Suburban Township". Townships within this designation are characterized by low density single family residential subdivisions, various types of shopping centers, and greenfield industrial parks. Relevant policies for Suburban Townships include:

- Support sewer and water system expansion to serve new development in suburban locations that are contiguous with current development and are not recommended for agricultural preservation or natural resource protection.
- Advocate greater variety of housing types in suburban townships at higher density than currently exist.
- Oppose strip commercial planning and zoning because they require added public investment in traffic control measures.
- Consider traditional neighborhood development concepts instead of conventional subdivision design practices.

The land use policies and designations of the Plans are generally consistent.

ADJACENT MUNICIPAL PLANNING

The Kutztown, Maxatawny, Lyons planning region is bordered by three regional comprehensive planning areas: The Eastern Berks Region Joint Comprehensive Plan to

the south and east; the Greenwich/Lenhartsville Plan to the north and west; and the Richmond/Fleetwood Plan to the east and south. The following is a brief summary of the relationship of these plans to the Kutztown, Maxatawny, and Lyons Plan.

Eastern Berks Region Joint Comprehensive Plan

The Eastern Berks Region Joint Comprehensive Plan is comprised of four municipalities: Topton Borough, and Longswamp, District, and Rockland Townships. The Plan designates the majority of District and Rockland as Rural, with the Growth Areas located in and around the Borough of Topton and portions of north-central Longswamp Township from Topton to Mertztown. The Plan's border with Maxatawny Township is designated as Conservation and Rural. There are no major inconsistencies in land use designation between the Plans.

Greenwich/Lenhartsville Joint Comprehensive Plan

The majority of the Greenwich Township border with Maxatawny Township is designated as Conservation by the Greenwich/Lenhartsville Joint Comprehensive Plan. This district recommends an average of one dwelling unit per six acres. The Plan also designates the border area surrounding the Old 22 Corridor as Low Density Residential. This district recommends one dwelling unit per acre with no public sewer and water, and two dwelling units per acre if public sewer and water service is available. The designations of the Greenwich/Lenhartsville Future Land Use map are consistent with the Kutztown/Maxatawny/Lyons Joint Comprehensive Plan.

Fleetwood/Richmond Joint Comprehensive Plan

The majority of the border between Richmond Township and Maxatawny Township is designated as Rural Conservation and Agricultural Preservation. The Rural Conservation district is predominately woodlands and steep slopes, and recommends a base density of 2 acre lots, with the following scale based upon slopes: 15%-20% slope require 3 acre lots; and slopes greater than 25% require 4 acre lots. The Agricultural district recommends a sliding scale for residential development, allowing an average of 15 homes on tracts of 650 acres. The border surrounding West Kutztown Road is designated as Commercial and Low Density Residential, and the border between Richmond Township and Lyons Borough is designated as General Industrial and Medium Density Residential. The designations of the Richmond/Fleetwood Future Land Use map are consistent with the Kutztown/Maxatawny/Lyons Joint Comprehensive Plan.

SUMMARY

The region's location adjacent to predominantly rural municipalities combined with the high degree of access provided by US 222, the availability of public sewer and water service, and the presence of Kutztown University, has had a powerful influence upon development. The Berks County Comprehensive Plan designates the area surrounding Kutztown Borough and portions of the US 222 corridor as growth areas, as does the Comprehensive Plans for Lehigh and Northampton Counties. These factors continue to shape the municipalities today, indicating that this planning effort must account for their influence as policies, goals, and objectives are established.

FIGURE 3.1 KUTZTOWN BOROUGH QUICK FACTS

HISTORY: Established 1815

LAND AREA: 1.6 square miles

POPULATION (2000): 5,067
1990-2000 growth rate of 7.7%
Median household income is \$35,677

GOVERNMENT: Borough governed by a six-member Borough Council and Mayor. Boards and Commissions include the Planning Commission and the Zoning Hearing Board. The day-to-day operations are administered by a full-time Borough Manager who is appointed by the Council.

In the Commonwealth of Pennsylvania: 11th Senatorial District and 187th Legislative District.

In the U.S. House of Representatives: 6th Congressional District of Pennsylvania

SEWER AND WATER: Kutztown Municipal Authority
~~Township Kutztown Municipal Authority~~

EDUCATION: Kutztown Area School District – Public school for grades K through 12.

BOROUGH OFFICES: Kutztown Borough
45 Railroad Street
Kutztown, PA 19530

FIGURE 3.2 MAXATAWNY TOWNSHIP QUICK FACTS

HISTORY: Established 1752

LAND AREA: 25.9 square miles

POPULATION (2000): 5,982
1990-2000 growth rate of 4.5%
Median household income is \$51,006

GOVERNMENT: Township governed by a three-member Board of Supervisors. Boards and Commissions include the Planning Commission and the Zoning Hearing Board. The day-to-day operations are administered by a Township Manager.

In the Commonwealth of Pennsylvania: 11th Senatorial District and 187th Legislative District.

In the U.S. House of Representatives: 6th Congressional District of Pennsylvania

SEWER/WATER: Maxatawny Township Municipal Authority
Kutztown Municipal Authority

EDUCATION: Kutztown Area School District – Public school for grades K through 12.

Kutztown University - higher education

KU Early Learning Center – nursery & kindergarten

TOWNSHIP OFFICE: Maxatawny Township
127 Quarry Road, Suite 1
Kutztown, PA 19530

FIGURE 3.3 LYONS BOROUGH QUICK FACTS

HISTORY: Established 1927

LAND AREA: 0.4 square miles

POPULATION (2000): 504
1990-2000 growth rate of 1%
Median household income is \$40,500

GOVERNMENT: Borough governed by a five-member Borough Council and Mayor. Other boards include the Zoning Hearing Board. The Borough does not have a Planning Commission. The day-to-day operations are administered by a part-time Secretary who is appointed by the Council.

In the Commonwealth of Pennsylvania: 11th Senatorial District and 187th Legislative District.

In the U.S. House of Representatives: 17th Congressional District of Pennsylvania

SEWER AND WATER: Lyons Borough Municipal Authority

EDUCATION: Kutztown Area School District – Public school for grades K through 12.

BOROUGH OFFICES: Lyons Borough
P.O. Box 230
Lyons, PA 19536

CHAPTER 11

IDENTIFICATION OF ISSUES - PUBLIC PARTICIPATION

For a Joint Comprehensive Plan to be 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 forming the policies of the Joint Plan.

The Pennsylvania Municipalities Planning Code (MPC) requires public input at the *end* of the process, in the form of public meetings and public hearings. Restricting public involvement to merely what is required is not likely to produce a successful plan, as the public – quite rightly – will have little sense of participation in the process or ownership of the final document: they are being asked to approve a plan in which they had no voice. Early and frequent public participation is essential to the development of a practical, community-based Comprehensive Plan, regardless of the number of municipalities that are involved.

The public participation component of the Kutztown, Maxatawny, Lyons Joint Comprehensive Plan far surpasses the requirements of the MPC. Public input was sought early in the planning process, well before any policies or future land uses were determined. A three-pronged approach to direct public input was implemented.

- The Committee held monthly meetings starting in 2001 for the duration of the planning process. Among the earliest actions of the Committee was to identify ways to gain input of residents from the Township and Boroughs, as well as business owners regarding their perceptions of the municipalities, and any critical issues they share.
- SSM conducted a series of interviews (some via telephone, others in person) with specific individuals identified by the Committee. The selected persons were chosen because of their positions within the community and the particular insights those positions gave them. The interviewees included a variety of public officials, Kutztown University and Kutztown Area School District representatives, and local business leaders. These individuals were questioned about their specific likes and dislikes in the region, what they felt were the most pressing issues facing the community, what they would like the community to become, and other questions more directly related to their particular areas of expertise.
- The Committee and SSM prepared a written questionnaire that was mailed to approximately 1,000 households in the Region. The written questionnaires allowed the responders to be anonymous, but some personal information was asked in order to identify concerns that were more prevalent among specific

demographic groups. The questions were largely similar to those asked in the interviews, but were structured in a way that allowed for quantitative analysis of the responses. Questionnaire responses were reviewed and analyzed by SSM.

This chapter will include an analysis of the results of that outreach, including a summary of the questionnaire results.

Actual detailed questionnaire results for each municipality can be found in Appendix A.

QUESTIONNAIRE ANALYSIS AND PLANNING CONCLUSIONS

Approximately 1,000 surveys were mailed out, distributed among the three municipalities based upon population. 389 surveys were returned, a response rate of nearly 39%. More than half (204) of the respondents were long-time residents of the Region, having indicated that they have lived in their respective municipality for over 20 years. 80 respondents indicated living in the Region for 11-20 years, while the remaining 105 respondents lived in the region ten or less years.

The age distribution of the respondents was as follows:

- 18 to 24 years old - zero responses;
 - 25 to 44 years - 85 responses;
 - 45 to 64 years - 149 responses;
 - 65 years and older - 119 responses.
-
- When asked what they liked most about living in the Region, and given a list of 28 community attributes, the majority of the respondents indicated that they liked the “rural and small town atmosphere, farmland, and open space,” thereby making these aspects of the community the most consistently mentioned. “Housing choices and safety” were the next most frequently selected choices.

On the other extreme, when asked what they liked LEAST about living in the Region, an overwhelming majority indicated “high tax rates”. A distant second in the least appreciated aspects of the Region was the presence of “student housing”, followed in order by “lack of parking”; “traffic”; and “loss of farmland”.

- In the next question, respondents were asked to select and rank from a list of twenty-one items, what they believed to be the five most important planning issues that need to be addressed in the Region. Given the format of responses, we note that the total number of “votes” – regardless of ranking – indicates which issues are of greatest concern to the residents. The rankings are a gauge of the strength of the opinions. The top five issues were:

1. Managing Growth
2. Tax base
3. Preservation of farmland
4. Encouraging Economic Development
5. Preservation of Open Space

- When asked what they would support tax dollars be spent on, and given a list of possible issues and programs, the issues/programs deemed most worthy of respondent's tax money were:
 - Road Improvements (93% yes);
 - Protection of environmental resources (85% yes);
 - Public Sewer and Water Improvements (81% yes);
 - Increased Police / Public safety (78% yes);
 - Parks and Recreation (74% yes).

Only one Issue received less than fifty percent support for use of respondent's tax money, and that was Public Transportation (59% no).

- The next set of questions involved park and recreation facilities. Residents were asked how frequently they used the facilities; if more facilities were needed; and if so, what specific type of facility would be desired.

In answering the first part of the question, 13% of respondents indicated they used the Region's recreation facilities one or more times per week; 25% said one to three times per month; 42% said less than once a month; and 20% indicated they do not use the facilities at all.

When asked if additional facilities were need in the Region, 37% said "yes", 41% said "no", and 22% were undecided. The most frequently requested facility for "yes" respondents were trails, parks, and nature preserves.

- Residents were asked if they believed it was important to preserve the Region's farmland, and the response was an overwhelming yes, with 83% of respondents choosing "yes", 9% choosing "no", and 8% undecided.
- Residents were presented with a list of 22 different land uses for the Region, ranging from agriculture to 'Big Box Retail', and then asked to indicate by yes or no if they are appropriate. The top five selected uses were:

- Health services;
- Tourism and Cultural Attractions;

- Restaurants;
- Offices;
- Agriculture

The five least wanted land uses included:

- Big Box Retail;
 - Outlet Stores;
 - Warehousing Facilities;
 - Wholesale Trade;
 - Medium to Heavy Manufacturing
- Residents were given a list of 12 transportation issues to designate as “very serious”, “moderately serious”, and “not serious”. Issues that were deemed “very serious” included:
 - Parking in Kutztown Borough;
 - Route 222;

“Moderately serious” issues included:

- Truck traffic
 - Main Street in Kutztown;
 - Inadequate parking in Kutztown;
 - Poor condition of sidewalks.
- The next question asked residents to indicate what types of housing is needed in the Region. Housing for seniors received the most support, with 60% choosing “yes”. Housing for Young Couples, and Housing for Families were the only other choices above a 50% “yes” vote, tallying 51% each.

Student housing received the most “no” votes, with 75% choosing against student housing in ‘existing units’, and 71% against ‘large complexes’. Rental units also faired poorly, receiving a 74% “no” vote.

- The final question referred to the pros and cons of providing regional services. The residents were given a list of 12 services as yes or no options for providing these services on a regional, rather than individual municipal basis. Every issue received responses well over 50%, indicating that the respondents are in favor of regional services. Some of the most popular were:
 - Road Improvements/Connections
 - Emergency Medical Services

- Equipment Sharing
- Fire / Police Services
- Sewer and Water Service

ADDRESSING SURVEY FINDINGS IN THE COMPREHENSIVE PLAN

This Joint Comprehensive Plan will include a number of distinct plan elements as required by the Pennsylvania Municipalities Planning Code. The responses from the residents could affect these elements in the following ways.

Land Use: Respondents from both the Boroughs and the Township state that they like the rural and small town character of their communities. While "character" is a somewhat vague quality touching on a range of aspects, there is a strong visual element associated with it. Preservation of community character may be largely (although not entirely) addressed by the land use and housing elements of the plan. These elements should therefore provide for growth that represents a natural evolution of the existing development patterns rather than a dramatic departure from those forms.

Economic Development: The respondents were clear that agricultural preservation and the maintaining of the rural and small-town atmosphere of the Region were top priorities; however, the encouragement of economic development was also highly supported. Major concerns were raised regarding the tax rates of the municipalities, and the need for economic development in the form of non-residential development. There was also considerable support for expansion and improvement of the sewer and water facilities, a major factor in attracting economic development. This suggests a coordinated economic development strategy whereby smaller-scale uses could be directed to the Boroughs and Villages, and larger-scale enterprises are directed toward the US Route 222 corridor.

Transportation: Transportation concerns were extremely important to respondents of the survey. Respondents expressed a strong need for road improvements, new road connections, additional parking in Kutztown, and a need for congestion management on US Route 222.

Community Facilities

All respondents indicated a high level of confidence with their tax dollars going toward emergency services (i.e., police and fire protection), sewer and water service, and parks. Respondents also indicated the desire to see these services performed on a regional basis.

**Resource Conservation &
Historic Preservation:**

Respondents indicated strong interest in farmland/open space preservation. There was also support for water quality protection.

Historic preservation received moderate support from respondents, but received further indirect support through the respondent's high opinion of the Region's cultural facilities and attractions, which tend to go hand-in-hand with historic facilities.

CHAPTER 12

POPULATION AND HOUSING NEEDS

INTRODUCTION

This chapter will discuss existing population and housing characteristics for the Kutztown, Maxatawny, Lyons planning area, including past, present and future population projections. Analyzing the three municipalities together will help one to better understand the regional growth trends that are experienced. National and State growth patterns show that as older boroughs continue to have development, growth pressure is displaced upon the adjacent townships. This pattern applies to Kutztown Borough where most of the lands are already developed and there is limited space for new residential development within its limits. This chapter will focus on providing population and housing projections, centering on expected housing increases and discussing how much land is expected to be consumed by residential growth in the next ten to twenty (10–20) years for the region. Two key factors which can influence population growth are the use of effective agricultural preservation zoning and availability of public sewer and water.

Included in this chapter are tables that show the past, present and future conditions and provide projections, show future growth possibilities, and depict how the Boroughs, Township, as well as the Kutztown Area School District, have been affected by growth pressures. This will aid in future decision-making processes for local officials, as well as point out some intermunicipal cooperation opportunities in the future. By presenting the information in a broader scale, the municipalities can better understand how they fit into the region and can help envision what types of growth is occurring in neighboring municipalities.

Additional population and housing data has been collected and is found in Appendix 2. The tables found in Appendix 2 include: *Gender; Owner and Renter Occupied Households and Average Persons per Unit; Racial Characteristics; Income, Poverty and Education Characteristics; Persons by Age; Employment by Industry; Employment by Occupation; Housing Occupancy, Tenure and Value; Housing Type; Households by Type; Year House was Built and Year Person Moved Into Home; Place and Means of Transportation to Work.*

REGIONAL DEMOGRAPHICS

The following lists contain general Census demographic data for each of the three municipalities. These lists are provided as a convenient reference for basic population data. Future population projections are provided later in this chapter. More detailed breakdowns of this data are available at www.census.org.

The Census Bureau defines "household" as "all the people who occupy a housing unit as their usual place of residence." This includes individuals who live alone as well as any combination of people who may reside together. In contrast, "family" is a *type* of household, and is defined as "two or more people who reside together and who are related by birth, marriage, or adoption." Also, the census counts population by place of *actual residence* on the census date, which is April 1. As a result, Kutztown University students living in the Boroughs or Township (including those in dormitories) are counted as residents.

BASIC DEMOGRAPHIC CHARACTERISTICS

All figures from 2000 Census. See preceding text for explanation of difference between "household" and "family." "Region" indicates the Borough and the Township combined.

	Kutztown	Maxatawny	Lyons
Total Population	5,067	5,982	504
Total Households	1,874	1,348	203
Total Families	886	997	134
Racial Composition*			
White	97%	96.1%	97.6%
African-American	1%	2%	1%
Other, including mixed racial composition	2.9%	2.7%	1.4%
Household Characteristics			
Average number of persons	2.49	2.64	2.48
Married-couple households	704 (37.6%)	871 (64.6%)	96 (47.3%)
Households with children under 18	270 (14.4%)	339 (25.1%)	37 (18.2%)
Female-headed households	133 (7.1%)	76 (5.6%)	27 (13.3%)
Single persons	500 (26.7%)	257 (19.1%)	44 (21.7%)
Persons over 65 living alone	247 (13.2%)	113 (8.4%)	9 (4.4%)
Age Characteristics			
Median age	24.5	21.4	32.8
Percentage of persons under 19	19.5%	37.7%	24.8%
Percentage of persons aged 19-24	31.5%	21.8%	13.7%
Percentage of persons aged 25-44	19%	16%	32.2%
Percentage of persons aged 45-64	13.8%	16.4%	18.7%
Percentage of persons aged 65 and over	16.3%	8.3%	10.8%
Income Characteristics			
Median household income	\$35,677	\$51,006	\$40,500
Median family income	\$49,653	\$57,813	\$42,292
Per capita income	\$18,803	\$15,586	\$20,459
Persons below poverty line	29.4%	8.1%	8.9%
Families below poverty line	3.8%	3.4%	3.2%

SOURCE: U.S. Bureau of the Census, 2004.

*In combination of more than one race, the total percentages may add to greater than 100% because individuals report more than one race.

The effects of the large proportion of students are reflected in the high proportion of single-person households, low median age, a high percentage of persons aged 19 to 24 (especially in Maxatawny and Kutztown), and a large percentage of persons below poverty level (most pronounced in Kutztown).

KUTZTOWN, MAXATAWNY, LYONS - POPULATION AND HOUSING TRENDS

Table 1 shows total population, land areas and persons per square mile for Kutztown Borough, Lyons Borough, and Maxatawny Township over the past ten (10) years (1990 and 2000).

Municipality	1990 Census Population	Persons Per Square Mile	2000 Census Population	Persons Per Square Mile	Land Area (Square Miles)
Kutztown Borough	4,704	2,940	5,067	3166.9	1.6
Lyons Borough	499	1,247.5	504	1,260	0.4
Maxatawny Township	5,724	218.5	5,982	228.3	26.2
<i>Total Region</i>	<i>10,927</i>	<i>387.48</i>	<i>11,553</i>	<i>408.97</i>	<i>28.2</i>
Berks County	336,523	389.49	373,683	432.5	864

Source: 1990 and 2000 U.S. Census Bureau

Table 2, which is broken up into 3 sections, provides 1990 and 2000 population data as well as population projections for the entire school district for 2010 and 2020. Table 2 also shows the percentage population change from 2000-2010, 2010-2020, and 2000-2020.

TABLE 2: Population Projections**1990 – 2000 - 2010**

Municipality	1990 Census	2000 Census	Change, 1990-2000		2010 Population Projections	Change 2000-2010	
			Number (Persons)	Percent Change		Number (Persons)	Percent Change
Kutztown Borough	4,704	5,067	363	7.7%	5,368	301	5.9%
Lyons Borough	499	504	5	1.0%	534	30	5.9%
Maxatawny Township	5,724	5,982	258	4.5%	7,396	1,414	23.6%
Total Region	10,927	11,553	626	6%	13,298	1,745	15%
Albany Township	1,547	1,662	115	7.4%	1,761	99	6%
Greenwich Township	2,977	3,386	409	13.7%	3,587	201	6%
Lenhartsville Borough	195	173	-22	-11.3%	183	10	5.8%
Total School District- Projections	15,646	16,774	1,128	7.2%	18,829	2,055	12.3%

Population projections source: Berks County Planning Commission

Note: Population projections were completed using the "Shift-Share Allocation" method. This method takes a local share of the countywide total (from Census 2000) and applies that same share to countywide projections from future years. This method is purely mathematical and does not account for local factors (birth rates, local zoning, development patterns, etc.). As such, all municipalities will show increases.

TABLE 2 continued: Population Projections**2000- 2010 - 2020**

Municipality	2000 Census	2010 Projection	Change, 2000-2010		2020 Population Projections	Change 2010-2020	
			Number (Persons)	Percent Change		Number (Persons)	Percent Change
Kutztown Borough	5,067	5,368	301	5.9%	5,689	321	6%
Lyons Borough	504	534	30	5.9%	566	32	6%
Maxatawny Township	5,982	7,396	1,414	23.6%	7,839	443	6%
Total Region	11,553	13,298	1,745	15%	14,094	796	6%
Albany Township	1,662	1,761	99	6%	1,866	105	6%
Greenwich Township	3,386	3,587	201	6%	3,801	214	6%
Lenhartsville Borough	173	183	10	5.8%	194	11	6%
Total School District Projections	16,774	18,829	2,055	12.3%	19,955	1,126	6%

Population projections source: Berks County Planning Commission

Note: Population projections were completed using the "Shift-Share Allocation" method. This method takes a local share of the countywide total (from Census 2000) and applies that same share to countywide projections from future years. This method is purely mathematical and does not account for local factors (birth rates, local zoning, development patterns, etc.). As such, all municipalities will show increases.

TABLE 2 continued: Population Projections		
2000 - 2020		
	Projected Total Change 2000-2020	
	Number (New Persons)	Percent Change
Kutztown Borough	622	12.2 %
Lyons Borough	62	12.3 %
Maxatawny Township	1,857	31 %
Total Region	2,541	22%
Albany Township	204	12.3 %
Greenwich Township	415	12.2 %
Lenhartsville Borough	21	12.1 %
Total School District Projections	3,181	19 %

Population projections from Berks County Planning Commission
Sources: U.S. Census Bureau; Berks County Planning Commission.

According to the U.S. Census Bureau, the Boroughs of Kutztown and Lyons both gained population from 1990 through 2000. This is inconsistent with national trends in which the population is relocating outside of the urbanized boroughs and local centers and moving out to the surrounding Townships. Maxatawny Township grew as well, which was not unexpected but what is surprising is that it grew at a much slower rate. As shown on the above population projection tables, all three municipalities are projected to grow over the next ten and twenty years.

Regional projections show that the population of the Kutztown, Maxatawny, Lyons Area is predicted to grow approximately 22% over the next twenty (20) years. The Kutztown Area School District is projected to grow at 19%. The population projections are then used as a guide to calculate the amount of housing that will be necessary to accommodate this kind of growth. It is important to remember that the population projections used are mathematically-based, and therefore will not take into account factors such as zoning, birth rates, death rates, or development pattern. That said, the projections are an acceptable means to estimate future housing needs.

Table 3 shows the past ten years total housing units, renter and owner occupied households and the average household size. This gives an indication on the trends of the number of housing units and owner-occupied housing units within the municipalities. This gives an indication of what impact student housing has overall in the total number and percentages of the households throughout the area.

**TABLE 3
OCCUPIED HOUSEHOLDS AND AVERAGE PERSONS PER
OCCUPIED HOUSING UNITS- 1990**

Municipality	Total Housing Units	Total Occupied Housing Units	Owner-Occupied Housing Units	Renter-Occupied Housing Units	Average Household size (Persons)	Vacant Housing Units
Kutztown Borough	1,805	1,754	894	860	2.61	51
Lyons Borough	220	214	129	85	2.33	6
Maxatawny Township	1,270	1,222	1,005	217	2.76	48
Total Region	3,295	3,190	2,028	1,162		105

In 1990, there were a total of 1,270 reported dwelling units in Maxatawny Township, with 96% of the units occupied. Of those 82% of the housing units were owner-occupied and 18% were renter-occupied. In Kutztown Borough there were a total of 1,805 housing units, with 97% of the units occupied. 51% of the housing units were owner-occupied while 49% were renter-occupied. In Lyons Borough, there were a total of 220 housing units, with 97% occupied. 60% were owner occupied and 40% renter-occupied. There were a higher percentage of rental units in both Lyons and Kutztown compared to Maxatawny Township. Kutztown's high rate of renter-occupied housing is obviously due to the presence of Kutztown University. Though there were a total of 174 vacant housing units throughout the Boroughs and the Township, the region has an extremely low vacancy rate, at just over 3%.

**TABLE 3 Continued
OCCUPIED HOUSEHOLDS AND AVERAGE PERSONS PER
OCCUPIED HOUSING UNITS- 2000**

Municipality	Total Housing Units	Total Occupied Housing Units	Owner-Occupied Housing Units	Renter-Occupied Housing Units	Average Household Size (Persons)	Vacant Housing Units
Kutztown Borough	1,940	1,874	954	920	2.49	66
Lyons Borough	216	203	120	83	2.48	13
Maxatawny Township	1,384	1,348	1,100	248	2.64	36
Total Region	3,540	3,425	2,174	1,251	2.54 (avg)	115

In 2000, there were a total of 1,940 total housing units reported in Kutztown Borough, in which 97% were occupied. The percentage in ownership of occupied units remained the same as 1990 with 51% owner-occupied and 49% renter-occupied. In Lyons Borough, there were 216 units, with 94% occupied. 59% were owner-occupied, and 41% were renter-occupied, an increase in renter-occupied units of 1% since 1990. In Maxatawny Township, there were a total of 1,384 housing units reported, in which 97% were occupied. Maxatawny saw no change in ownership percentages since 1990, with 82% of the housing units owner-occupied and 18% renter-occupied.

TABLE 3 Continued
1990-2000 CHANGE IN TOTAL HOUSING UNITS

Municipality	Total Change in Housing Units	Total Occupied Housing Units	Owner-Occupied Housing Units	Renter-Occupied Households	Average Household Size (Persons)	Vacant Housing Units
Kutztown Borough	135	120	60	60	-0.12	15
Lyons Borough	-4	-11	-9	-2	0.15	7
Maxatawny Township	114	126	95	31	-0.12	-12
Region	245	235	146	89	-0.03	10

In Kutztown, a total of 135 new housing units were constructed between 1990 and 2000. There was a total increase of 7% in occupied housing units, including an increase of 7% of both owner-occupied and renter-occupied housing. There was an increase of 15 vacant housing units from 1990 to 2000; however, the vacancy rate still remains steady at only 3%.

In Lyons, there was a net loss of four housing units between 1990 and 2000. There was a total decrease of 5% in occupied housing units including a decrease of 7% of owner-occupied units, and a decrease of 2% of renter-occupied units. There was an increase of 7 vacant housing units from 1990 to 2000, increasing the vacancy rate from 3% in 1990 to 6% in 2000.

In Maxatawny Township a total of 114 new housing units were constructed between 1990 and 2000. There was a total increase of 9%. Occupied units increased a total of 10%. Owner-occupied units increased by 9%, and renter-occupied units increased by 14%, an indication of Kutztown's saturated student-housing market. Thanks to the net

loss of 12 vacant units, the vacancy rate in the Township dropped from 3% in 1990 to 2% in 2000.

Overall, the region has gained 235 occupied housing units, an increase of 7%. The region has a very low vacancy rate of 3%, which indicates a high quality of existing housing stock. Student rental housing units have had the most effect on the housing market in the region, with Kutztown seeing a 7% increase in renter occupied units, and Maxatawny a 14% increase. The Housing Plan will describe methods to deal with the impact of additional student housing in the region.

Table 4 provides endorsed subdivision data from 2002 and 2003 for all three municipalities. The source of the information is the Berks County Planning Commission Annual Subdivision Reports, which include plans that have been approved and endorsed, but not yet built out.

TABLE 4: ENDORSED SUBDIVISION DATA
(Based on Number of Dwelling Units Approved)
2002-2003

Municipality	No. of Single Family	No. of Semi-Detached	No. of Apartment Units	No. of Townhouse Units	No. of Manufactured Homes	Net Increase Residential D.U.s
Kutztown Borough 2002	0	0	0	0	0	0
Kutztown Borough 2003	35	0	18	0	0	53
Lyons Borough 2002	0	0	0	0	0	0
Lyons Borough 2003	0	0	0	0	0	0
Maxatawny Township 2002	4	0	0	0	0	4
Maxatawny Township 2003	5	0	0	0	0	5
Total Permits issued in region, 2002-2003	44	0	18	0	0	62

D.U.s = Dwelling Units

Source: Berks County Planning Commission Annual Subdivision Reports

During the two-year time span from 2002 to 2003, the region experienced a net increase of 62 residential housing units approved for development. 53 were in the Borough of Kutztown and 9 were in Maxatawny Township. The Borough of Lyons did not have any new residential units approved during this time period.

STRUCTURAL CHARACTERISTICS

The condition of owner-occupied housing within the Borough of Kutztown is generally good and there are few vacant properties. However, there has been a trend in recent years for older homes to be occupied by elderly persons, young families just starting housekeeping or students. Older homes typically need more maintenance and upkeep than newer homes. Elderly persons on a limited income can not always afford to make building improvements. Young families – with working parents, young children and a tight budget – also have a hard time keeping up with the maintenance associated with home ownership. Absentee landlords are often lax in making building repairs. In some many cases, the demand for student housing has resulted in traditional single-family homes being converted to rental units with a far greater occupancy rate than was originally intended for the prior single-family use. The increased wear and tear on these structures combined with a lack of building maintenance places older homes at risk for deterioration. Since many of the older homes that cannot be converted from single-family dwellings to student rentals by virtue of the Borough's student separation zone are moderate or low in price, the deterioration of older houses in Kutztown could adversely impact the affordability of housing in the community. Additionally, older homes located in zoning districts in which the student separation ordinance does not apply are often sold at artificially inflated prices due to their revenue potential, effectively prohibiting most young and/or middle-income families from purchasing them and maintaining them as single-family dwellings or reconverting multi-unit structures to single-family use.

STUDENT HOUSING AND RELATED PROBLEMS

Although the university is working on the community relations problem resulting from the housing of students in the Borough, transient housing growth has slowed at best. The mixture of families and students, with commercial establishments and the University within a small geographic space has resulted in problems of noise, congestion, high rents and concerns about a skewed demographic distribution and an eroding tax base.

FUTURE HOUSING AND ACREAGE PROJECTIONS – 2000 - 2020

Table 5 shows housing needs and projected acreage needed to accommodate the growing population over the next ten and twenty years. This was based on the Census Bureau's 2000 housing information and on population projections obtained from the Berks County Planning Commission.

Table 5 also shows acreage requirements for residential purposes in the Boroughs and Township using different scenarios based on the net density of future development. Acreage requirements range from 5,000 to 7,500 square foot (s.f.) lots up to 2 acre lots. Obviously, the lower the density, the higher amount of acreage would be needed for development. Table 5 also shows new household projections based on the assumption

that the average household size for each municipality will remain at the 2000 number. In Kutztown Borough, if higher density housing developments were encouraged (4.2 units per acre) then the acreage needed by 2010 is 28.81 acres, and 59.52 by 2020. If the Borough would promote less dense, more land consuming housing developments (1.1 units per acre), the Borough would need to develop an additional 110 acres by 2010, and 227.27 by 2020. In Lyons, the 2010 acreage ranges from 2.86 with higher density to 10.91 acres with lower density, and in 2020 the ranges are 5.95 to 22.73 additional acres. Typically the Boroughs of Kutztown and Lyons would not encourage one acre to two-acre lot residential developments.

In Maxatawny Township, acreage requirements range from 127.62 acres (at 4.2 units per acre) to 1,340 acres with 2 acre lots (0.4 units per acre) by 2010. By 2020, those acreage amounts increase to 167.38 for higher density, and 1,757.5 for the lowest density. The Future Land Use Plan will recommend the most appropriate locations and densities for future development in both the Boroughs and the Township.

The Borough of Kutztown has approximately 1,025 acres within its municipal boundary, or 1.6 square miles total. Combining all of the residential use categories from the Existing Land Use Map, the Borough has 306.7 acres, approximately 30% of total land area, in residential use: approximately 260 acres in Single-Family residential and 46 acres in Multi-Family residential. There is limited room for new development within the Borough.

Using the same analysis for Lyons, the Borough contains approximately 248 acres, or 0.4 square miles. 43% of this acreage, over 107 acres, is in agricultural use, which is unusual in a Borough. Residential uses make up 18% of the acreage with 38.7 acres single family, and 6.1 acres multi-family. The other significant land use in Lyons is industrial due to the presence of Deka Battery, which contains 32.2 acres, approximately 13% of the Borough's total land area.

The total area of Maxatawny Township is 16,835 acres, approximately 25.9 square miles. 10,722 acres are designated as agriculture, and approximately 1,360 acres are designated as residential including: 1,337 acres as single family, and 23 acres as multi-family. By planning where the residential growth should occur and by encouraging higher densities with required open space, protection of agricultural areas, and protection of environmentally sensitive areas, the Township could preserve its rural aspect while accommodating the expected population growth.

**TABLE 5
HOUSEHOLD AND ACREAGE REQUIREMENTS 2000-2010**

Area	Projected Population Increase (2000-2010)	Average Household Size*	Projected Household Increase	Acreage Requirements Assuming 5,000-7,500 ³ Sq.Ft. Lots	Acreage Requirements Assuming 10,500 Sq.Ft. Lots	Acreage Requirements Assuming 12,000 Sq.Ft. Lots	Acreage Requirements Assuming 32,000 Sq.Ft. Lots	Acreage Requirements Assuming 1 Acre Lots	Acreage Requirements Assuming 2 Acre Lots
Kurtztown Borough	301	2.49	121	28.81	35.59	41.72	110	N/A	N/A
Lyons Borough Maxatawny Township	30	2.48	12	2.86	3.53	4.14	10.91	N/A	N/A
	1,414	2.64	536	127.62	157.65	184.83	487.27	670	1,340
Region	1,745	--	669	159.29	196.77	230.69	608.18	--	--

* Assume Average household size value of 2000 Census for each municipality

Note: Assume 20% of tract will be devoted to uses other than lot areas (i.e., utilities easements, rights-of-way for roads, open spaces, and other, etc.)

Note: Assume Net Densities of 4.2, 3.4, 2.9, 1.1, 0.8, 0.4 dwelling units per acre, respectively.

³ The 5,000 sq.ft. lot size and 7,500 sq.ft. uses an average net density of 4.2 dwelling units per acre.

Methodology of Table 5: Take projected population increase and divide average household size (from the 2000 census assuming it will not change) = Projected household increase. Take Projected household increase and divide it by the assumed net densities of dwelling units per acre (respectively) = acreage requirements.

**TABLE 5 (CONTINUED):
HOUSEHOLD AND ACREAGE REQUIREMENTS 2000-2020**

Area	Projected Population Increase (2000-2020)	Average Household Size*	Projected Household Increase	Acres Requirements Assuming 5,000-7,500 ³ Sq.Ft. Lots	Acres Requirements Assuming 10,500 Sq.Ft. Lots	Acres Requirements Assuming 12,000 Sq.Ft. Lots	Acres Requirements Assuming 32,000 Sq.Ft. Lots	Acres Requirements Assuming 1 Acre Lots	Acres Requirements Assuming 2 Acre Lots
Kutztown Borough	622	2.49	250	59.52	73.53	86.21	227.27	N/A	N/A
Lyons Borough	62	2.48	25	5.95	7.35	8.62	22.73	N/A	N/A
Maxatawny Township	1,857	2.64	703	167.38	206.76	242.41	639.09	878.75	1,757.5
Region	2,541	--	978	232.85	287.64	337.24	889.09	--	--

* Assume Average household size value of 2000 Census for each municipality.

Note: Assume 20% of tract will be devoted to uses other than lot areas.

Note: Assume Net densities of 4.2, 3.4, 2.9, 1.1, 0.8, and 0.4 dwelling units per acre, respectively.

³ The 5,000 sq.ft. lot size and 7,500 sq.ft. uses an average net density of 4.2 dwelling units per acre.

Methodology of Table 5: Take projected population increase and divide average household size (from the 2000 census assuming it will not change) = Projected household increase. Take Projected household increase and divide it by the assumed net densities of dwelling units per acre (respectively) = acreage requirements.

GROWTH FACTORS

There are many key factors which can influence population growth in the region. Type and density of development; enactment of agricultural preservation zoning; sewer and water service and capacity; regional location; and expansion of Kutztown University will all play a role in how the municipalities grow over the next twenty years.

The potential Sacony Authority Waste Water Treatment Plant, if constructed, will allow expanded capacity for both residential and non-residential development in the region. The availability and expansion of sewer and water facilities will increase development pressure in agricultural and rural areas.

Currently, both of the Boroughs' water and sewer services extend outside their respective Borough limits into Maxatawny Township and Richmond Township.

The continued growth Kutztown University can affect the residential neighborhoods in all municipalities. Municipalities are concerned about the conversion of housing units to student apartments, which can adversely impact neighborhoods. The University intends to expand housing opportunities for students. The presence of the University brings with it educational and cultural amenities that can attract residential and economic growth in the Region.

The location of the region, with access to and from Allentown and Reading via US 222, and other larger urban centers via Interstate 78, is also a key factor for growth. Commuters who work in these larger urban areas may find the small town atmosphere of the Kutztown, Maxatawny, Lyons area as an attractive and convenient place to live.

CHAPTER 13

EXISTING LAND USE

INTRODUCTION

It is impossible to plan for the future land use without first understanding what patterns exist today. This chapter discusses the existing land uses by category and acreage in the Kutztown, Maxatawny, Lyons Region. The approximate acreage of each category is provided for a comprehensive overview of how land was utilized at the time this Plan was developed. Existing land use patterns not only have a significant impact on the development of the future land use plan, but they affect circulation within the area and the demand for community facilities and services as well. By understanding how land is utilized, one can plan for uses that may be desired or that are currently lacking in the Region.

The Berks County Planning Commission and Berks County Mapping Office supplied the GIS (Geographic Information System) information to create the Existing Land Use Map for the planning area. This data was based on the Berks County tax assessment of each parcel in the study area. Site verification was performed to confirm the accuracy of the data, and the Joint Planning Committee provided insight as well.

Existing Land Uses are classified into the following types for mapping purposes:

- Single-Family Residential
- Multi-Family Residential
- Rural/Rural Residential
- Commercial
- Industrial
- Public/Non-Profit
- Agricultural/Agribusiness
- Commercial Recreation
- Transportation/Rights-of-Way
- Woodland
- Water

The Existing Land Use Map should be used in conjunction with other maps in this document. The Agricultural Resources Map is particularly helpful in further analyzing

the agriculture/agribusiness uses within the Region. The Agricultural Resources Map shows prime farmland, purchased agricultural easements, and agricultural security areas within the Region.

LAND USE PATTERNS

The Kutztown, Maxatawny, Lyons Region has experienced population growth and expansion over the past twenty years. The Borough of Kutztown and surrounding areas of Maxatawny Township create a center of population and economic activity in the northeast section of Berks County, and provide a wide array of services to the planning region as well as surrounding municipalities. Though the pressures of residential development have extended from the Boroughs (mainly Kutztown) into Maxatawny Township, the majority of the Region remains agricultural in nature.

Residential development dominates the Borough of Kutztown, making up nearly 30% of the Borough's land use. However, there are other characteristics and land use categories within the Borough which make it unique, such as the downtown commercial and mixed-use districts. This commercial area, located along Main Street, plays a vital role as a regional community center for area residents, providing shops, restaurants, taverns, and professional offices. Public/Non-profit uses, nearly 18% of the existing land use, consist mostly of the Kutztown Area School district facilities, located in the southeastern portion of the Borough. The Kutztown Borough Park is also included in this category.

The Borough of Lyons is very rural in nature, including over 43% agricultural uses within its borders, highly unusual for a Borough. The remainder of the Borough is primarily residential (18%) and industrial (13%). The high percentage of industrial use can be attributed to the presence of East Penn Manufacturing (Deka Battery).

Maxatawny Township has also experienced residential development, generally extending out from the Boroughs along the main transportation corridors. The Township, however, is dominated by agricultural uses which make up over 63% of the existing land uses. Maxatawny Township is also home to Kutztown University, which accounts for the majority of the Public/Non-profit acreage within the Township.

Below are the descriptions of each of the land use categories displayed on the Existing Land Use Map, as well as acreage developed under each category. Trends are discussed following the descriptions.

FIGURE 13.1 EXISTING LAND USE ALLOCATION

Figures in acres; percentages may not sum to 100.0 due to rounding error. Note that the "residential" category is divided into "single-family" and "multi-family."

CATEGORY	KUTZTOWN	MAXATAWNY	LYONS	REGION TOTAL
Residential	306.7 (29.9%)	1,360.4 (8.1%)	44.8 (18.1%)	1,711.9 (9.5%)
<i>Single-Family</i>	260.2 (25.3%)	1,337.4 (7.9%)	38.7 (15.6%)	1636.3 (9.1%)
<i>Multi-Family</i>	46.5 (4.5%)	23.1 (<1%)	6.1 (2.4%)	75.7 (<1%)
Agriculture/Agribusiness	86.5 (8.4%)	10,722.4 (63.7%)	107.3 (43.4%)	10,916.2(60.1%)
Public/Non-Profit	182.5 (17.8%)	625.1 (3.7%)	11.6 (4.7%)	819.2 (4.5%)
Commercial	145.5 (14.2%)	642.5 (3.8%)	2.9 (1.1%)	790.9 (4.4%)
Industrial	77 (7.5%)	267.9 (1.6%)	32.4 (13.1%)	377.3 (2.1%)
Transportation (roads and railroads)	194.3 (18.9%)	649.9 (3.9%)	30.4 (12.3%)	874.6 (4.8%)
Commercial Recreation	0.9 (<1%)	14.2 (<1%)	2.6 (1.1%)	17.7 (<1%)
Rural	7.2 (<1%)	914.9 (5.4%)	15.8 (6.4%)	937.9 (5.2%)
Woodland	23.8 (2.3%)	1,585.3 (9.4%)	0 --	1,609.1 (8.9%)
Water	0.6 (<1%)	53.2 (<1%)	0 --	53.8 (<1%)
TOTAL	1,025	16,835.8	247.8	18,108.6

SOURCE: Berks County Planning Commission; field verified by SSM, 2004.

Single-Family Residential

Specific development types included in this category are single-family dwellings, two-family dwellings (when constructed as semi-detached or "twin" houses), mobile homes, and mobile home parks.

The Boroughs of Kutztown and Lyons were developed in a grid pattern with blocks created by streets intersecting at right angles, alleyways, and sidewalks on both sides of each street. The vast majority of the residential uses within both Boroughs are single family residential uses.

The residential areas of Maxatawny Township do not have this same grid growth pattern, even where located adjacent to the Boroughs, so there is no real sense of extension of Kutztown or Lyons. The Township developed mostly as an agricultural community, with the largest concentrations of single-family residential uses located in the Villages of Bowers and Maxatawny, as well as a few scattered subdivisions throughout the Township.

Multi-Family Residential

Multi-family residential uses are scattered throughout the Township and Boroughs, and cover substantially less total acreage than single-family residential housing. In the Region (most prevalent in the Boroughs) this category contains a large number of apartments that function as student housing for Kutztown University, although they are not University-owned. This category consists of the following specific development

types: three-family residences, condominiums, apartments (including those over garages), residential conversions, and boarding/rooming houses. Multi-family uses within the Boroughs are generally scattered throughout established single-family neighborhoods.

Rural

Rural areas include lands that are located among agricultural areas, but are not currently in agricultural use. These areas can include open fields, meadows, and low density rural housing.

Agricultural/Agribusiness

The agriculture/agribusiness category consists of areas currently or typically in active agricultural use (cropland, pastureland, dairy facilities, barns, and stables) along with agriculturally based businesses. Agricultural land uses encompass nearly 11,000 acres and make up over 60% of the Region's existing land use.

Public/Non-Profit

Public and semi-public lands include cemeteries; buildings and lands owned by the municipal, county, state, or federal governments (including police stations); recreational, cultural, and park facilities; libraries; schools; churches; fire stations; correctional facilities; and rail, bus, and airport terminals. Specific descriptions and examples of this use are provided in Chapter 5, Community Facilities & Services. In Maxatawny Township, the dominant use in this category is the property owned by Kutztown University and the Kutztown University Foundation, including all campus buildings, dormitories, sports facilities, and parking areas.

Commercial

Commercial uses consist of all properties where goods and services are sold, ranging from fast food establishments, convenient stores and shopping centers, to professional offices. The Kutztown Airport and the Rodale Institute are both classified as commercial uses, and account for a majority of Maxatawny Township's commercial acreage. Other commercial uses in the Township are found in the Villages of Bowers and Maxatawny and along Route 222. Commercial development in Kutztown is located mostly along East and West Main Street, including the downtown core, and in a few small concentrations throughout the Borough. The few commercial uses in the Borough of Lyons are located along the Fleetwood/Lyons Road.

Industrial

The industrial land use category includes all properties being used for manufacturing and processing facilities, research and development facilities, metal and woodworking shops, truck terminals, and office/warehouse uses. Most of the Region's industrial acreage is comprised of Eastern Industries Quarry in Maxatawny, and East Penn Manufacturing (Deka) in Lyons. Kutztown's industrial uses are concentrated on Willow Street and Industrial Avenue.

Transportation/Rights-of-Way

This category includes acreage that is made of streets, highways (including interchanges), railroads, and their respective right-of-ways.

Commercial Recreation

The Commercial Recreation category contains the least acreage of all the existing land use categories. Uses within this category include golf courses, driving ranges and other private recreation facilities.

Woodland

The Woodland category contains all of the forested areas within the Region. Most of the wooded areas are located in the northwest and extreme northern regions of Maxatawny Township where the topography is rolling to hilly.

Water

This category consists of streams, lakes, ponds, or other water bodies within the Region. The majority of water acreage is located in Maxatawny Township.

LAND USE TRENDS

Analysis of the Existing Land Use Map reveals several land use trends in the Region. With the exception of a few widely scattered subdivisions throughout Maxatawny Township, the Region's residential uses are found predominantly within and immediately surrounding the Boroughs of Kutztown and Lyons, and the Villages of Bowers and Maxatawny. The Region continues to be dominated by agricultural uses, and will continue to be so for the near future.

Commercial uses are concentrated within the Kutztown central business district, along with a few high-acreage parcels located in Maxatawny Township, including Rodale and

the Kutztown Airport. Strip commercial development has occurred along Route 222 in the Township.

Fortunately, there is little indication in the Region of a trend which is occurring nationwide to relocate businesses which serve the day-to-day needs of residents to shopping areas outside Boroughs. One of the most important factors to the economy of a region is a healthy commercial and industrial base. There are several significant concentrations of commercial and industrial uses in the Region, with opportunities for additional economic development opportunities.

There is a trend toward converting older, larger single family homes to student housing in the Region. Kutztown University's enrollment is growing, and the need for student housing grows with it. Student housing can affect the look and make-up of an established residential area. It is important that the municipalities in the Region regulate conversions and enforce building and maintenance codes in order to preserve the façades of these homes as well as to retain the character of the community.

CHAPTER 14

COMMUNITY FACILITIES

Community facilities include public buildings and services that support municipal government and functions, providing for the everyday needs of residents. They include services such as sanitary sewerage and water supply services, police and fire protection, stormwater management, trash collection and recycling, libraries, and recreation facilities. The extent to which these services are available depends upon factors such as population, tax base, the traffic circulation system, and location within the Region. Community facilities should be considered resources with limited capacities that are to be provided in those places where they can serve the residents of the region most efficiently.

Facilities and public services can be provided in a variety of ways. Issues such as the existing and projected needs of the residents, the philosophy of municipal officials, financial resources, and whether similar services are offered by other agencies in the region all play a role in determining what services are most needed. Financing may be provided through tax revenue, state or federal funding, or through contracts with private or quasi-public agencies, thereby tailoring activities and expenditures for specific needs. Ultimately, a comprehensive approach to providing such facilities and services allows municipal governments to evaluate the cost of these facilities and services and develop an approach for providing them. The Community and Recreation Facilities Map depicts the location of the region's facilities, and can be found at the end of this chapter.

PUBLIC SEWAGE TREATMENT AND DISPOSAL FACILITIES

Public sewer in the Region is provided by a variety of entities: Kutztown Borough; The Kutztown Municipal Authority (KMA); the Maxatawny Township Municipal Authority (MTMA); and the Lyons Borough Municipal Authority.

The Borough of Kutztown owns, operates and maintains the sewage collection system and sewage treatment plant which serves all units within the Borough and Kutztown University. The Plant's current capacity is 1.5 million gallons-per-day (GPD), with an average daily flow of approximately 1.2 million GPD. Kutztown University is the largest customer of the Plant, accounting for nearly one-third of the average daily flow. The Kutztown Plant was constructed in 1939, and is located in Maxatawny Township on Krumsville Road, north of US 222 along the Sacony Creek. There is minimal capacity available at the treatment facility, which is already committed for future development within the Borough and University.

The Kutztown Municipal Authority (KMA) owns, operates, and maintains the collection system for developed portions of Maxatawny Township southwest of Kutztown. All flows from the KMA lines are sent to the Kutztown Sewage Treatment Plant.

The Maxatawny Township Municipal Authority (MTMA) owns, operates, and maintains the sewage collection system in the Village of Bowers. The flow from this system is treated at the Lyons Borough Sewage Treatment Plant, from which the MTMA purchases capacity.

The Borough of Lyons is served by the Lyons Borough Municipal Authority, which owns, operates, and maintains a sewage collection system and a sewage treatment plant. The Lyons Plant serves the Borough of Lyons, the Village of Bowers, and several units along Bowers Road to the Rockland Township line. The Lyons Sewage Treatment Plant is located on East Hunter Street in Lyons and has a current capacity rated at 150,000 GPD.

The Existing and Proposed Sewer Facilities and Soil Suitability for On-Site Sewage Disposal Map show the extent of public sewer service in the Region.

Public Sewer Regionalization

There is currently a proposal to form a new authority called the Sacony Creek Regional Authority, which would own and operate a regional sewage treatment plant near the existing Kutztown Borough Plant. The new plant would serve portions of Maxatawny Township, including the US 222 corridor from the Kutztown line to Long Lane (east) and from the Borough of Kutztown (west), and the currently unsewered areas to the south of Kutztown. The collection system for the new plant would be owned by the Maxatawny Township Municipal Authority. This regional plant was still in the planning stages at the release date of this document.

PUBLIC WATER SUPPLY FACILITIES

Public water in the Region is provided by the same entities as public sewer: Kutztown Borough; The Kutztown Municipal Authority; the Maxatawny Township Municipal Authority; and the Lyons Borough Municipal Authority.

The Borough of Kutztown owns and operates the water plant, storage facilities and distribution system (within the Borough of Kutztown), and serves all units within the Borough. The Borough Plant has a 2 million GPD capacity with the potential for expansion to 3 million GPD. Current average daily flow from the plant is approximately 800,000 to 900,000 GPD. The source of the water is the Borough-owned well field, which contains four wells, and is located in Maxatawny Township near the Sacony Marsh.

The Kutztown Municipal Authority owns and operates the water distribution system for all units just outside of the Borough, including Kutztown University, which accounts for

nearly 35% of the water demand. The water is pumped from the Borough plant through the KMA owned lines.

The Maxatawny Township Municipal Authority owns and operates the water distribution system that serves the Village of Bowers and surrounding areas to the south along Bowers Road. The MTMA owns two wells located adjacent to Bowers Road south of the Village.

The Lyons Borough Municipal Authority owns and operates the water distribution system that serves all units within Lyons Borough as well as all units along Lyons Road south to the Rockland Township line. The Borough owns two wells, which are located just south of the Borough along Lyons Road in Maxatawny Township.

The Existing and Proposed Water Facilities Map shows the extent of public water service in the Region.

EDUCATIONAL FACILITIES

The Kutztown Area School District encompasses over 100 square miles and provides public education for Kutztown, Maxatawny, and Lyons residents as well as residents from the adjacent municipalities of Lenhartsville Borough, Greenwich Township, and Albany Township. The District enrollment for the 2003-04 school year was 1,808 students in kindergarten through twelfth grade. The District operates six schools, four of which are within the planning region. The year the facility was built is listed after the school, along with grades which attend.

- Kutztown Area Elementary School (1955) - kindergarten through fifth grade
- Maxatawny Elementary School (1954) - kindergarten through fifth grade
- Kutztown Area Middle School (1981) - sixth through eighth grade
- Kutztown Area High School (1961) - ninth through twelfth grade

Schools located outside the Planning Region include:

- Albany Elementary- Albany Township (1958) - kindergarten through fifth grade
- Greenwich-Lenhartsville Elementary School - Greenwich Township (1955) - kindergarten through fifth grade

The locations of these schools are shown on the Community Facilities and Recreation Map.

LIBRARY SERVICE

The Louisa Gonser Community Library, located in the Borough of Kutztown, is part of the Berks County Library System, from which it receives funding. The library staff consists of a director, three assistant librarians, and a varying number of volunteer workers to help with the library programs. The library hosts several programs, including Summer Reading programs, pre-school story hours, and special events at holidays and throughout the year.

The Rohrbach Library at Kutztown University allows all students and employees of Kutztown University borrowing privileges. In addition, borrower cards can be issued to all adult citizens of the Commonwealth of Pennsylvania who are not registered students or employees of Kutztown University.

HOMETOWN UTILICOM

Residents of the Borough of Kutztown can elect to receive cable television programming, high-speed Internet access and telephone service through Hometown Utilicom (HU). Hometown Utilicom is owned and operated by the Borough of Kutztown.

Recently, two additional private service providers have been added to the Hometown Utilicom network. LANtek, of Kutztown, will provide broadband internet access to areas not currently served by the HU fiber-to-the-home network. The second provider added to the HU network is Altronics Security Systems of Bethlehem, PA. Altronics will enable HU customers to add home and business security to their existing services.

FIBER OPTIC NETWORK

The Borough of Kutztown has made a substantial investment and commitment to serve its residents with the most advanced telecommunications network in the Commonwealth of Pennsylvania. A fiber-to-the-home (FTTH) network was complete in 2002 and can serve all areas within the municipal boundaries of the Borough with voice, video and data services. In its first year of operation, the FTTH project received a *Governor's Award of Local Government Excellence*. At this time, the Borough of Kutztown, through its service mark, Hometown Utilicom, provides cable television, broadband internet and telephone services. It is expected that the number of services delivered over the FTTH network will increase in the coming years.

There is no doubt that the FTTH network is a major asset to the region. Since its inception, one of the goals of the network has been to attract business and industry to the Kutztown region. It is the Borough's intent to work with its neighboring municipalities, Kutztown University, the Chamber of Commerce and Berks County in whatever way

necessary to leverage the Borough's FTTH asset for economic development in and around this community.

The FTTH project is in its fifth year of operation. The focus of the Borough has shifted from "building" to "marketing." Part of the marketing of the network will include investigating ways to work directly and indirectly with neighboring municipalities. While the network was built "by the Kutztown community for the Kutztown community," the Borough realizes the potential benefit of the system to the entire region and will work to make sure that every avenue is explored as to ways this important asset can be leveraged to improve this region.

The Kutztown-Maxatawny-Lyons area is a rural region. It has been well documented through numerous studies and publications that rural areas of the Commonwealth of Pennsylvania, and the United States, lack the information technology infrastructure necessary to thrive. The following excerpt from testimony given by Kutztown Borough Manager Jaymes Vettraino at a hearing in front of the Pennsylvania House of Representatives Intergovernmental Affairs Committee on May 15, 2003, serves as a good summary of the Borough's opinion as to the potential of the FTTH technology.

"The engine of the knowledge-based economy is the ability to transfer information quickly and securely. We see a strong role for the State and local governments to make sure that people have access to the ability to communicate. In the 21st century knowledge economy, fiber optic communications systems will be as important as other public utilities in determining the economic viability and growth of a region."

With this statement in mind, the Borough is committed to working with its neighbors to be the central hub that helps to bridge our region's "digital divide."

The Borough has focused on serving its internal needs. In order for the Borough to move beyond its borders there will need to be very specific planning and cooperation between the neighboring municipalities. This planning and cooperation will need to include discussions on the technical ability of the Borough to reach customers, agreements to expand the service territory and investments to build an expanded network. The Borough sees the need and potential to work with its municipal neighbors as the project develops

POLICE PROTECTION

The Region is served by two police forces: The Kutztown Borough Police; and the Berks-Lehigh Regional Police Department.

The Kutztown Police Department consists of ten full time officers serving the needs of Kutztown Borough (in Maxatawny Township). The department serves a resident population of approximately 5,300 persons and a transient student population of 7,000.

In 2001, the Northeastern Berks Regional Police Dept (originally formed in 1991) consisting of the Maxatawny Township and the Boroughs of Topton and Lyons in Berks County, was joined by Upper Macungie Township in Lehigh County to form the Berks-Lehigh Regional Police Department. The Department is currently served by 20 full-time officers, one part-time officer, one full-time detective, and one part-time detective. The Department's fleet includes 7 marked and 3 unmarked police vehicles, four 4-wheel drive vehicles, one special response vehicle, one command post ambulance, and two motorcycles.

FIRE PROTECTION / EMERGENCY SERVICE / HOSPITALS

Two fire departments are located in the Region: the Kutztown Fire Company and the Lyons Borough Fire Company. The Kutztown Fire Company services nearly 40 square miles of the Borough, University, and portions of Maxatawny and Greenwich Townships. The Department crew consists of 40 members operating a fleet of 5 vehicles.

The Lyons Borough Fire Company serves the Borough of Lyons, and portions of Rockland and Maxatawny Townships. The Company consists of a crew of 15 firefighters operating four vehicles.

Emergency service for the Region is provided by the Kutztown Emergency Management Center. The Emergency Management Center (EMC) is a location for the coordination of the emergency response of a community. The most basic function during an emergency is the ability to have an immediate availability of a computer-linked unified command center to address the needs of all those involved.

The nearest hospitals to the Region are the Reading Hospital in West Reading, St. Joseph's Medical Center in Bern Township, and the Lehigh Valley Medical Center in Allentown.

SOLID WASTE

Trash disposal – or “solid waste management,” to use the formal term – in the region is regulated by each municipality separately. The Borough of Kutztown maintains a Borough waste collection system under the supervision of the Superintendent of

Transportation, Grounds, and Buildings. The Borough owns and operates three refuse collection vehicles and a recycling vehicle and provides municipal collection of residential, commercial, and industrial waste. Residential collection is performed twice a week, and commercial and industrial users can rent dumpsters from the Borough. The Borough provides curbside recycling services twice a month, including the recycling of glass, plastic, newspapers, aluminum, and cardboard.

The Borough also operates a Fall Leaf Collection Program and a Spring Tree and Limb/Brush Clean-up Program. The bi-weekly collection of leaves begins in mid-October and continues for five weeks. The Tree and Limb/Brush pickup takes place in early April. A Yardwaste Recycling Program is available to all Borough residents where the Borough provides two dumpsters near the Borough Municipal Building which are available 24 hours a day.

Solid waste disposal and recycling in Maxatawny Township and the Borough of Lyons are handled by private hauling companies.

RECREATION

Public recreational facilities in the Region consist of five parks totaling approximately 66 acres. The table below shows acreage as well as the facilities available at each.

RECREATIONAL FACILITIES

	Baseball Field	Softball Field	Soccer Field	Basketball Court	Tennis Court	Playground	Multipurpose Field	Swimming Pool	Walking	Biking	Volleyball Court	Picnicking	Pavilion	Fishing	Other	ACREAGE
KUTZTOWN																
Kutztown Borough Park	X	X		X	X	X					X	X	X		X	37.0
Kutztown Borough Swimming Pool				X			X				X	X				5.0
Kutztown Youth Athletic Assoc.	X											X				
MAXATAWNY																
DeLong Park-Bowers		X		X		X	X		X			X	X		X	15.0
LYONS																
Lyons Borough Park	X	X		X		X						X				5.0

SOURCE: Berks County Planning Commission

The Kutztown Borough Park is the largest recreation facility in the Region at 48 acres. It is a heavily used park, home to a variety of activities and programs for local residents, including the Borough's Little League Baseball program. The Park also includes a concert bandshell, sand volleyball courts, and an indoor skating rink.

DeLong Park in the Village of Bowers is Maxatawny Township's only public park and has nineteen acres. It is used mainly for community events, and for active and passive recreational pursuits. DeLong park is also the site of the popular Bowers Pepper Festival every year.

The Lyons Borough Community Park is a five acre facility home to both active and passive recreational activities. The park is host to the annual Fall Fiddle Festival, which like the Bowers Pepper Festival, is a very well attended and popular event.

In addition to the above-listed parks, recreation is available at the school facilities in the Region.

STORMWATER MANAGEMENT

Kutztown, Maxatawny, and Lyons are all located within the DEP designated Sacony Creek Watershed, and therefore fall under the regulations of the Sacony Creek Watershed Act 167 Stormwater Management Plan. The Plan was created under the direction of Act 167 of 1978, the Stormwater Management Act, and contains a stormwater management ordinance which is adopted by all municipalities within the watershed. Portions of Maxatawny Township also fall under the regulations of the Little Lehigh and Maiden Creek Act 167 Plans.

Act 167 Stormwater Management Plan -

Up to the enactment of Act 167, stormwater management had been oriented primarily towards addressing the increase in peak runoff rates discharging from individual land development sites to protect property immediately downstream. Minimal attention was given to the effects on locations further downstream (frequently because they were located in another municipality), or to designing stormwater controls within the context of the entire watershed. Management of stormwater also was typically regulated on a municipal level with little or no designed consistency between adjoining municipalities in the same watershed concerning the types, or degree, of storm runoff control to be practiced.

Act 167 changed this approach by instituting a comprehensive program of stormwater planning and management on a watershed level. The Act requires Pennsylvania counties to prepare and adopt stormwater management plans for each watershed located in the county, as designated by the Pennsylvania

Department of Environmental Protection (Department). Most importantly, these plans are to be prepared in consultation with municipalities located in the watershed, working through a Watershed Plan Advisory Committee (WPAC). The plans are to provide for uniform technical standards and criteria throughout a watershed for the management of stormwater runoff from new land developing sites.

The types and degree of controls that are prescribed in the watershed plan need to be based on the expected development pattern and hydrologic characteristics of each individual watershed. The management plan, specifically the standards and criteria, are to be developed from the technical evaluations performed in the planning process, in order to respond to the "cause and effect" nature of existing and potential storm runoff impacts in the watershed. The final product of the Act 167 watershed planning process is to be a comprehensive and practical implementation plan, developed with a firm sensitivity to the overall needs (e.g., financial, legal, political, technical, environmental, etc.) of the municipalities in the watershed.

Community Facilities List

Municipality	Identification Number	Site Name
Kutztown Borough	KB-1	Borough Garage
Kutztown Borough	KB-2	Electrical Substation
Kutztown Borough	KB-3	Municipal Building/Police Station
Kutztown Borough	KB-4	Sewage Treatment Facility
Kutztown Borough	KB-5	Municipal Parking Lots
Kutztown Borough	KB-6	Train Station
Kutztown Borough	KB-7	Kutztown Park
Kutztown Borough	KB-8	Kutztown Public Pool
Kutztown Borough	KB-9	Borough Farm and Water Well Property
Kutztown Borough	KB-10	Old Swimming Pool Site
Kutztown Borough	KB-11	Water Reservoirs
Kutztown Borough	KB-12	Grace Evangelical Church
Kutztown Borough	KB-13	Trinity Lutheran Church
Kutztown Borough	KB-14	St. John's Lutheran Church
Kutztown Borough	KB-15	St. John's UCC
Kutztown Borough	KB-16	St. Paul's UCC
Kutztown Borough	KB-17	Bethel Nazarene Church
Kutztown Borough	KB-18	Prayer Baptist Church
Kutztown Borough	KB-19	Tabernacle Church
Kutztown Borough	KB-20	St. Barnabas Episcopal Church
Kutztown Borough	KB-21	Elementary School
Kutztown Borough	KB-22	Jr. High School
Kutztown Borough	KB-23	High School
Kutztown Borough	KB-24	Post Office
Kutztown Borough	KB-25	Friends of Eagles
Kutztown Borough	KB-26	Historical Society
Kutztown Borough	KB-27	Kutztown Fairgrounds
Kutztown Borough	KB-28	Kutztown Grange
Kutztown Borough	KB-29	Fire Company
Kutztown Borough	KB-30	Public Library
Kutztown Borough	KB-31	Community Development Office, Community Partnership, Kutztown U.

Community Facilities List

Municipality	Identification Number	Site Name
Maxatawny Township	MAX-1	Kutztown University
Maxatawny Township	MAX-2	Kutztown Airport
Maxatawny Township	MAX-3	Rocdale Research Center - Slegfried's Dale Farm
Maxatawny Township	MAX-4	DeLong Park
Maxatawny Township	MAX-5	Berks-Lehigh Regional Police
Maxatawny Township	MAX-6	Municipal Building
Maxatawny Township	MAX-7	Maxatawny Elementary School
Lyons Borough	LYN-1	Lyons Borough Municipal Building
Lyons Borough	LYN-2	Lyons Borough Park
Lyons Borough	LYN-3	Lyons Borough Fire Company

Source: Comprehensive Plan Kutztown Borough, 1996; Metro Street Atlas of Berks Co., PA; Maxatawny Township Comprehensive Plan Revision; 1

CHAPTER 15

TRAFFIC CIRCULATION

INTRODUCTION

The relationship between the use of land and its impacts on the circulation network is an important element in the comprehensive planning effort. A community's quality of life is highly dependent on the efficient use of land as well as effectiveness of its circulation network. In order for a network to adequately serve adjacent land uses, it must be regularly evaluated as new development or redevelopment occurs. Different land uses require different road characteristics, and addressing future transportation needs is dependent on a sound understanding of the current network.

Existing and proposed development areas must be considered when making future road programming decisions. In turn, future development patterns should not adversely affect the circulation system. It is necessary to follow appropriate design standards, improve existing roads and manage access so the road network will be capable of performing its intended function. Municipal and individual land use decisions are strongly influenced by existing or proposed circulation systems, while at the same time these same land use decisions can affect the circulation systems and the functions, which the roads are expected to perform.

The circulation system within a community has an important influence on the type and location of development which occurs. The location of residential, commercial, and industrial uses can influence the function or classification of roads, their design and their condition. In addition to influencing the character of the community by influencing land uses, the perception of a community can be influenced by the circulation system itself. A municipality with relatively narrow winding roads abutting agricultural and wooded areas will often be perceived as having a rural character. A borough with relatively narrow streets, high traffic volumes, unsynchronized signalization, and lack of sidewalks or uncoordinated pedestrian crossings will be perceived as gridlocked. In areas where development has occurred which does not respect the limitations of the circulation system, the perception can be one of poor planning and frustration.

IMPORTANCE OF TRANSPORTATION

Addressing transportation issues has three critical benefits:

- It increases the quality of life for the region's residents by facilitating circulation and making travel safer.

- Attractiveness of the region to tourists/shoppers can be enhanced if congestion is mitigated; and, the level of service and visual attractiveness of area roads are maintained.
- The US 222 corridor is considered the main economic growth corridor of the region. Providing a well maintained transportation system is necessary to support optimum economic development.

Regional Influences on Traffic Circulation

US 222- The lone principal arterial in the region, US 222 contains the highest traffic volume in the planning area, as well as one of the highest traffic volumes in Berks County. It is the primary link from Lancaster and Reading to the Allentown area.

Kutztown University- The University's enrollment of over 10,000 full and part-time students and 954 employees makes it the third largest university in the Pennsylvania State System of Higher Education.

East Penn Manufacturing (Deka) - According to *The 2003 Berks County Data Book*, East Penn Manufacturing, located in Lyons Borough, is the second largest employer in Berks County with 3,852 employees.

COMPOSITION OF THE CIRCULATION NETWORK

Not surprisingly, Maxatawny Township contains the highest total of linear road mileage for both State and Municipal roads with 27.93 and 47.44 miles respectively. US 222 is the only road classified as an arterial in the Township. The rest of the Township's roads include major collectors (SR 737, Kutztown Road, and Noble Street), minor collectors (Crystal Cave Road, Mill Creek Road, Farmington Road, and portions of Long lane, Topton Road, and Bowers Road), and local roads. It should be noted that the northern tip of the Township contains approximately one-tenth of a mile of Interstate 78, but since I-78 is a limited access expressway with no exit in the Township, it does not influence the traffic circulation pattern.

The Borough of Kutztown contains 11 miles of State and 26 miles of Municipal roads. US 222 crosses the northern portion of the Borough and includes an interchange at SR 737 Krumsville Road. Noble Street and Main Street are major collectors, and the rest of the Borough's mileage is composed of local streets.

The Borough of Lyons contains 1.25 miles of State and 2.36 miles of Municipal road mileage. Fleetwood Road and Lyons Road, which intersect in the Borough, are major collectors, with the rest of the mileage composed of local streets.

Road mileage is indicated below in Table One.

TABLE 1 - ROAD MILES

MAXATAWNY TOWNSHIP

State Miles	Municipal Miles	Total
27.93	47.44	75.37

KUTZTOWN BOROUGH

State Miles	Municipal Miles	Total
11.0	26.0	37.0

LYONS BOROUGH

State Miles	Municipal Miles	Total
1.25	2.36	3.61

Source: 2004 Township/Municipal Directory of Berks County

Important Transportation Corridors

Without a doubt, the US 222 corridor is the most important transportation corridor within the region. Although it is designated as a north/south highway, the US 222 corridor's primary direction through the region is east/west. It is the highest volume road through the region, and travels roughly through the middle of Maxatawny Township. Portions of US 222 function as a limited access highway, with uninterrupted travel from Lancaster City to Maiden creek Township in Berks County, and again as the Kutztown Bypass. It remains to be seen if improvements will be made to the remaining unimproved portions of US 222 in Maiden creek and Richmond Township, and from the end of the Kutztown Bypass to the Lehigh County Border. Because it bisects the region, US 222 has a significant impact on the land uses of the region, allowing convenient access to employment centers in Lehigh County, which will likely influence new housing in the area.

The four other notable major collector transportation corridors in the region include the Fleetwood-Lyons Road; Topton Road; SR 737; and Noble Street. The Fleetwood -Lyons Road is the main thoroughfare in the Borough of Lyons, connecting it to Topton to the north, and Fleetwood to the south. It is also the location of Eastern Industries. Topton Road travels due north from the Borough of Topton and intersects with US 222, where it becomes Long Lane. SR 737 begins in the Borough of Kutztown and travels north through a small portion of Maxatawny Township, and then through Greenwich

Township. SR 737 is the Kutztown area's most convenient link to Interstate 78. Noble Street travels south from the Borough of Kutztown into the Borough of Lyons.

EXISTING ROADWAY CLASSIFICATION

How a particular highway is used determines the function that it serves in the system. Highway and roadway classification are based on analysis of the volume of traffic using the facility, the type of trip provided, the length of the trip, and the speed of the trip. There are four basic classifications of highways, as described in *Vision 2020*:

Interstate /other Expressways - These highways are designed to provide for the movement of the greatest number of vehicles over the longest distance, in the fastest allowable time. Access to expressways is limited to grade-separated interchanges and the flow of traffic is uninterrupted. These highways generally serve either inter-state and inter-regional traffic, or cross-town traffic in densely populated areas.

Arterial Roads – Arterial roads can be classified as limited access/interstates, other principal arterials or minor arterials. They provide for the movement of large volumes of traffic over longer distances; mobility is more important than access, and they carry the highest volumes of traffic. Principle and minor arterials generally operate at lower speeds than arterial interstates due to the presence of traffic control devices and access points.

Collector Roads – Collector roads serve moderate traffic volumes and act to move traffic from local areas to the arterials. Collectors, too, can be subdivided into subcategories. Major Collectors provide for a higher level of movement between neighborhoods within a larger area. Minor Collectors serve to collect traffic within an identifiable area and serve primarily short distance travel.

Local Roads – Local roads are, by far, the most numerous of the various highway types. These streets provide access to individual properties and serve short distance, low speed trips.

**HIGHWAY FUNCTIONAL CLASSIFICATIONS AND
RECOMMENDED DESIGN FEATURES**

<u>Classification</u>	<u>General Provisions</u>	<u>Right-of-Way Width (ft.)</u>	<u>Cartway Width</u>
Expressway	55+ MPH Limited Access No Parking Noise Barrier/Buffer (where required)	Minimum 120; however, may be wider based on local conditions and design	Minimum four 12' wide travel lanes with 10' wide shoulders capable of supporting heavy vehicles
Arterial (Principal and Minor)	35-65 MPH Some access controls to and from adjacent development. Encourage use of reverse and side street frontage and parallel access road. No Parking	80	48-52 feet; 12' wide travel lanes with shoulders in rural area and curbing in urban areas
Collector (Major and Minor)	25-35 MPH Some access controls to and from adjacent development. Parking permitted on one or both sides.	60	34-40 feet; 12' wide travel lanes with stabilized shoulders or curbing; 8' wide lanes provided for parking.
Local	15-35 MPH No access control to and from adjacent development. Parking permitted on one or both sides.	53	28-34 feet with stabilized shoulders or curbing; cartway widths can be reduced based on interior traffic patterns.

Roads are classified on the Transportation Map. The following is the list of each type of functional road in the Kutztown, Maxatawny, Lyons planning region:

Interstate Expressway: I-78

Principal Arterials: US 222

Minor Arterials: None

Major Collectors: Kutztown Road/Main Street; SR 737; Noble Street; Topton Road (from Topton Borough to Long Lane); Fleetwood-Lyons Road

Minor Collectors: Long Lane; Farmington Road; Crystal Cave Road; Mill Creek Road; Topton Road (from Long Lane to US 222); Bowers Road (south of Fleetwood-Lyons Road)

Local Access Roads: all other local roads and streets

SCENIC ROADS

Scenic roads are generally found in agricultural and wooded areas and near stream corridors. Scenic roads will be discussed in the chapter on Scenic Resources.

TRAFFIC VOLUMES

Traffic volumes are determined through traffic counts taken at specific locations within a transportation corridor. The volume is usually portrayed in terms of average annual daily traffic (AADT). This represents the average count for a 24 hour period, factoring in any fluctuations due to the day of the week or month of the year. The AADT is an important factor that, in conjunction with the previous factors outlined, helps in determining the functional classification of a road. Comparing traffic volumes from different time periods helps to illustrate how growth is affecting circulation patterns.

Information available on traffic volumes is important in determining the potential for capacity problems. Roads that are not used for the purpose for which they are intended can experience capacity problems. This is particularly evident in areas experiencing a significant amount of new development without concurrent upgrades to the transportation corridors. Capacity problems become particularly evident when the number of lanes is reduced and traffic is funneled from a roadway with a higher number of lanes to one with a lower number of lanes.

Though the Kutztown Area is growing, capacity on the region's roads is heavily influenced by traffic originating outside the area. Roads most likely to experience capacity problems are generally found in the Boroughs, because these roads are carrying local as well as regional traffic at increasingly higher volumes. Traffic volumes are beginning to increase on other roads throughout the Township as well.

Roadway Conditions

An inventory of roadway conditions is necessary in order to identify problems within the circulation system and to address these problems as appropriate. Roadway conditions are generally evaluated from four perspectives:

- Safety
- Access
- Interchanges
- Corridor Segments

Safety

Safety concerns are evident at those locations within the circulation system that may pose hazards due to poor road alignment, limited sight distance, design, or structural problems, lack of road shoulders or obstacles near the roadway. These all create hazardous conditions, which can slow traffic and cause congestion and potentially lead to accidents.

Access Management

Access management problems are situations where conflicts between mobility and access are, or will be, intense and result in congestion and safety problems. Access management problems typically occur on roads serving high volumes, high speed traffic, and abutting intense trip generating uses, such as US 222 between Kutztown and the Lehigh County line. An example of an access management problem would be where commercial development occurs on a road and the mobility of traffic is adversely affected by the increase in driveways from adjacent land to the road on which the land fronts. As the number of driveways increases, the safety and efficiency of the road can decrease. Access management will be an increasing concern on the roads in the region in the future.

Corridor Segments

Corridor segment problems are usually found in more densely developed areas when congestion, access and safety issues are all present. Corridor segment problems can include those roads that may possess maintenance issues or exhibit structural problems.

ALTERNATIVE FORMS OF TRANSPORTATION

In a plan for circulation, it is necessary to not only address vehicular traffic but multi-modal facilities such as bicycle-pedestrian, transit-pedestrian, and bicycle-transit opportunities.

Bus Service

Currently, the region has no Fixed Route Service provided by the Berks Area Reading Transportation Authority (BARTA). Carl R. Bieber Tourways, which is based in Kutztown, provides daily express service between Reading and New York City. It also provides trips to Allentown, Bethlehem, and Philadelphia.

Kutztown University provides continuous shuttles operating on and off campus for its students. Residents of Kutztown may purchase a Shuttle Bus Community Pass for a nominal fee from the Borough for use on the shuttle.

Rail Service

Freight service is provided by Norfolk-Southern along the Reading Division Main Line. A portion of this line connects Reading to Allentown, and passes through the Borough of Lyons and the southern portion of Maxatawny Township. This line experiences freight travel on a daily basis. In addition, the Kutztown Transportation Authority owns the Kutztown Branch Line that runs between Kutztown and Topton Boroughs.

Airport Services

The Kutztown Airport is a privately owned facility located immediately southwest of the Borough of Kutztown along West Main Street in Maxatawny Township. The airport provides general aviation and serves as a local center for sailplane activities in Berks County. The airport consists of two runways; a 1,938 foot paved runway and a 2,068 foot turf runway. Additionally, the airport is equipped with radio, fuel, maintenance, and hangar facilities.

The nearest passenger, commuter, and charter air service are located at the Lehigh Valley International Airport in Allentown, and the Reading Regional Airport in Bern Township.

Pedestrian Facilities

The existing sidewalk and pathways system in the region is based on the existing development pattern which has occurred, and is isolated in many cases. The municipalities should evaluate their policies on the construction or replacement of sidewalk when a property is sold. It is also essential to close any gaps along routes to community facilities.

The municipalities also have the opportunity to explore the feasibility of a trail system that would link existing sidewalks and pathways to a number of important community facilities and parks. The trail system available to the public is very limited at this time. Residents have expressed interest in increased trails available to the public.

CHAPTER 16

PEDESTRIAN CIRCULATION

Sidewalks

Sidewalks within the Region are predominantly located within the Borough of Kutztown and the area of Maxatawny Township containing Kutztown University. There are some short extensions of sidewalk from the Borough into Maxatawny Township at locations other than the University. There has not been much sidewalk construction within the Borough of Lyons. Most construction which has occurred has been along Kemp Street.

The following map is a map of sidewalks in the Borough of Kutztown which was prepared by the Borough for its 1996 Comprehensive Plan. The map has been updated to show sidewalk construction since 1996. The most extensive areas of more recent sidewalk construction have been along the westernmost portion of Normal Avenue, within Carriage Point Estates, and macadam walkway along the fairgrounds property. The map also shows sidewalk phases for completion of the sidewalk system within the Borough, in order of priority. The first priority was school/pool access.

The 1996 Comprehensive Plan noted that the lack of sidewalks in some areas of the Borough and the poor condition of sidewalks in other areas are matters of concern for reasons of safety and convenience. It was also noted that with the high concentration of pedestrian traffic due to University students, a growing Borough population, and a growing popularity of walking for health, safe sidewalks should be provided within the Borough limits. The short term recommendation was to enforce the sidewalk ordinance enactment by Borough Council in order that sidewalks be constructed and/or repaired where required. The long term recommendation was to require sidewalks for all properties within the Borough limits to insure safety for everyone and to implement the phased sidewalk plan to upgrade sidewalk conditions.

In Maxatawny Township, the Township will need to determine on a subdivision-by-subdivision basis whether sidewalks should be constructed within a development. Within higher density developments, particularly those around the Borough, sidewalks would be appropriate. As additional development occurs around the Borough, interconnections to the Borough sidewalk system can be planned.

The Borough of Lyons should formulate a policy for sidewalks in the Borough in the future, and if it is determined that the sidewalk system should be expanded, prepare a long range plan for extension of the Borough sidewalk system throughout the developed portions of the Borough. Options available include a Borough proactive approach or a more passive approach in which the sidewalks would be constructed as properties are sold or renovated.

Walking Trails

Walking trails are available at DeLong Park in the Township.

The Borough of Kutztown has undertaken the Sacony Creek Trail Project. The purpose of this project is to develop an educational recreational trail along the wooded corridor adjacent to the Sacony Creek and implement stream bank restoration. This trail will provide a green space linkage to the Main Street, the elementary school, Kutztown University, Kutztown Pool, and other recreation facilities. It will also provide a green link for the community and recreation users to downtown.

This project will restore the eroded stream bank using riprap and instream deflectors to protect the stream banks, decrease erosion and sedimentation, and improve aquatic habitat.

The project will provide:

- Link of green space/corridor to connect Main Street to the Kutztown Pool, elementary school and recreation facilities
- Open Space for creating a more healthy and livable urban community
- Safe and green route to a year round and well traveled destination (much safer than traveling on busy roads)
- Access for recreational uses: walking, biking, fishing, etc.
- Educational model displaying the importance of: wetlands, streams, water quality, flood control, native plants and woodlands.
- Much needed recreational resource
- “Spoke” or green link to other recreation facilities
- Easy access: trail in community’s backyard
- Subsequent phases which will move greenways up and downstream
- Public recreation/greenway to serve the entire school system and everyone from the Region

Other regional trails are discussed in the Transportation Facilities chapter.

Alburtis-Auburn Recreational Trail

One trail which should be considered is an Alburtis-Auburn Recreational Trail.

Extending in a northwesterly direction from Kutztown, an abandoned railbed for the Allentown & Auburn Railroad, graded in 1857, extends as far north as Auburn, Schuylkill County. Long known to local historians and mentioned in Ruth Bonner's 1965 *Sesquicentennial History of Kutztown* (p. 17), its exact course is clearly shown in the *Illustrated Historical Atlas of Berks County* (A. M. Davis, 1876) and may be easily retraced with a modern Berks Co. road atlas. The route, over which no trackage was ever laid, departs Kutztown along Rt. 737, roughly parallels the Sacony Creek and/or Sacony Road through Borough-owned land at the old Kutztown Swimming Pool, then continues west into Greenwich Twp. past Kutz's Mill and Old Dutch Mill Campground to a point east of Virginville, where it follows Crystal Cave Road, crosses the Maiden (Ontelaunce) Creek, and continues roughly parallel to Virginville and Windsor Castle Roads through Windsor Twp. to land occupied by the Hamburg Area School District and along the eastern boundary of the Borough of Hamburg, crossing into Schuylkill County and State Game Lands No. 106, and from there on to Auburn. To the south of Kutztown, the Borough's right-of-way (administered by the Kutztown Transportation Authority) extends along the Kutztown spur of the former Philadelphia & Reading Railroad to Topton, switching into the Conrail Reading Line (formerly the P. & R.) along High St., with a convenient refreshment stop at Topton's historic Depot, most recently a café and deli. South of Topton, unconfirmed local hearsay posits an abandoned rail line near the Rod & Gun Club that may once have been associated with Thomas Iron Co. sites along the South Mountain ridge or Hunsicker's Grove, en route to Alburtis across the Berks-Lehigh County line.

Were a trail extended within the Borough's existing right-of-way between Kutztown and Topton, the remaining route could be developed in a sort of "Rails to Trails" initiative that could literally link western Lehigh County and southern Schuylkill County across northeastern Berks County. Such an inter-municipal trail would involve the Boroughs of Kutztown, Topton, and Hamburg, the Villages of Virginville and Windsor Castle, and the Townships of Longswamp, Maxatawny, Greenwich, Richmond, Perry, and Windsor. Beyond Berks borders, it could also possibly involve Lower Macungie Twp. (Lehigh County); Upper Hanover, Douglass, and/or New Hanover Twps. (Montgomery County); and Brunswick Twp. (Schuylkill County).

Furthermore, an existing utility right-of-way extending across open farmland south of Baldy Road in Maxatawny Twp. could easily link the Borough of Lyons into such a recreational trail, with additional links possible to the Village of Bowers (east) and through the campus of Kutztown University, where a trail could be sited along existing secondary roads (Saucony Road) and through or around State Game Lands No. 182 (Greenwich Twp.) to link to the proposed main trail in the vicinity of Old Dutch Mill

Campground, providing easy access to Crystal Cave, a viable destination spot. Thus linked, this route would also take in many historic sites and structures through northern Berks, similar in concept to the Perkiomen Trail in Montgomery County, beginning at Green Lane and extending southeast through Schwenksville and Collegeville to near King of Prussia, where it connects to the Schuylkill River Trail. Eventually, in fact, suitable secondary roads extending from Topton or Alburdis via the Rittenhouse Gap (near Bear Creek Ski Resort) to Green Lane could be located that would literally allow linkage from the City of Philadelphia northwest to the Blue Mountain line, with slightly more than 30 miles tracing across northeastern Berks.

CHAPTER 17

AGRICULTURAL RESOURCES

Introduction

Agricultural resources within the Region are shown on the following map. The Agricultural Resources map identifies prime agricultural soils, Agricultural Security Areas, and Agricultural Easements. Because of the built-out nature and limited available lands within the two Boroughs, this discussion primarily pertains to Maxatawny Township.

Agricultural Resources in The Region

Prime Agricultural Soils

Prime agricultural soils, shown in light green, cover most of the Region. Prime Agricultural Soils are soils in Capability Classes 1, 2 or 3 as identified by the United States Department of Agriculture Natural Resources Conservation Service. Prime agricultural land is often easily developable land, and without protection, prime agricultural soils are subject to development.

Agricultural Security Areas and Agricultural Easements Map

Many parcels within the Township are designated as Agricultural Security Areas. These areas are shown as green hatching on the map. This is the first step to getting lands preserved through the conservation easement program administered by Berks County. Agricultural Security Areas contain properties which owners voluntarily enroll in an agricultural security program created by a municipality. The enrollment in an Agricultural Security Area typically demonstrates a commitment to keeping a property in agricultural use and affords some protection for agricultural properties, but does not prevent development of the Agricultural Security areas. Property owners may leave the program and develop their land. Some protection is afforded to properties in Agricultural Security Areas. The Agricultural Area Security Law prohibits local government units from enacting nuisance regulations; addresses the use of eminent domain by government units; requires inclusion in an Agricultural Security Area for easement purchase; and provides for all agricultural conservation easements to be perpetual. Hazardous waste sites may not be located in any municipality that has an established Agricultural Security Area.

Agricultural Easements

Agricultural Easements are displayed on this map in darker green. These easements are purchased through State and County funding sources. This program has very specific guidelines which apply to each parcel under consideration. One stipulation is that the parcel(s) have to be located within an established Agricultural Security Area. Once the County accepts a parcel, and a purchase price of the development rights is agreed upon, the development rights are sold. The land(s) can remain cultivated for profit and can be sold for agricultural purposes, and it is guaranteed that the land will be preserved as farmland and/or open space. Maxatawny Township has land that has its development rights sold through this program, primarily in the central and southern portions of the Township.

Farmed Areas

Most of the Township is actively farmed. These areas are shown in green on the Existing Land Use Map. Agriculture is the major land use and a significant part of the economy in Maxatawny Township. Portions of the Boroughs are farmed. Portions of some farms extend from the Township into Lyons Borough.

Rodale Institute

The Region contains a major international agricultural resource -- the Rodale Institute 333 acre experimental farm along Siegfriedale Road in Maxatawny Township. The farm is devoted to regenerative education, training, research, and organic agriculture and gardening.

Questionnaire Responses

A total of 389 responses were received to the Joint Comprehensive Plan Questionnaire which was mailed out to households within the Region. 197 of those responses were from Maxatawny Township. When asked what they like most about living within the Region, both Maxatawny respondents and overall respondents had three particular likes, rural atmosphere/open space, small town atmosphere, and farmland. Quiet and the landscape were also important to the respondents.

When asked what are the most important planning issues needing to be addressed within the Region in the next ten years, preservation of farmland was ranked highly along with managing growth and the tax base for Township residents and overall respondents.

When asked if they supported the use of tax dollars towards farmland preservation/development rights purchased, in the Township 126 said yes and 45 said no. For the Region as a whole, 234 said yes and 98 said no.

When asked "is it important to preserve remaining farmland in the Region", in the Township 155 said yes, 20 said no, and 19 were not sure. When asked why they thought it was important to preserve farmland, 15 said "I live on a farm", 70 said "I like to purchase local produce", 116 said "I want farmland available for future generations to farm", 98 said "I like to view farmland", and 104 said "I want to limit development which occurs in the community".

For the Region as a whole, 315 said it is important to preserve remaining farmland in the Region, 34 said no, and 32 were not sure. When asked why it is important to preserve farmland, 17 said "I live on a farm", 155 said "I like to purchase local produce", 245 said "I want farmland available for future generations to farm", 182 said "I like to view farmland", and 201 said "I want to limit development which occurs in the community".

When asked should the following be promoted in the Region, in the Township 150 said agriculture should be promoted and 22 said no. For the Region as a whole, 200 said agriculture should be promoted and 42 said no.

People were asked to list what they felt were the Region's treasures, places that are unique because of their beauty, appeal, historic character, or because of what they offer the citizens of the Region. Township respondents listed Kutztown Park most (total of 46). Farmland was next, with 43 responses.

Kutztown Borough residents mentioned farmland 34 times, ranking after the Kutztown Park and Bandshell, Sacony Creek watershed, and the Kutztown Historical Society. Lyons Borough residents mentioned farmland 7 times, more than any other treasure.

Complete questionnaire results are found in Appendix A.

Importance of Agricultural Resources in the Area

In the study *Fiscal Impacts of Different Land Uses*, prepared by the Penn State College of Agricultural Sciences and the Cooperative Extension, it was found that residential development in general does not pay for itself. Residential development increases costs more than it increases tax revenue, and other land uses must help subsidize school expenses. Current residents may end up paying higher taxes to cover the costs associated with new residents moving into the Region. Farmland and open land provided more in tax revenue than they required back in expenditures, and can help keep residents' taxes low, even if the Clean and Green program reduces the real estate tax paid by farmers.

Another report which looked at the relationship of land use and cost to residents is *The Cost of Sprawl in Pennsylvania*, prepared for 10,000 Friends of Pennsylvania. Sprawl is the pattern of low density, scattered development requiring travel by motor vehicle,

typically consuming agricultural land and segregating residential uses from other types of land use. Maxatawny Township has experienced sprawl and could continue to do so in the future without appropriate land use policies.

The costs, which were found to result from the sprawl, are increases in costs of roads, schools, utilities, and transportation, increases in air pollution and water pollution, and consumption of agricultural lands, natural areas and open space. Sprawl affects the quality of life in rural areas and results in direct costs such as higher school taxes.

As additional residential development occurs, the loss of farmland diminishes a major component of the economy of the Region. When agricultural operations are continued, they help maintain local agricultural supplies, make it easier for remaining farmers to continue to farm, maintain a cultural heritage and lifestyle of the region, and help maintain open space, rural character and the beauty of the landscape.

Agricultural Zoning

Effective agricultural zoning allows agricultural uses and those uses compatible with farming, strongly limits dwellings and discourages subdivision of farms into parcels smaller than can typically be farmed. Effective Agricultural zoning has been adopted in a number of municipalities in Berks County.

Agricultural preservation zoning can keep large areas relatively free of non-farm development, lessening conflicts with farming operations which result from increased traffic, litter, complaints and damage to crops. It can also assure a supply of agricultural land for purchase or rental by farmers and protects the investment that is made in purchase of agricultural easements. Agricultural preservation protects natural systems, helps replenish groundwater and maintain stream flow, and conserves prime agricultural soils that are a resource that once lost, cannot be recovered.

Administrative Means For Agricultural Preservation

Effective Agricultural Zoning is just one means of preserving existing agricultural activities in the Region. The following are examples of administrative and supplemental zoning techniques to encourage and protect agriculture:

- Work with local farmers to promote participation in County's Purchase of Agricultural Conservation Easements Program.
- Promote the inclusion of farms in Agricultural Security Areas.
- Support measures to relieve property tax burden for farmers

- Limit extension of public sewer and water facilities to agricultural areas
- Permit businesses which support agricultural operations, such as farm equipment sales and service, farm supply stores, and businesses which market or process farm products
- Allow farmers to supplement incomes through home businesses, home occupations and farm related businesses
- Permit appropriate recreational activities, such as hayrides, corn mazes, and festivals.
- Limit non-farm uses which could cause conflicts with agricultural practices and/or require buffers for non-farm uses around the perimeter of farms. Direct any non-farm development to parcels least suited to farming.
- Promote smart growth techniques.
- Promote enrollment in Clean and Green tax relief program.
- Allow and give incentives to compact development and higher densities where public sewer and water are available in areas designated for development.
- Support establishment and continuation of farm-related programs and organizations.
- Minimize construction of roads through and interchanges within agricultural areas
- Limit expansion of small rural villages into surrounding agricultural areas.
- Work to improve relationships between farmers and non-farm neighbors.
- Make information available on the Pennsylvania agricultural loan program which permits farmers to borrow funds for land, buildings, machinery, or equipment bought, built or renovated for the benefit of the business.
- Encourage farmers to utilize the Pennsylvania Farm Link program created by the Center for Rural Pennsylvania. This program is designed to help match farmers planning for retirement, and other interested landowners, with farmers hoping to work into farm ownership or long-term leasing.

Alternatives to “Traditional Agriculture”

Often agriculture has been equated with “traditional” methods such as dairy farming, raising of steers, and cultivating such crops as corn, hay, wheat, alfalfa, soy beans, barley, and oats. Increasingly, there a number of alternatives which can be practiced to supplement farm income or utilize smaller parcels of land, including:

- Nursery/Greenhouse
- Horse Farm
- Equestrian Center
- Orchard
- Winery
- Christmas Tree Farm
- Pick-Your-Own Operation
- Herb Farm
- Wildflower/Flower Farm
- “Gentleman’s” Farm
- “Agritainment” (using crafts, corn mazes, petting zoos, entertainers, hay tunnels, and hayrides to generate income and attract purchase of produce).
- Deer Farm
- Meat/cheese/milk Goats
- Hydroponics
- Ornamental Crops

CHAPTER 18

SCENIC RESOURCES

INTRODUCTION

The Scenic Views/Viewshed map identifies portions of the road system within the Region along which there are scenic views and vistas. The road segments are identified in green on the following map. There are still a number of scenic roadways within the Region.

SCENIC ROAD SEGMENTS

The following roads have been identified in part or in their entirety. Their identification is subjective in nature, and opinions as to road segments included can differ.

Crystal Cave Road	Snyder Road
Mertz Road	Eagle Point Road
Church Road	Siegfriedale Road
Kline's Corner Road	Grim Road
Wessner Road	Kern Road
Moyer Road	Leiby Lane

The Scenic Views/Viewsheds are generally limited to the Township because of the higher density of buildings and limited open space in the Boroughs. The Boroughs do contain historic buildings, so there are areas of the Boroughs which are attractive because of the attractiveness of the architecture rather than rural beauty found in the Township.

PLANNING IMPLICATIONS

The Region still contains a number of scenic roads and views, but these can be lost if strip development occurs along roads and substantial development occurs in the rural areas of the Region. It will be necessary to determine to what extent preservation of scenic resources will be made a priority within the Region. Preservation of scenic resources can be accomplished through broad land use policies such as open space, farmland, stream valley, and woodland preservation and/or through attention to developments as they are proposed. Performance and design standards for developments, including siting of buildings, and conservation and cluster subdivision design, can encourage retention of scenic areas and protection of viewsheds.

CHAPTER 19

NATURAL RESOURCES

INTRODUCTION

Two maps showing natural resources have been prepared for this Plan. The first is a composite map showing woodland; areas of steep slope, including slopes of 15% - 25% and slopes greater than 25%; and Natural Areas from the Berks County Natural Areas Inventory. The second map shows water related features, including: high quality stream, floodplains, wetlands, hydric soils (which are potential wetlands), and watersheds, which are listed by watershed name.

FLOODPLAINS

One hundred-year floodplains are shown from Federal Emergency Management Agency (FEMA) Maps. Detailed studies have not been performed to establish, through calculation, the extent of the 100-year floodplains for all watercourses. Any development proposed in the vicinity of watercourses by developers would require a calculated study of the 100-year floodplain by the developer if such detailed studies have not been performed by FEMA.

Floodplains are areas adjacent to watercourses which are covered by floodwater during times of flooding. A 100-year floodplain is the area which has a 1% chance of being flooded during any one year, and which is typically used for regulatory purposes. It is best if the floodplains are not developed, because development within the floodplains results in danger to persons and property. If development occurs within the floodplain, this may constrict the area over which floodwaters may flow, resulting in increased flood damage downstream because of resultant increased flood velocities downstream. Outdoor storage of materials within floodplains is not desirable because of the possibility of the materials entering the stream when flooding of the banks occur.

Care must be taken in disturbing areas along watercourses because increased sedimentation within the stream (increased depositing of soil within the stream) can occur. Increased impervious cover along watercourses typically increases the storm water runoff in the streams. The runoff can erode stream banks and channels. If sedimentation is increased, filling of streambeds can occur, which could cause floodwaters to cover a larger area, meandering of streams, and choking of life within the stream, detracting from the aesthetic value of the stream.

It is desirable to keep pervious surfaces on stream banks, as opposed to impervious surfaces such as paved areas. As surface runoff moves toward streams, water can be absorbed into the ground if the surface is pervious. Increased absorption can result in

replenishment of groundwater and also in decreased flood peaks because less water reaches the stream from the surface of the land. Inadequate supply of groundwater can result in an inadequate flow of water to the stream during dry months. The inability to sustain stream flow can mean a greater concentration of pollutants at periods of low flow.

Agriculture practiced along streams should be practiced with care. Increased tillage and use of the soil can increase the sediment concentration and runoff reaching streams. Animal excretions can result in increased bacteriological concentration in runoff, pesticides can result in increased undesirable chemicals in runoff, and fertilizer and manure can increase nitrate concentrations in runoff.

On-site sewage disposal systems should not be located within areas subject to flooding because of the danger of contamination of the stream and the groundwater because of the proximity of the stream and the presence of the high water table. There may not be an adequate distance between the on-site facility and surface water to permit renovation of sewage effluent prior to its reaching the stream. In some instances, soils found in the floodplains are very porous and the movement of sewage effluent is too rapid to allow for the renovation of the effluent prior to reaching the groundwater table or the stream. In other situations, the soil near the surface may be saturated with water or become readily saturated with sewage effluent, resulting in effluent remaining near or rising to the surface of the land. When flooding occurs, sewage effluent could then contaminate the surface water. The efficiency of filter fields of septic tanks can be impaired or destroyed as a result of flooding.

WETLANDS

The wetlands shown are from the National Wetlands Inventory, prepared by the Office of Biological Services, U.S. Department of the Interior, Fish and Wildlife Service. The wetlands inventory was prepared by stereoscopic analysis of high altitude aerial photographs, with the wetlands identified on the photographs based on vegetation, visible hydrology, and geography. A detailed on the ground and historical analysis of any site may result in a revision of the wetland boundaries, and it is possible that small wetlands and those obscured by dense forest cover may not be identified.

Wetlands within the area are generally found along the watercourses such as the Sacony Creek. 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, prevalence of vegetation typically adapted for life in saturated soil conditions. During on-site investigation, wetlands can sometimes be identified when they are saturated with permanent or semi-permanent standing water and contain common wetlands plants such as cattails and willows. If wetlands cannot be identified by hydrophytes (plants adopted to life in saturated soil conditions), soils may be investigated to determine whether

wetlands are present. Hydric soils mapping can be used to identify potential wetlands sites. Hydric soils are discussed below.

To try to put wetlands into less technical terms, often low lying land that remains wet for considerable periods of the growing season, land that can not be farmed because it is too wet or can only be farmed every few years, or low-lying land that can only be developed by filling are likely to be wetlands. These areas store water which can replenish groundwater and surface water supplies.

Wetlands can be areas rich in plant growth and animal habitat. They often serve as breeding places for many organisms. In addition to providing a home and a source of food for organisms, wetlands can protect water sources and can help keep water sources clean by acting as natural filters and removing pollutants such as bacteria and sediment from water. This occurs as plants growing in and around wetlands trap pollutants.

In general, no developmental activity or placement of fill material may occur within wetlands without obtaining a DEP permit.

HYDRIC SOILS

The hydric soils have been mapped from soils information provided by United States Department of Agriculture Natural Resources Conservation Service and indicate areas of potential wetlands. Hydric soils developed under conditions sufficiently wet to support the growth and regeneration of hydrophytic vegetation and are soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions (an anaerobic situation is one in which molecular oxygen is absent) in the upper part.

Criteria for identifying hydric soils include somewhat poorly drained soils that have water table less than 0.5 ft. from the surface for a significant period (usually a week or more) during the growing season; are poorly drained or very poorly drained and have either water table at less than 1.0 ft. from surface for a significant period during the growing season if permeability is equal to or greater than 6.0"/hr. in all areas within 20", or have water table at least 1.5 ft. from the surface for a significant period during the growing season if permeability is less than 6.0"/hr. in any layer within 20"; soils that are ponded for long duration (from 7 days to 1 month) or very long duration (greater than 1 month) during the growing season; or soils that are frequently flooded for long duration or very long duration during the growing season.

The areas of hydric soil are more extensive than the areas of wetlands, and are often found in the vicinity of the watercourses within the Region. There also are several isolated areas of hydric soil, also within the Region, as shown on the Water Related Features Map.

The hydric soils should be preserved and serious consideration should be taken to limit development on hydric soils. Hydric soils can act like a sponge when floodwaters rise, and when coupled with established wetlands, can filter nutrients and pollutants to protect the surface and ground water.

STEEP SLOPES

Areas that have slopes greater than 15% have severe limitations to development. In general, this land is too steep for residential subdivisions and cultivation. Development of steep slopes can result in hazardous road conditions, costly excavation, erosion and sedimentation and storm water runoff problems. These slopes are quite prone to erosion, and protection of them is particularly important for water resource protection when watercourses are nearby. Development should be limited, vegetative cover maintained to the greatest extent possible, and erosion controls instituted. Without absorptive vegetation, runoff can rapidly erode the slopes.

WOODED AREAS

Wooded areas are primarily found in the northern portion of the Township.

Wooded areas are scenic amenities and habitats for wildlife and home to most of the native species in the County. They provide visual relief from developed land areas. In addition, they increase capacities for absorption of storm water runoff, diminishing flood potentials and decreasing erosion. Wooded areas are especially valuable when on steep slopes, playing the important role of reducing runoff and erosion and sedimentation by binding the soil.

Maintenance of wooded areas on steep slopes is of even greater importance when the steep slopes are near streams, which could be disturbed through sedimentation, and experience greater flood peaks if they are swelled by increased surface runoff. Wooded areas are in some cases in proximity to the watercourses within the Region, sometimes on steep slopes.

When wooded areas are retained, the quantity and quality of groundwater can be better maintained than if woods are removed, because the natural cover allows for infiltration of rainfall into the groundwater system. Retention of wooded areas will also preserve the home of most of the native species in the County.

ROLE IN OPEN SPACE SYSTEM

Stream valleys, farmland, and woodlands in the Region constitute background open space, which is seen and perceived by residents of the entire area. The preservation of these resources is very important because they help create the image of the Region as a pleasant, rural community outside the Boroughs and major road corridors. As development occurs in

the Region in the future, if this background open space is not preserved, the remaining rural character of the Region will be lost.

STREAMS AND WATERSHEDS

The watersheds and streams in the region are shown on the Water Related Features map. Some of the natural functions of watercourses and the area surrounding the watercourses have been discussed above. It is also important to note that streams can provide a recreational resource.

PA DEP has established designated water uses for waterways within the Commonwealth as follows:

Special Protection

<u>Symbol</u>	<u>Protected Use</u>
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HQ	<i>High Quality Waters</i> – A stream or watershed which has excellent quality waters and environmental or other features that require special water quality protection.
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EV	<i>Exceptional Value Waters</i> – A stream or watershed which constitutes an outstanding national, State, regional or local resource, such as waters of national, State or county parks or forests, or waters which are used as a source of unfiltered potable water supply, or waters of wildlife refuges or State game lands, or waters which have been characterized by the Fish Commission as “Wilderness Trout Streams”, and other waters of substantial recreational or ecological significance.
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Aquatic Life

<u>Symbol</u>	<u>Protected Use</u>
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CWF	<i>Cold Water Fishes</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.
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WWF	<i>Warm Water Fishes</i> – Maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.
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MF	<i>Migratory Fishes</i> – Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which ascent to flowing waters to complete their life cycle.
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TSF *Trout Stocking* – Maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.

Special Protection Waters, High Quality and Exceptional Value, are required to be maintained at their existing quality; however, High Quality water can be degraded if certain social and economic justifications are met. Streams that are classified as High Quality have additional requirements for potential discharges listed in the Rules and Regulations of the Pennsylvania Department of Environmental Protection. PA DEP requires that a proposed point source discharge to High Quality Waters must show that the discharge is justified for necessary economic or social development which is of significant public value and that the proposed discharge alone or in combination with other discharges will not affect the protected use criteria. A proposed discharger must prove that the best available land disposal and reuse technologies are not feasible for economic environmental reasons.

There are no Exceptional Value Waters in the Region. The stream in the southwestern portion of the Region, in the Moselem Creek basin, is a High Quality Stream. The Sacony Creek Basin within the Region is classified either Cold Water Fishes or Trout Stocking.

Natural Areas of Special Interest

The following Natural Areas inventory sites are found in the Region. They are identified in the Natural Areas Inventory of Berks County.

Sacony Creek Marsh located southeast of Kutztown in Maxatawny Township is a 20 acre wetland complex comprised of a medium size creek bordered by a fair quality Mixed Graminoid-Robust Emergent Marsh (NC519) which grades into a small remnant floodplain forest. Broad-leaved cattail (*Typha latifolia*), spotted touch-me-not (*impatiens capensis*), and arrow-leaved tearthumb (*Polygonum sagittatum*) co-dominate the marsh with reed canary grass (*Phalaris arundinacea*), hairy-fruited sedge (*Carex trichocarpa*), and tussock sedge (*Carex tricta*). SP515 indicates a good to fair population of a plant imperiled (S2) in Pennsylvania. SP517 indicates a fair population of a submerged aquatic, considered rare (S3) at the state-level, growing in Sacony Creek with water purslane (*Ludwigia palustris*) and waterwort (*Elatine minima*). A good population (SP518) of a plant imperiled (S2) in Pennsylvania grows in Sacony Creek and in a nearby plant-choked spring-fed tributary. The Sacony Marsh has been disturbed by ditching, filling, and some invasion of exotic species. Filling, wetland encroachment, illegal dumping, and pollution should be avoided in the future. In close proximity to a university and local high school, the marsh provides an excellent outdoor lab for natural history classes.

SP503 in Kutztown Borough indicates a fair population of a state-threatened wetland plant growing along Sacony Creek between Main Street and Normal Street Bridge. The plant grows in seeps with box elder (*Acer negundo*), swamp rose (*Rosa palustris*), sensitive fern (*Onoclea sensibilis*), and broad-leaved cattail (*Typha latifolia*). This stretch of stream flows through a populated, well-traveled area and receives runoff from roads and adjacent properties. The future of the plant is uncertain given the surrounding land use. A local botanist should verify the full extent of the population and monitor its health over the next few years.

Schofer Cave/Sacony Wetland in Maxatawny, Richmond, and Greenwich Townships. Over a thousand individuals of the globally rare SA504 and one individual of SA505 were observed in Schofer Cave. A PA-Endangered animal species was observed at Sacony Wetland in 1991. Additional surveys are needed to determine the extent of this population.

PLANNING IMPLICATIONS

As development occurs in the Region, care must be taken to preserve and protect natural resources.

- An ongoing awareness of and sensitivity toward the natural resources of the Region should be encouraged.
- Development should be concerned with geologic stability, soils suitability, groundwater supplies and stream flows.
- Groundwater resources should be protected against depletion and contamination.
- Methods of encouraging replenishment of the groundwater supply should be encouraged.
- Streams, ponds and wetlands should be protected against pollution from point sources and runoff.
- Floodplains and wet soils should be protected from encroachment.
- The loss of topsoil should be minimized.
- The retention and establishment of trees and other vegetation should be encouraged to control erosion, shade surface waters, control stormwater flow, create wind breaks, provide animal habitats and provide visual amenities.

- The development of steep slopes should be avoided.
- Innovative land development techniques should be used to minimize land consumption, preserve ecosystems, and preserve natural resources and open space.
- The coordination of open space systems among adjoining developments should be encouraged.
- Incorporation of natural resources into development plans should be encouraged.
- Flexible approaches to site design to recognize resources should be encouraged.

CHAPTER 20

GEOLOGY AND AQUIFER YIELDS

INTRODUCTION

The Geologic Formations and Aquifers Map shows geologic formations within the Region and the median well yield in gallons per minute (gpm) for each formation. The well yield information helps to determine where, in general, the most productive aquifers in the Region are found.

GEOLOGIC FORMATIONS

The geologic formations are described as follows:

Allentown Formation

Medium-gray dolomite and impure limestone; dark-gray chert stringers and nodules; laminated; some oolite and sharpstone conglomerate; maximum thickness is about 2,000 feet; median yields from specific study areas range from 60 to 210 gal./min.; many wells are capable of yielding 1,000 gal./min. or more; aquifer can be easily contaminated; turbidity is a common water quality problem.

Epler Formation

Very finely crystalline, medium-gray limestone interbedded with gray dolomite; coarsely crystalline limestone lenses are present; approximately 1,000 feet thick.

Granitic Gneiss

Light buff to light pink; fine to medium grained; most mineral grains are about 1 mm in diameter; primary minerals are quartz, microcline, hornblende (5 to 10 percent), and occasional biotite.

Hamburg Sequence Rocks

Transported rocks of the Hamburg overthrust; gray, greenish-gray, and maroon shale, silty and siliceous in many places; dark-gray impure sandstone; medium- to light-gray, finely crystalline limestone and shaly limestone; total thickness is about 3,000 feet.

Hardyston Formation

Light-gray quartzite; weathers yellow brown; porous and limonitic in many places; quartz-pebble conglomerate occurs at base; maximum thickness is 800 feet.

Hornblende Gneiss

Dark-gray to black; most grains are about 1 to 2 mm in diameter; hornblende makes up about 50 percent of the rock; the other 50 percent is labradorite (feldspar); rock is extremely resistant to abrasion and very resistant to rupture, but may be susceptible to crumbling.

Jacksonburg Formation

Medium- to dark-gray limestone, coarsely crystalline; thin silty layers; fossiliferous; commonly called "cement limestone"; maximum thickness is 375 feet; "cement rock" portion of formation is composed of silty limestone, dark-gray to black, fine-grained; thin pyrite seams; fossiliferous; 830 feet thick.

Leithsville Formation

Dark-gray to medium-gray dolomite; some calcareous shale and sandy dolomite; cherty; 1,500 feet thick. Median yield is 100 gal./min.; large yields may be obtained from solution openings; aquifer can be easily contaminated; turbidity is a common water-quality problem; water is relatively hard.

Martinsburg Formation

Buff-weathering, dark-gray shale, and thin interbeds of siltstone, metabentonite, and fine-grained sandstone; brown-weathering, medium-grained sandstone containing shale and siltstone interbeds occurs in the middle of the formation; basal part grades into limy shale and platy-weathering, silty limestone; may be 12,800 feet thick. A median sustained yield of 32 gal./min. has been calculated and a maximum well yield of 200 gal./min. is reported; yielding zones are commonly less than 150 feet in depth but occur as deep as 400 feet below land surface; the natural quality of the water is often poor due to hydrogen sulfide and high concentrations of iron.

Ontelaunee Formation

Light- to dark-gray, very fine to medium-crystalline dolomite; interbedded and nodular dark-gray chert at base; average thickness is about 750 feet. Wells in excess of 200 to 500 gal./min. are common; industrial and public supplies of groundwater are available; water is relatively hard.

Rickenbach Formation

Gray, very fine to coarsely crystalline, laminated dolomite; dark-gray chert in irregular beds, stringers, and nodules; bands of quartz and quartz-sand grains occur in lower half; thickness of at least 350 feet is present. Yields greater than 100 gal./min. are common; industrial and public supplies of groundwater are available.

Stonehenge Formation

Gray, finely crystalline limestone and dark-gray laminated limestone; contains numerous flat-pebble breccia beds and shaly interbeds; maximum thickness is 1,500 feet. Median yield is 100 gal./min.; highest yields are obtained from fractures and solution cavities; water is relatively hard.

PLANNING IMPLICATIONS

Several formations, Allentown, Leithsville, Ontelaunee, Rickenbach, and Stonehenge have high median yields. They are particularly important to protect, along with existing zones supplying municipal water sources.

A number of these formations are limestone. Limestone can pose a problem for development due to the natural hazard associated with this kind of geologic formation called a "sink hole." Sinkholes, specifically, are a feature characteristic of limestone areas (Karst), which can cause a closed depression which is dry or through which water seeps downwards, resembling in shape a basin, funnel or cylinder. Over time water dissolves the rock into a solution and can leave an area of open space where rock once was located. Over time the surface can subside due to the pressures from above the ground and sink into holes, producing sinkholes. This can damage property, produce injuries or loss of life, cause disruption of public utilities and services, and also damage public infrastructure such as roadways.

Implementation techniques include:

- Each municipal SALDO should be updated to adopt special regulations to identify and mitigate risks in carbonate rock areas.
- Each municipality should keep on record areas known to have sinkholes and other landforms associated with carbonate rock.
- Municipalities with carbonate rock should develop sinkhole management programs.
- Update wellhead protection programs and continue to protect aquifers.

CHAPTER 21

HISTORICAL RESOURCES



HISTORICAL RESOURCES

The following map indicates historical resources within the Region. The list which follows identifies each resource numbered on the map.

Some of the historical resources have been listed or are eligible for the National Register of Historical Resources. These resources include:

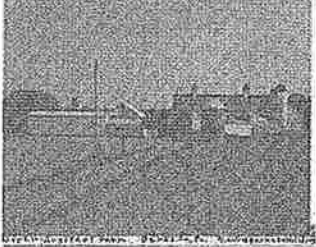
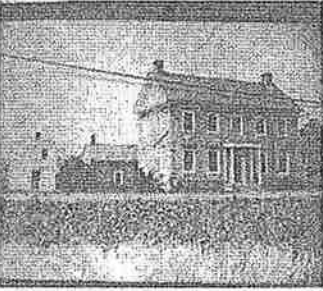
***PENNSYLVANIA HISTORICAL MUSEUM COMMISSION,
BUREAU FOR HISTORIC PRESERVATION
NATIONAL REGISTER OF HISTORIC PLACES
Listed and Eligible Properties***

KUTZTOWN BOROUGH



National Historic Site Name	Address	Status	Date Listed or Nominated	Description
 <p>H.K. Deisher Knitting Mill</p>	56 Noble St.	Listed	09/05/1985	Originally built in 1881, additions were added in 1900 and 1903. This building is significant not only for its intact 19 th century industrial architecture, but also for the large role that it played in the economic development of Kutztown. It has retained almost all of its original architectural elements and embellishments.
 <p>Kutztown 1892 Public School Building</p>	White Oak & Normal Ave.	Listed	08/27/1980	The schoolhouse is a 2 story, 8- room Victorian structure of brick and stone construction. It is an example of the larger public school buildings built throughout PA toward the end of the 19 th century. It is one of the best preserved of these structures in Pennsylvania and the Mid-Atlantic Region. in Berks County.

**PENNSYLVANIA HISTORICAL MUSEUM COMMISSION,
BUREAU FOR HISTORIC PRESERVATION
NATIONAL REGISTER OF HISTORIC PLACES
Listed and Eligible Properties**

MAXATAWNY TOWNSHIP

National Historic Site Name	Address	Status	Date Listed or Nominated	Description
 Boyer – Mertz Farm (Angstadt Farm)	Northeast Corner Noble St. & Bastian Rd.	Listed	09/09/1992	This farm is important for its association with Berks County agriculture and its example of a transitional 19 th cn. non-mechanized diversified farm which, in the earlier part of the 20 th cn., converted to mechanization and dairy specialization. The 1905 farmhouse is essentially unchanged, and is a fine example of a vernacular farmhouse using high style features.
 Hottenstein Mansion	U.S. 222, Box 370	Listed	06/22/1972	Although the Hottenstein family played a prominent role in local affairs, providing several doctors, a state legislator, and a legal aide to President Wilson, the 1783 Hottenstein Mansion is more significant for its architecture than its history. It has excellent Georgian symmetry, and particularly in the quality of its interior woodwork. It possesses fine examples of the Fraktur style of painting. The Great Room (Ballroom) was purchased by Henry DuPont and is now on display in the Winterthur Museum.

**PENNSYLVANIA HISTORICAL MUSEUM COMMISSION,
BUREAU FOR HISTORIC PRESERVATION
NATIONAL REGISTER OF HISTORIC PLACES
*Listed and Eligible Properties Continued...***

National Historic Site Name	Address	Status	Date Listed or Nominated	Description
 Kemp's Hotel	U.S. 222, East of Kutztown	Listed	12/19/1978	<p>This Hotel is one of the oldest hotels in Berks County and has long been recognized as a local landmark. Located ¼ mile northeast of Kutztown (Rt. 222) for nearly two centuries. Some of the hotel's more famous lodgers have included John Adams, Judge Francis Dana and signer of the Declaration of Independence William Ellery.</p>
 Siegfried's Dale Farm (Rodale Research Center)	Siegfriedale Rd.	Listed	05/10/1984	<p>What is now the farm research center of the Rodale Press has a history that reaches back 2½ centuries to the 1732 arrival in Maxatawny Township of Johannes Siegfried. Siegfried and his wife Elizabeth were "among the first, if not the first, white settlers in the vicinity of Kutztown" and their daughter was the first child in the region of European ancestry. It was a major center for the spread of the Moravian denomination. The farm and all its buildings remained in the Siegfried's family until well into the 20th century. The integrity and architecture has been preserved extremely well and now it is open to the public.</p>
G. Grim Homestead	Grim Rd.	Eligible	08/14/1989	
Kutztown University, Old Main	Main St. U.S. 222	Eligible	03/15/1983	

THE SIGNIFICANCE OF THE REGION'S HISTORY

The history of the Region begins in the early 18th century, in the first years of settlement and growth throughout "Penn's Woods." In 1681, William Penn's charter created a proprietary colony that welcomed all religions and nationalities. Pennsylvania quickly attracted a mixed population including English Quakers, Welsh, French Huguenots, and Swedes. By far the largest group of immigrants arriving in the colony were the Germans—some seeking religious sanctuary, others economic opportunities in the fertile and unsettled regions of southeastern and central Pennsylvania. Among the latter were Germans from the Rhine River Valley who came to the countryside of Berks County to settle and farm. The topography and geology of this region invited the raising of crops and livestock; the area was comprised of gently sloping hillsides and valleys underlain with limestone, producing a particularly rich fertile soil in a moderate climate. The settlers brought their native skills and crafts to the county, quickly establishing a way of life based on self-sufficiency and tradition.

From its original settlement in the 1730s and formal organization in 1779, the Kutztown area has been synonymous with Pennsylvania German folk culture and remains among the most architecturally intact "small towns" within the German settlement area of southeastern Pennsylvania. By the time that the Borough was incorporated in 1815, it was already well on its way to becoming the major agricultural and commercial center of northeastern Berks County, and by the mid 19th century, it had grown into a leading industrial and manufacturing hub as well.

Organized as Berks County's second borough in 1815 but likely settled as early as the mid 1720s, largely by Palatine German and French Huguenot families migrating over the South Mountain from the Oley Valley in southeastern Berks County, Kutztown has come to be regarded both locally and nationally as the epicenter of Pennsylvania German culture largely through its annual PA German (formerly "Folk") Festival, dating to 1950 and now the oldest continuous folk celebration in the United States. The geographical center of the East Penn Valley, a fertile crescent lying between the Blue and South Mountain ranges through several counties, fed by tributaries of the Schuylkill River and the town's "home" stream, the Saucony Creek, Kutztown became identified early on with large, prosperous farms and later with burgeoning industry from the town's foundry, mills (feed and grain as well as silk), and factories producing merchandise ranging from cigars and paper boxes to ladies' undergarments. It is also well-known for its antique extravaganzas, its annual Fair, and of course, its namesake University.

Peter Wentz (Wents), whose 1744 homestead in Worcester Township, Montgomery County, is an official county Historic Site, was among the Germans settling in southeastern Pennsylvania in the years of peak immigration between 1727 and 1776. Although there is no evidence that he ever actually occupied the property, Wentz in 1724 paid the Penn proprietorship 160 pounds for a 1,000-acre land patent and four years later

received title to land "situated on the Saucony, a branch of the Schuylkill river" in what is now Maxatawny Township, including part of what is now Kutztown Borough. He deeded 550 acres of the patent to his son, Jacob. From this parcel, Jacob Kutz (Coots), Sr. in 1755 purchased the 130 acres that were to become the family homestead at the foot of Kutz Hill as well as the Borough bearing his family's surname. Not until 1779, however, did George Kutz, to whom this tract was conveyed after Jacob's death in 1768, lay out his plan for "Cootstown" (as the town was officially known until 1835, when altered to its present spelling).

From its founding, Kutztown was a major stopping point on the improved Maxatawny Path, stretching from the forks of the Delaware (Easton) to the inland cities of Reading, Lancaster, York, and routes westward into the Ohio and Shenandoah Valleys. This Easton Road, surveyed in 1753 and running directly through Kutztown as Front Street, was an important, well-traveled east-west trade route well before the establishment of Kutztown--and its fording of the Sacony Creek, known to have been a mightier tributary than its present flow indicates, may have given significant impetus to the town's early settlement. Roughly equidistant between the route's main destinations of Easton and Lancaster, Kutztown thus linked its almost exclusively German and Swiss population to the English and Scotch-Irish settlements flanking it in both directions.

From colonial days through the era of the Schuylkill Canal, Kutztown was also a stop on the north-south stage line that ran from the frontier line of the Blue Mountains and the Perkiomen Valley at the juncture of Berks, Chester, and Montgomery Counties south through Norristown into Philadelphia. The town's geographical position thus made it accessible to trade and news from throughout southeastern Pennsylvania. The efforts of the Schuylkill Navigation Company to the west, and the Lehigh and Delaware Canals to the east, further enhanced its centrality as a point of departure for farm goods and raw materials to the main markets at Lancaster, Easton, and Philadelphia. When a railroad was established in 1870, the Borough was linked more definitively to the larger world, and trains transporting lumber, livestock, produce, and foundry goods made their way daily past the town's 1873 depot.

Houses of worship--churches as well as meeting-houses and cloisters--were among the first institutions established in the Pennsylvania colony. In the Maxatawny section of the East Penn Valley, the German Reformed congregation is said to have been organized by 1736 and to have constructed its first sanctuary of stone by 1755 one-half mile east of Kutztown on the Levan farm. A local Lutheran congregation may have been formed as early as 1752, although regular services seem not to have been held prior to about 1776, probably owing to several nearby Lutheran charges dating prior to 1750, including Moselem, Mertz, Lehigh, and Ziegel's. In 1790, these congregations cooperated to establish St. John's, founded as one of the first Union churches in Berks County.

By about 1800, St. John's Union Church was also operating its own school, now a private home, at 229 West Walnut Street. While originally a less popular alternative, secular education appeared at an early date with the Franklin Academy, opened in 1835 and soon relocated to 301 West Walnut St., where it remained until 1858. Over the years, the Kutztown community continued its strong championing of educational advancement. The success of the Franklin Academy was such that St. John's Reformed pastor J. Sassaman Herman began to conceive of a private academy for higher (post-elementary) education, which he established in his home as the Fairview Seminary in 1860. Six years later, the seminary, by then known as Maxatawny, had evolved into the Keystone Normal School, one of Pennsylvania's first schools of higher learning, intended for the training of teachers to instruct in rural one-room schools, and under Commonwealth custodianship since 1917 as a State Teacher's College. Today, Kutztown University has become the third largest within the State System of Higher Education, with a present enrollment nearly 10,000 students on a 325-acre campus directly adjacent to the Borough.

Pennsylvania German customs have been associated with Kutztown since its founding, with fairs and festivals representing important chapters in the Borough's cultural history. Since 1950, the Kutztown Folk (Pennsylvania German) Festival has attracted thousands of visitors from all over the country to watch craft demonstrations and dances, to view exhibitions, to sample traditional foods, and to learn about the Pennsylvania Dutch culture in this region. From its humble beginnings, in the past decade the Festival has drawn well over 100,000 tourists during its nine-day stretch and has made the name of Kutztown synonymous with authentic Pennsylvania Dutch folk culture.

Besides its annual festival, Kutztown is home to the Pennsylvania German Cultural Heritage Center and current headquarters of the Pennsylvania German Society, founded in 1891 as a scholarly organization dedicated to the preservation of the local heritage. The local "Pennsylvania Dutch" character still resides locally, and the Kutztown Region remains one of the prime spots to hear the dialect, a mingling of early 18th-century *Pfälzisch* German and modern English, still being spoken at local markets and country venues.

With its large university and small-town charm, Kutztown retains much of the same commercial vitality and activity that characterized its early history and development. Because of its traditional agrarian folk culture, its strong adherence to the dialect, and a proud resistance to change, Kutztown has often been regarded by both tourists and antique hunters alike as a spot somewhat removed from time. With its handsome, 200+-year-old stone homes and some of its narrow country lanes still unpaved, it provides a vibrant reminder of, and linkage between, American rural life of the colonial era and the 20th century. While the major travel route, Rt. 222 (Easton Road), has since bypassed the main street in town, college activity and the annual Festival continue to attract visitors into the commercial district.

PROPOSED KUTZTOWN HISTORIC DISTRICT

Efforts are underway to create a Kutztown Historic District. Already reviewed and declared eligible by the Pennsylvania Historical and Museum Commission, the District would contain an area roughly bounded by College Boulevard, West Walnut St., Vine Alley, Danner Alley, Fair Street, North Whiteoak St., Boro Alley, Church Lane, Cemetery Lane, Greenwich St., North Constitution Blvd., West Main St., Sander Alley, Bieber Alley, Keystone Ave., South Whiteoak St., Normal Ave., Lambert Alley, and Sander Alley.

The proposed District encompasses the oldest structures in Kutztown, forming the core of the Borough's settlement from its founding until the present day. Major changes of a visual or land use nature mark the east and west boundaries of the district. On the east, Constitution Boulevard marks the virtual end of the West Main Street commercial area and the beginning of East Main Street (primarily a residential area with adjacent industrial zones), while on the west, College Boulevard divides the proposed District and the campus of Kutztown University along the Borough-Township line.

The proposed District also includes one of the town's major open spaces, the adjacent St. John's and Hope Cemeteries. Along the north and south edges, the proposed District is bounded by streets and alleys that separate older residential structures from more recent neighborhoods. Ancillary to the Main Street core, the inclusion of side streets is conditioned by the historical development of the Borough itself, from its original residential neighborhoods (West Walnut and Greenwich Sts.) to the cross-streets projecting southward (Noble and South Whiteoak Sts.), the primary direction of the Borough's growth from its settlement through the end of the 19th century.

The proposed District represents a cohesive, continuous streetscape and a wide variety of commercial and residential structures tracing the development of the Borough, including at least one half-dozen structures dating to the last quarter of the 18th century, considerably more to the first quarter of the 19th, and literally dozens to the pivotal period of Kutztown's growth between 1840 and 1880.

As of this writing, the proposed District is still being inventoried but will likely include upwards of 800 contributing structures, including approximately three dozen of outstanding architectural and/or historical importance to the District and several hundred more of importance to the District.

OTHER OPPORTUNITIES FOR HISTORIC DISTRICTS

Additional historic districts in the Region may be appropriate, including areas such as Lyons, Bowers, Monterey, and Eagle Point. These opportunities should be investigated.

PLANNING IMPLICATIONS

The information on historical resources can be used in several ways. It can be used as a basis for efforts to create historic districts where concentrations of resources occur. It is also possible to have trail systems link historic sites and erect informal displays near historic sites. Efforts could be made to encourage developers to preserve historic resources and their context and mitigate impacts on historic resources. Efforts can be made to protect individual historic properties or sites. The appropriate adaptive reuse of historic structures can be encouraged where appropriate.

In addition, when we talk about agricultural preservation activities, we do not just have to point to a map showing prime agricultural soils, agricultural security areas, and preserved properties. We see that agricultural operations are part of the heritage of this area and important agricultural homesteads remain in the Region.

Historical Resources Identification Table - Kutztown, Maxatawny and Lyons Joint Comprehensive Plan

Map Id	Municipality	Historical Site	Description
1	Maxatawny Township	Former Eagle Point schoolhouse	One-room brick building schoolhouse; architecturally interesting; closed in 1955.
2	Maxatawny Township	Kroningersville Hotel	Built 1850's for a store, which has been closed for a long time; and a Post Office. Area referred to as "Eagle Point." Built from stone, it is a huge structure which is now used as a dwelling place/hamlet called Eagle Point.
3	Maxatawny Township	Small Kutz family cemetery	
4	Maxatawny Township	Site of 1740 Levan grist mill	Burned in recent years with nothing (or very little) remaining of the structure, it was were Count Zinzendorf preached in 1742; often mentioned in old references
5	Maxatawny Township	Golden Eable/Kunkle Inn	This Inn has been closed for a long time; now used as a dwelling unit; stone construction which is architecturally interesting and is in well kept condition. Built before 1816
6	Maxatawny Township	Former Leibelsperger Inn site	Built in 1850's 1860's, brick building, and now used as dwelling unit.
7	Maxatawny Township	Hottenstein home/ Hottenstein Mansion	Stone construction; architecturally interesting; in well kept condition, exceptionally fine building with a visible datestone. On the National Register of Historic Places.
8	Maxatawny Township	Hottenstein family cemetery	Old cemetery
9	Maxatawny Township	Siegfried One-room schoolhouse	Now the bookstore at Rodale.
10	Maxatawny Township	Former Siegfried/Schofer Hotel	This white, 2 1/2-story huge structure can be seen from Rte. 222; used to have the "Schofer" Post Office and operated in the hotel from 1886 - 1920. The hotel was in operation for 150-years.
11	Maxatawny Township	Siegfried's/Zion Church	Built in 1820 and enlarged later, this has a fine porch/setting.
12	Maxatawny Township	Kemp's Hotel	Established in 1763, this is a huge structure and John Adams slept here in 1777. It is still operating in some form, and is on the National Register of Historic Places.
13	Maxatawny Township	Bower's Hotel	This huge stone structure which is in well kept condition was built in 1820 and was enlarge at a later date. This structure has a fine porch/setting.
14	Maxatawny Township	Former Parochial School	"Maxatawny/De Long's" Church; 2 1/2-story building with a small porch with two large trees in the front and has a graveyard opposite. It has been closed for a long time and now used as a dwelling unit. It was built in 1818.
15	Maxatawny Township	Maxatawny-Fairview Seminary/Fister Mansion	(1860-62) it is a huge 3-story with porch. This preceded K.S. College located beside a church and now used as a dwelling unit. This farm exhibits historic features such as the type of architecture the of the farmhouse and other buildings located on the private property represents the way farms looked from the earliest settlement of the area. This is right outside the municipal jurisdiction, located in Maxatawny Township but a treasure to the local area none-the-less.
16	Maxatawny Township	Boyer-Mertz/Boyer-Angstadt Farm	

Historical Resources Identification Table - Kutztown, Maxatawny and Lyons Joint Comprehensive Plan

17	Maxatawny Township	Siegfried's Dale Farm / Rodale Research Center	What is now the farm research center of the Rodale Press has a history that reaches back 2 ½ centuries to the 1732 arrival in Maxatawny Township of Johannes Siegfried. Siegfried and his wife Elizabeth were "among the first, if not the first, white settlers in the vicinity of Kutztown" and their daughter was the first child in the region of European ancestry. It was a major center for the spread of the Moravian denomination. The farm and all its buildings remained in the Siegfried's family until well into the 20 th century. The integrity and architecture has been preserved extremely well and now it is open to the public.
18	Maxatawny Township	Grim Homestead	On the National Register of Historic Places. Now used as an apartment building. Originally built in 1881, additions were added in 1900 and 1903. This building is significant not only for its intact 19th century industrial architecture, but also for the large role that it played in the economic development of Kutztown. It has retained almost all of its original architectural elements and embellishments.
19	Kutztown Borough	H.K. Deisher Mill	On the National Register of Historic Places. The schoolhouse is a 2 story, 8- room Victorian structure of brick and stone construction. It is an example of the larger public school buildings built throughout PA toward the end of the 19 th century. It is one of the best preserved of these structures in Berks County in Pennsylvania and the Mid-Atlantic region.
20	Kutztown Borough	1892 Public School Building	Highlighted
21	Kutztown Borough	Washington House	Located at 314 West Main Street in Kutztown.
22	Kutztown Borough	Swan Inn	Located at 208 West Main Street in Kutztown.
23	Kutztown Borough	Franklin Academy	Located at 301 West Walnut Street in Kutztown.
24	Lyons Borough	Lyons Hotel and American House	Located at corner of Kemp Street and Mill Street in Lyons.
25	Lyons Borough	Lyons 2-story School	located at the corner of Hunter Street and Main Street in Lyons.
26	Lyons Borough	St. Paul's Church	located at the corner of Kemp Street and Brock Street in Lyons.

Highlighted = map point verification needed

Source: Berks County Vision 2020; Berks County Open Space and Recreation Plan, January 1994; Meiser's Historical Sites Map of Berks County Pennsylvania from actual surveys by George M. Meiser, IX, 1976; Pennsylvania Historic Museum Commission; National Register of Historic Sites.

APPENDIX A

PLANNING QUESTIONNAIRE RESULTS

**OVERALL TOTALS
KUTZTOWN, LYONS, MAXATAWNY
JOINT COMPREHENSIVE PLAN
QUESTIONNAIRE**

1. In what Township or Borough in this region do you live or own property?

Kutztown Borough	170
Lyons Borough	22
Maxatawny Township	197
Total	389

2. How long have you lived/owned property in your municipality?

5 years or less	49
6-10 years	56
11-20 years	80
more than 20 years	204

3. What is your age?

18-24	0
25-44	85
45-64	149
65 and older	119

4. What do you like most about living/owning property in the Kutztown, Lyons, Maxatawny Region?

(Please rank five 1, 2, 3, 4 and 5, 1 being what you like most.)

	1	2	3	4	5		1	2	3	4	5
Environmental Quality	11	12	14	8	10	Safety	10	19	24	18	15
Recreational Opportunities	4	4	6	7	11	Job Opportunities	3	3	1	2	0
Tax Rates	2	3	4	2	7	Cultural Facilities	0	3	1	9	2
Rural Atmosphere/Open Space	58	10	11	7	6	Roads	1	1	2	0	2
Housing Availability & Choice	16	12	6	9	6	Access to Cities	3	0	24	22	15
Farmland	26	34	21	15	15	Access to Work	12	11	11	16	7
Cleanliness	5	12	14	8	11	Access to Shopping	0	4	6	3	8
Emergency Services	6	8	6	11	4	Small Town Atmosphere	56	32	27	39	17
Walkability	13	17	14	15	11	Housing Quality	1	1	0	2	1
Visual Appearance	1	6	8	11	14	Residential Areas	4	2	3	2	9
Housing Cost	3	3	3	0	7	People	13	12	12	16	16
Schools	11	18	13	17	16	Kutztown University	6	8	4	7	14
Telecommunications Infrastructure	4	7	6	3	5	Quiet	14	16	22	17	29
Utility Costs	1	2	3	4	2	Landscape	7	16	20	11	13

Additional Comments: _____

5. What do you like least about living/owning property in the Kutztown, Lyons, Maxatawny Region?
(Please rank five 1, 2, 3, 4 and 5, 1 being what you like least.)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Lack of Parking	30	18	17	18	21	Housing Quality	0	0	0	3	1
Traffic	29	23	11	16	11	Property Maintenance	3	4	11	9	8
Tax Rates	73	24	21	15	19	Loss of Farmland	27	23	19	23	15
Residential Development	12	20	14	11	9	Cultural Facilities	1	0	2	1	4
Safety	0	4	4	1	3	Recreational Opportunities	1	3	9	4	7
Roads	6	20	11	12	15	Schools	1	1	0	4	0
Job Opportunities	8	13	16	8	10	Environmental Quality	0	1	4	3	3
Loss of Open Space	9	23	33	15	12	Sewage Facilities	7	6	9	8	6
Emergency Services	0	0	0	2	0	Water Supply	3	6	4	4	4
Housing Availability & Choice	4	2	2	2	4	Availability of Public Transportation	6	8	10	16	18
Visual Appearance	0	3	5	1	6	Noise	4	8	10	12	7
Utility Costs	12	12	13	11	7	Access to Work	2	0	1	0	2
Commercial Development	3	11	13	20	6	Access to Shopping	3	9	7	13	7
Housing Cost	0	5	2	3	5	Student Issues	14	19	15	11	16
Student Housing	32	17	15	10	12						

Additional Comments: _____

6. What do you think are the most important planning issues needing to be addressed within the Kutztown, Lyons, Maxatawny Region in the next 10 years? (Please rank five 1, 2, 3, 4 and 5, 1 being the issue you think is most important.)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Managing growth	82	23	18	20	22
Preserving environmentally sensitive areas such as floodplains, woodlands, wetlands, and steep slopes	19	27	20	11	11
Road improvements	17	15	18	28	17
Preservation of Farmland	32	33	32	15	14
Sewage disposal	12	7	9	9	8
Drinking Water Supply (quantity)	3	9	10	16	8
Zoning	10	21	18	10	9
Regional cooperation in providing services	8	7	10	16	15
Preservation of open space	4	22	31	26	12
Preserving historically significant buildings and structures	4	6	7	7	16
Coordination of long-range planning with Kutztown University	9	13	17	20	18
Water quality protection	17	20	20	18	13
Expanding public transportation	3	5	4	7	10
Tax base	40	29	20	21	17
Police/Crime Watch	6	9	10	15	14
Promoting vitality of Borough downtowns	11	8	14	16	16
Providing recreational facilities	1	1	5	5	11
Stormwater management	1	3	2	2	4
Watershed management	1	1	1	4	5
Emergency services	0	0	2	4	7
Encouraging economic development	17	26	21	11	22

Additional Comments: _____

9. Was the increase in residential development in your municipality over the last ten years....

Acceptable	<u>252</u>
Too high	<u>92</u>
Too low	<u>29</u>

10. Do you think it is important to require future non-residential redevelopment in the Region to place more emphasis on amenities such as landscaping, attractive signage, decorative lighting and benches?

Yes	<u>181</u>
No	<u>90</u>
Not Sure	<u>99</u>

11. a. Is it important to preserve remaining farmland in the Region?

Yes	<u>315</u>
No	<u>34</u>
Not Sure	<u>32</u>

b. If you answered yes, why do you feel it is important to preserve farmland?

17 I live on a farm.

155 I like to purchase local produce.

245 I want farmland available for future generations to farm.

182 I like to view farmland.

201 I want to limit development which occurs in the community.

 Other _____

12. Do you think it is important to improve landscaping, signage, decorative lighting, and benches in Downtown Kutztown and Lyons?

Yes	<u>171</u>
No	<u>133</u>
Not Sure	<u>75</u>

15. What types of housing do you feel are needed in the Region?

	Yes	No	If Yes, Where?				
			*M	K	L	A	C
Housing for senior citizens	179	119	18	40	8	8	0
Housing for young couples	144	139	11	23	7	6	0
Housing for families with school children	146	140	15	20	6	4	0
Housing for singles	85	185	7	13	8	2	0
Housing for empty nesters	85	183	8	9	1	3	0
Owner-occupied units	117	157	7	14	3	3	0
Rental units	74	201	6	11	4	0	1
Student housing – In existing units	70	213	1	9	0	0	
Student housing – In large complexes	83	205	8	5	0	0	

*M = Maxatawny Township
 K = Kutztown Borough
 L = Lyons Borough
 A = All 3
 C = Campus of KU

Additional Comments: _____

16. Every Region has its “treasures” – places that are unique because of their beauty, appeal, historic character, or because of what they offer the citizens of the Region. These are special places that citizens often want to preserve for future generations. Please identify up to five such places in the Region. You may want to name a village, a historic building, an agricultural area, a public building, a business, a stream valley, an area of countryside which is especially beautiful, or other location you consider a “treasure”.

1. _____
2. _____
3. _____
4. _____
5. _____

17. Do you think that the pros and cons of providing the following services together on a Regional basis should be considered by the governing bodies of Kutztown, Lyons, and Maxatawny?

	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
Code Enforcement	<u>204</u>	<u>72</u>	<u>59</u>
Zoning	<u>219</u>	<u>66</u>	<u>58</u>
Police Service	<u>263</u>	<u>46</u>	<u>34</u>
Fire Service	<u>274</u>	<u>41</u>	<u>24</u>
Emergency Medical Services	<u>286</u>	<u>28</u>	<u>23</u>
Equipment Sharing	<u>262</u>	<u>33</u>	<u>37</u>
Road Improvements	<u>269</u>	<u>38</u>	<u>33</u>
Solving Transportation Problems	<u>159</u>	<u>39</u>	<u>36</u>
Sewer Service	<u>210</u>	<u>76</u>	<u>56</u>
Water Service	<u>208</u>	<u>77</u>	<u>58</u>
Economic Development	<u>153</u>	<u>47</u>	<u>33</u>
Planning Road Connections	<u>287</u>	<u>23</u>	<u>26</u>

Additional Comments: _____

18. Please list any additional comments you have or any other issues in the Region that are important to address.

RESOLUTION NO. 2010- 1

**A RESOLUTION OF THE BOARD OF SUPERVISORS OF
THE TOWNSHIP OF MAXATAWNY, BERKS COUNTY,
PENNSYLVANIA, ADOPTING THE MAXATAWNY
TOWNSHIP COMPREHENSIVE PLAN OF JULY 2009.**

BE IT RESOLVED by the Board of Supervisors of the Township of Maxatawny, Berks County, Pennsylvania, and it is hereby resolved by the authority of the same as follows:

WHEREAS, it is the Board of Supervisors of Maxatawny Township, hereinafter referred to as "Board", has elected to revise and update the Maxatawny Township Comprehensive Plan of October 9, 1996; and

WHEREAS, it is the Board's purpose in the adoption of the revisions to the October 9, 1996 Maxatawny Township Comprehensive Plan, as revised July 2009, to provide a statement of the objectives of the Township relative to the future development as to the location, character, timing of development within the municipality, and also to serve as a statement of community development objectives to include a plan for land use among other objectives, as more fully set forth in said Comprehensive Plan; and

WHEREAS, it is the Board's intention to adopt the revisions to the Comprehensive Plan to provide a guide for the growth and development of the Township and to provide a vehicle to implement short and long term range strategies; and

WHEREAS, the Comprehensive Plan for Maxatawny Township of 2009 shall further provide a statement of the Township's future objectives with respect to land use, density of population, housing, commercial and industry usages, community facilities and utilities,

and the need for preserving agricultural land and protection of natural resources.

NOW, THEREFORE, be it resolved by the Board of Supervisors of the Township of Maxatawny, Berks County, Pennsylvania, and it is hereby resolved by the authority of the same as follows:

SECTION 1. That the Maxatawny Township Board of Supervisors hereby adopts by reference the Maxatawny Township Comprehensive Plan Revision of July 2009, a copy of which is incorporated herein as it more fully set forth below. The Maxatawny Township Comprehensive Plan Revision of 2009 shall consist of the following subject matters:

Introduction to the Comprehensive Plan, Community Vision, Goals, and Objectives, Future Land Use and Housing Plan, Economic Development Plan, Community Facilities and Services Plan, Transportation Plan, Plan for the Protection of Natural and Historic Resources, Action Plan, Plan Interrelationships, Regional Settings and Influences, Identification of Issues – Public Participation, Population and Housing Needs, Existing Land Use, Community Facilities, Traffic Circulation, Pedestrian Circulation, Agricultural Resources, Scenic Resources, Natural Resources, Geology and Aquifer Yields, and Historical Resources.

Included in the adoption of the Maxatawny Township Comprehensive Plan Revision of July 2009 are all textual matters related to the aforementioned, including, but not limited to, maps, charts and tables and other items contained in the Plan document.

SECTION 2. The adoption of the Maxatawny Township Comprehensive Plan Revision of July 2009 shall amend, replace, and supersede the Maxatawny Township Comprehensive Plan of October 9, 1996.

SECTION 3. The Board has complied with all notice and comment requirements under the Municipal Planning Code ("MPC") for the adoption of the Comprehensive Plans.


SECTION 4. All resolutions or parts of resolutions inconsistent with this Resolution are hereby repealed insofar, but only insofar, as the same are inconsistent herewith.

RESOLVED AND ADOPTED by the Board of Supervisors of the Township of Maxatawny, Berks County, Pennsylvania, in the lawful session duly assembled, this 6th day of January, 2010.

**BOARD OF SUPERVISORS OF
MAXATAWNY TOWNSHIP, BERKS
COUNTY, PENNSYLVANIA**



Allen L. Leiby, Chair



Gayle Sanders, Supervisor










David Hoffman, Supervisor

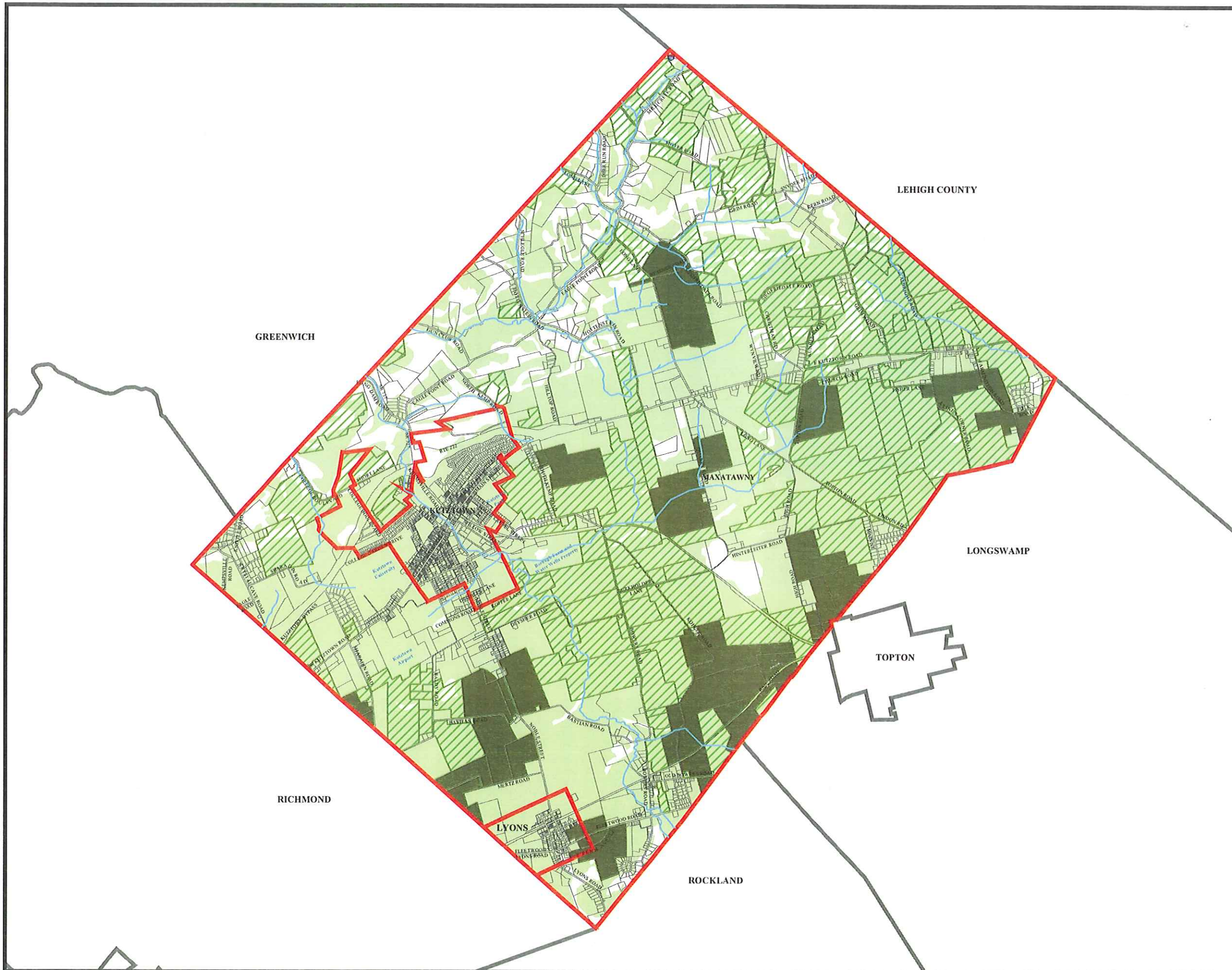
Attest:



Township Secretary

**Agricultural Resources
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan**

-  Streams
-  Study Area
-  Parcels
-  Agricultural Easement
-  Agricultural Security Area
-  Prime Agricultural Soils
-  Municipality



Data source: Berks County GIS and Soil Survey Geographic (SSURGO) data base for Berks County, Pennsylvania 1997

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1347 North Park Road
PO Box 6307
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610.621.2000
F. 610.621.2001

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MacArthur Office Plaza, Suite 401
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Windsor, PA 18052-3439
610.433.4183
F. 610.433.3499

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PO Box 8333
St. Thomas, USVI 00801
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F. 340.777.7280



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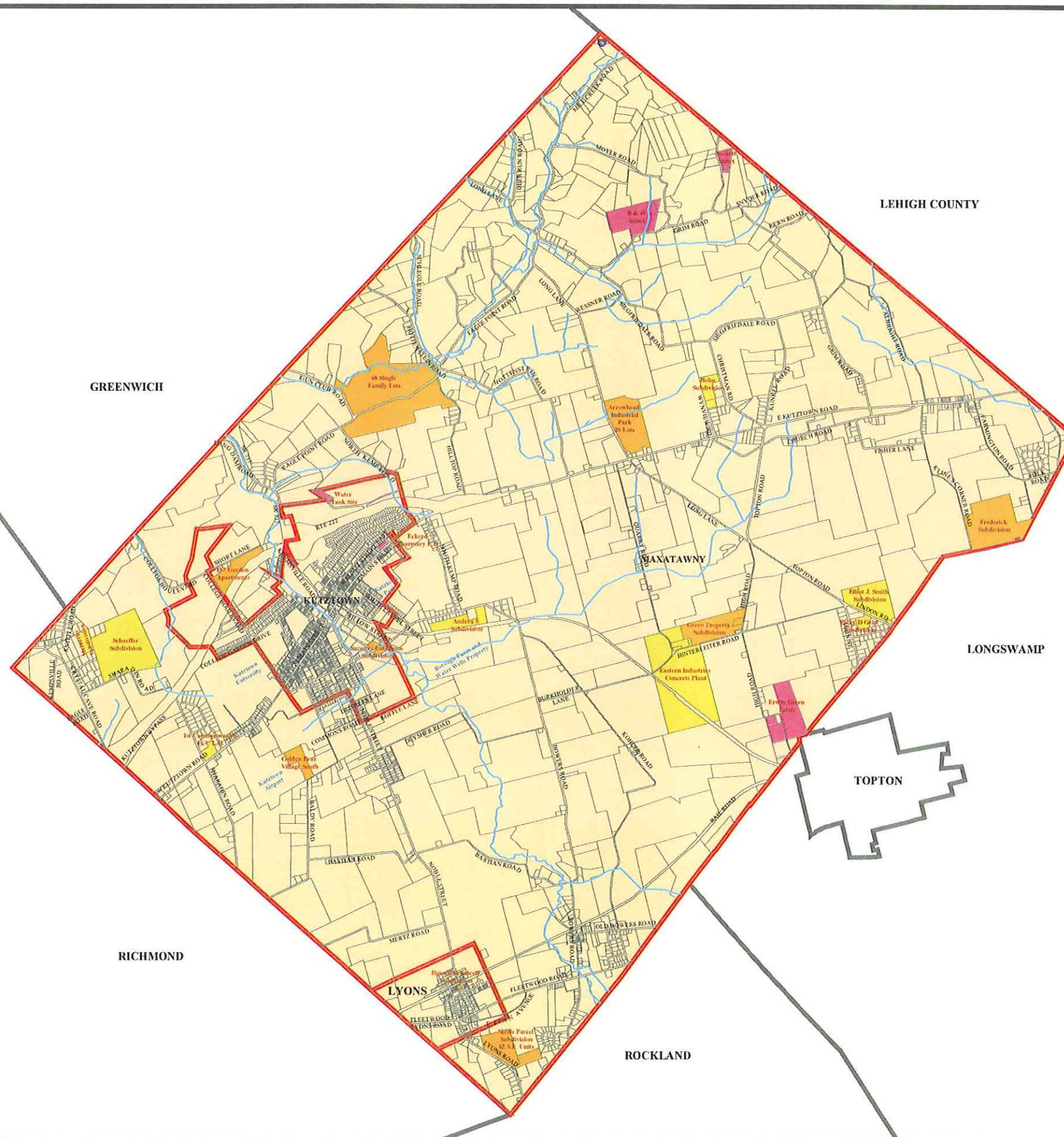
Engineers and Consultants

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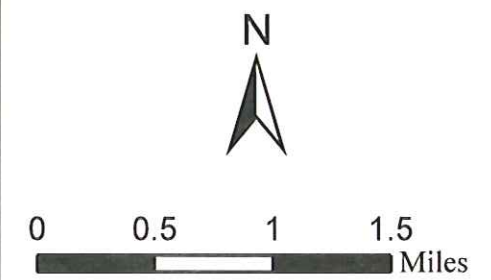
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2/10/04

**Recently Approved + Proposed
Subdivision + Land Development
Map (2002 - 2004)
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan**



- Streams
 - Parcels
 - Study Area
- Subdivisions**
- Public
 - On-lot
 - None Serviced



Data source: Berks County GIS; SSM

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Whitehall, PA 18052-3439
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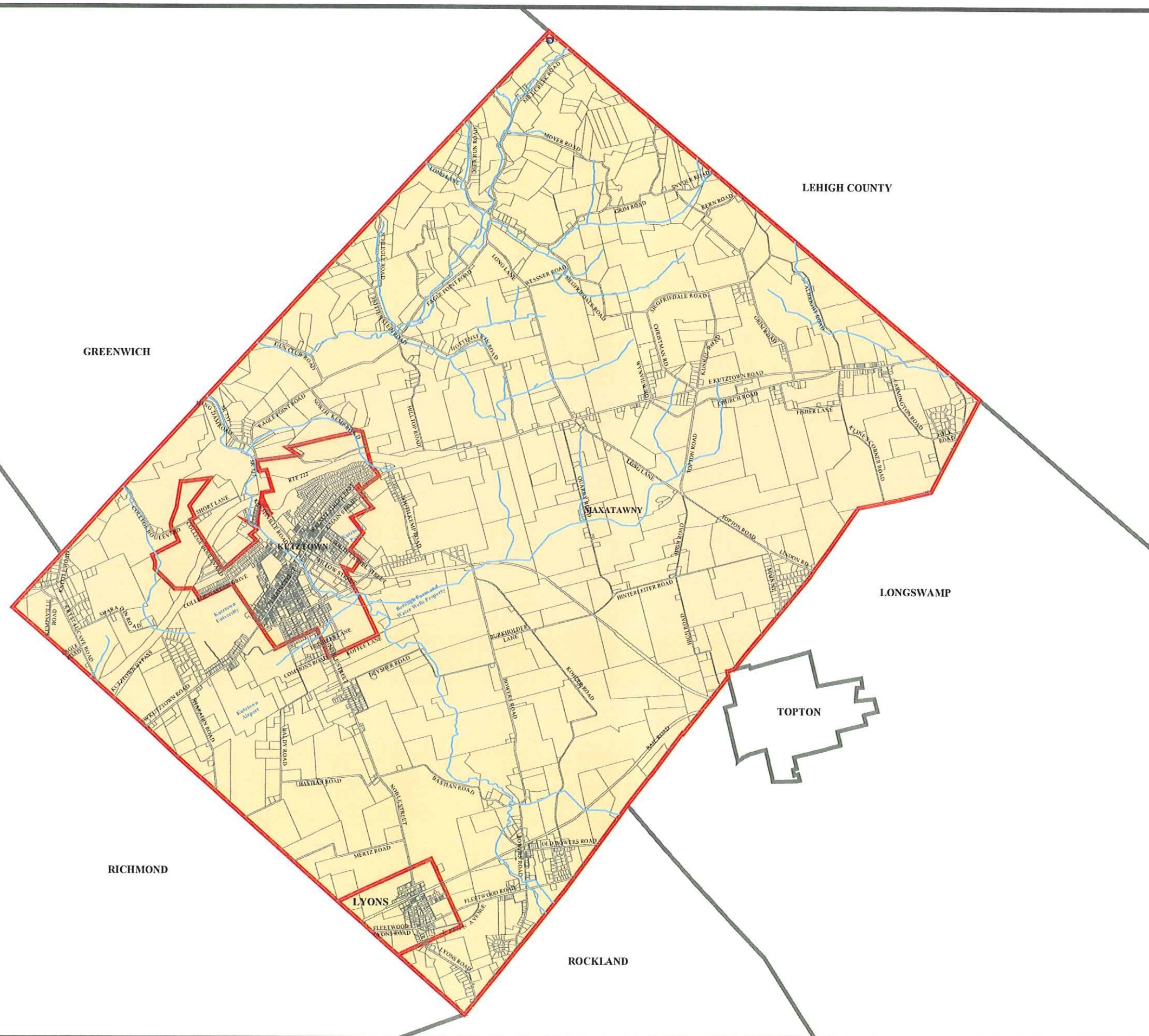
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F: 340.777.7280







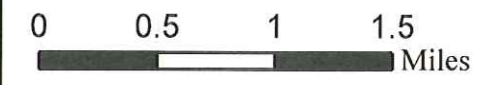
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2/10/04

Base Map
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan



-  Streams
-  Parcels
-  Study Area
-  Municipality



Data source: Berks County GIS

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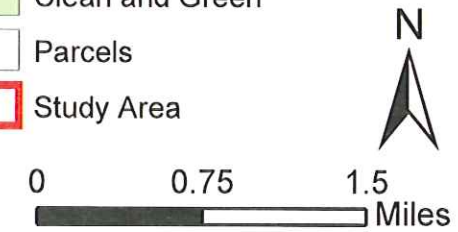
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2/10/04

Community Facilities and Recreation Kutztown and Lyons Boroughs, and Maxatawny Township Joint Comprehensive Plan

-  Airport
-  Fire Company
-  Municipal Building
-  Police
-  School
-  School College
-  School Non-public
-  Other Community Facilities
-  Streams
-  Kutztown Fairground
-  Open Space and Recreation
-  Clean and Green
-  Parcels
-  Study Area



Data source: Berks County GIS; SSM

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1347 North Park Road
PO Box 6307
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F. 610.621.2001
LEHIGH VALLEY



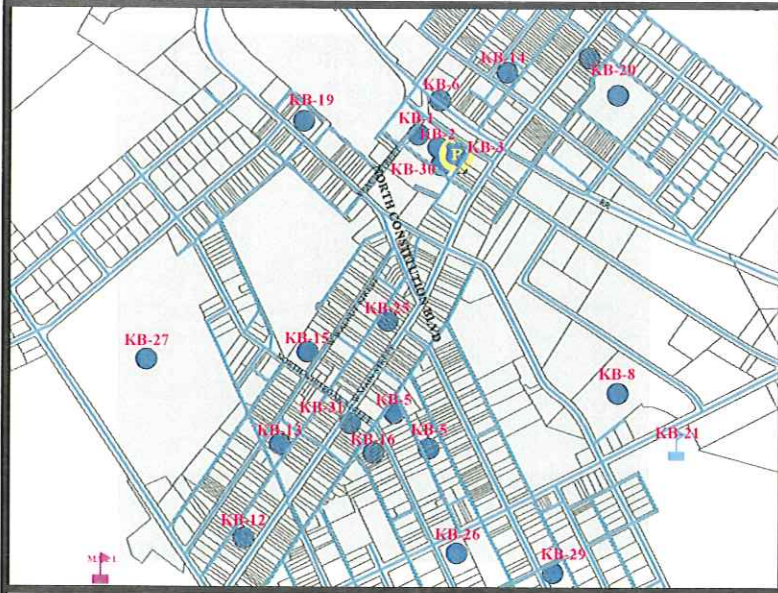
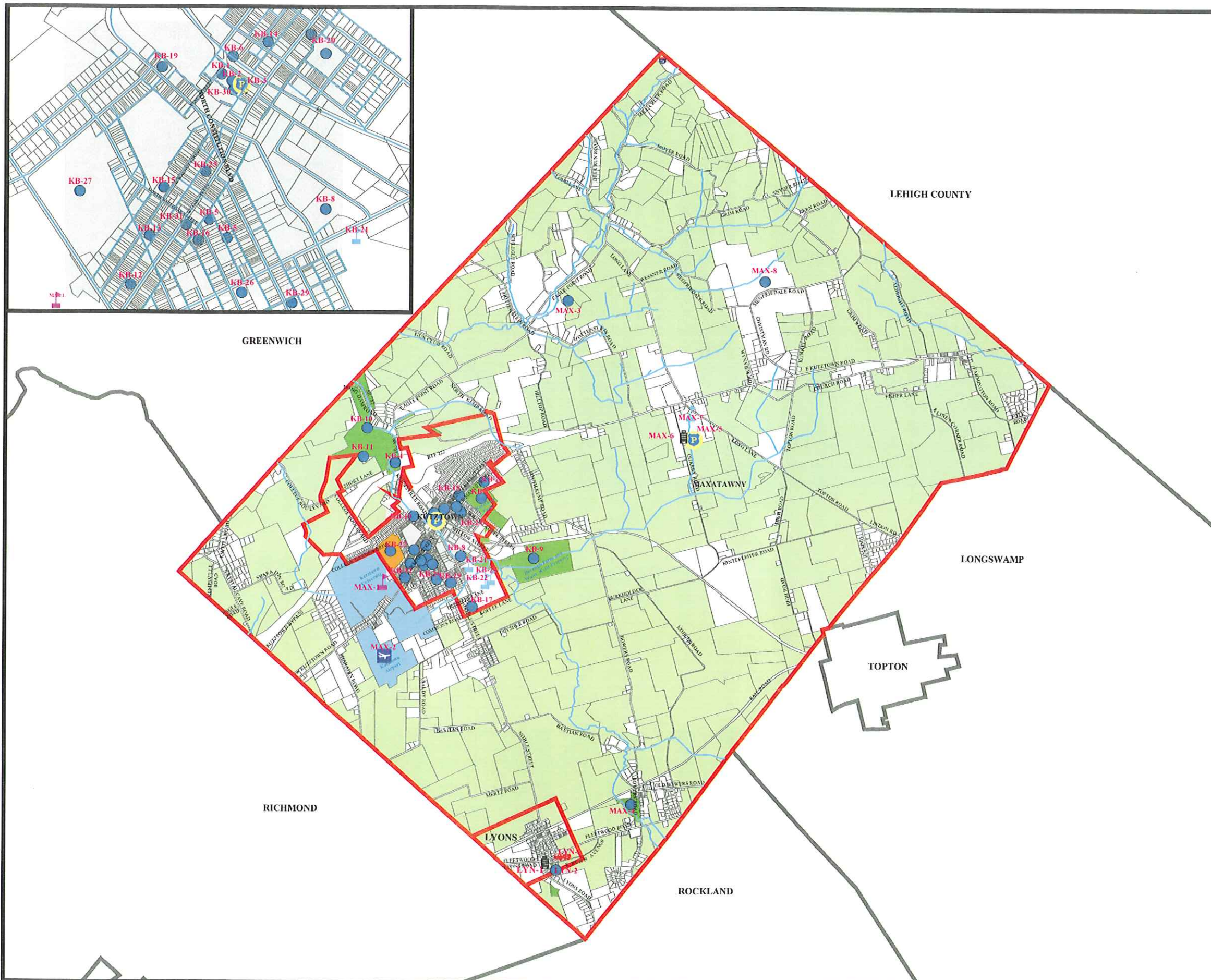
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Wilkes-Barre, PA 18702-3439
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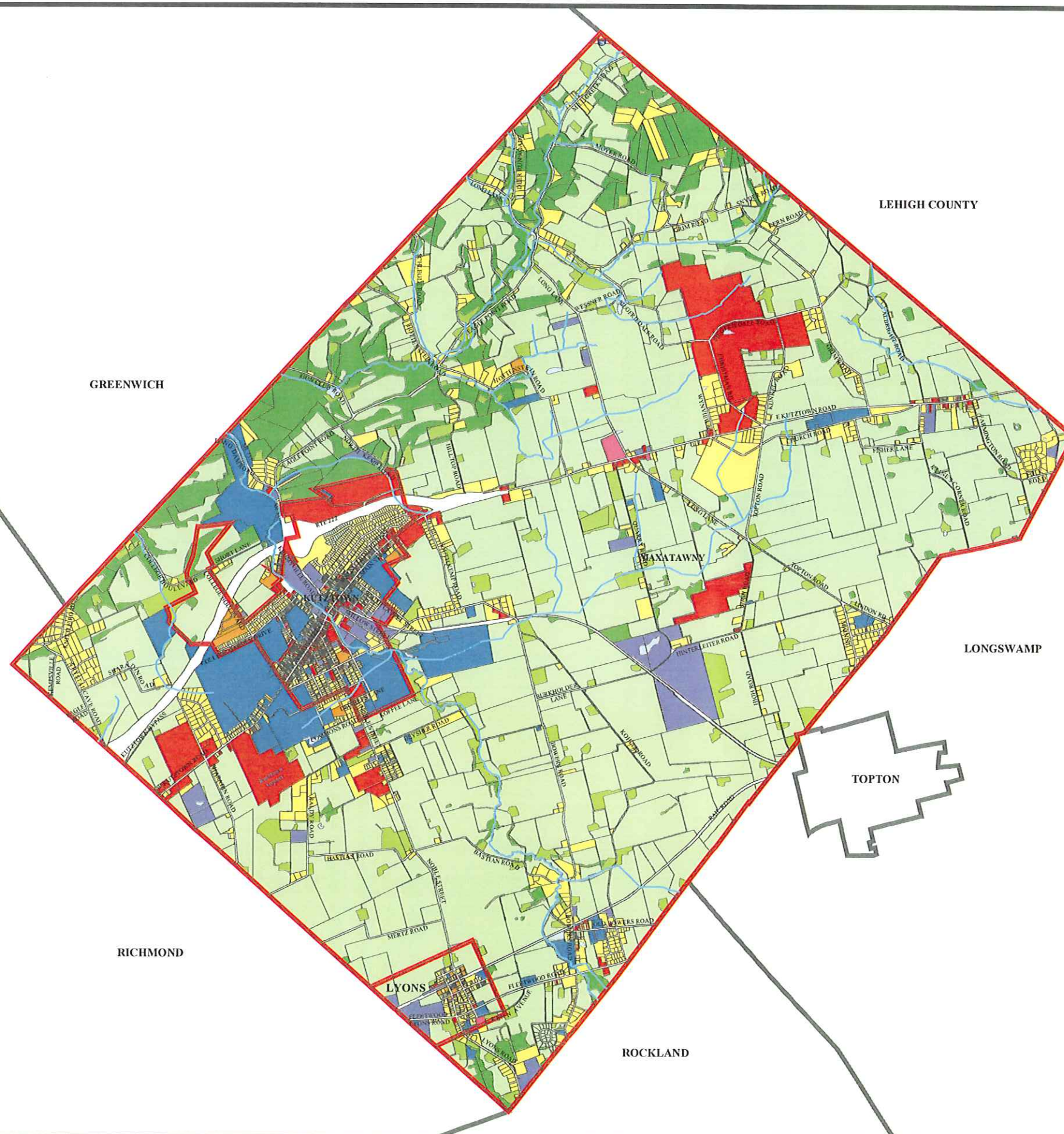
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10/18/06



Existing Land Use Kutztown and Lyons Boroughs, and Maxatawny Township Joint Comprehensive Plan



- Streams
- Parcels
- Study Area
- Existing Land Use**
- AGRICULTURE
- COMMERCIAL
- COMMERCIAL RECREATION
- INDUSTRIAL
- SINGLE FAMILY RESIDENTIAL
- MULTI FAMILY RESIDENTIAL
- PUBLIC / NON-PROFIT
- RURAL
- WATER
- WOODLAND



Data source: Berks County GIS

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1647 North Park Road
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610.621.2600
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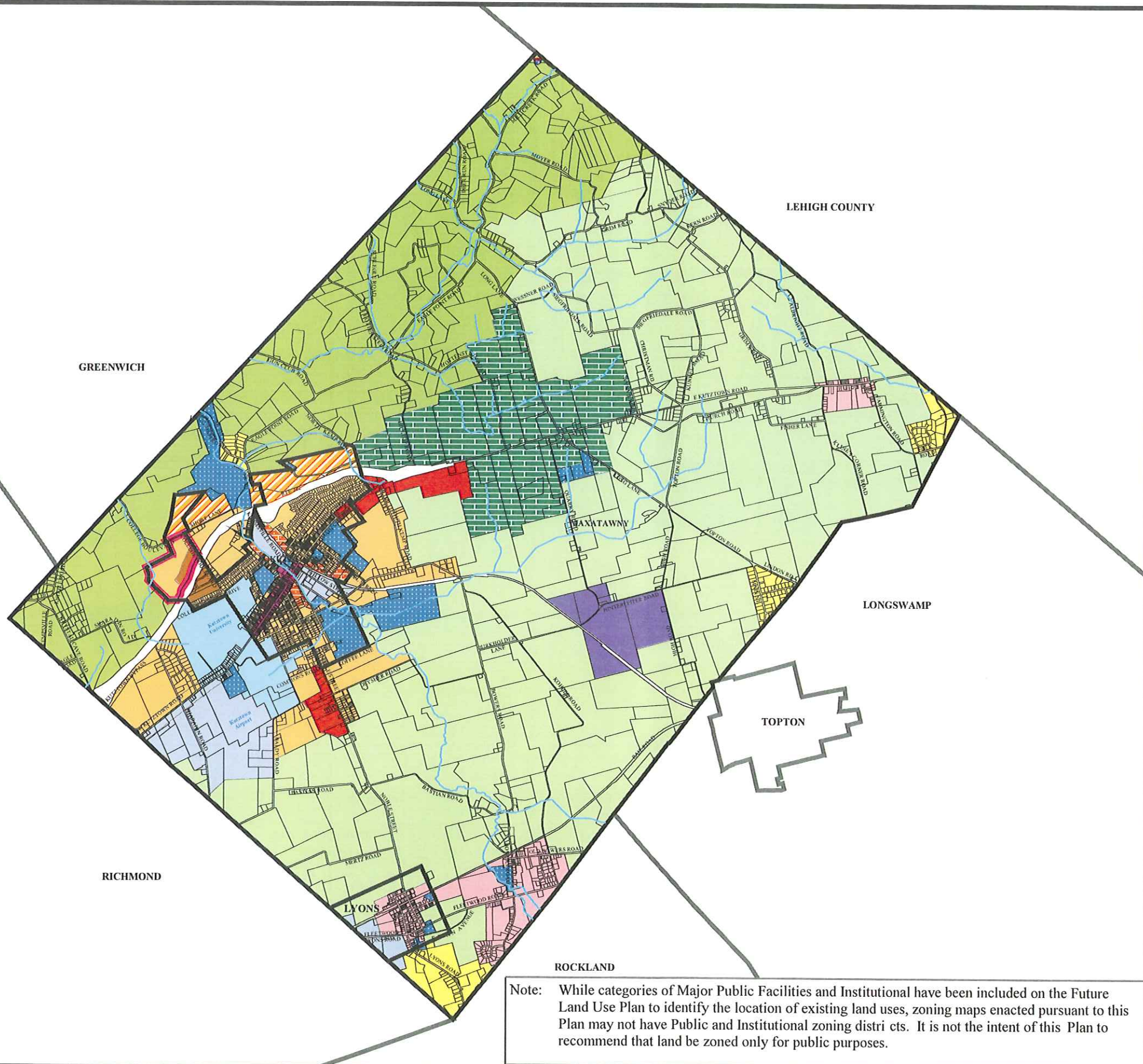


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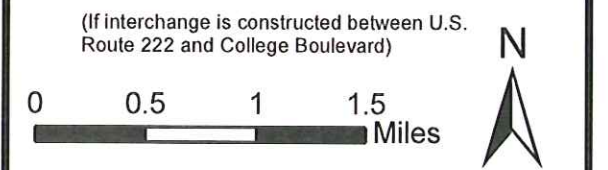
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2/10/04

Future Land Use Plan Kutztown and Lyons Boroughs, and Maxatawny Township Joint Comprehensive Plan



- Future Land Use**
- Agricultural (A)
 - Rural (R)
 - Low Density Residential (LDR)
 - Managed Hillside Development (MHD)
 - Medium Density Residential (MDR)
 - High Density Residential (HDR)
 - Town Center Mixed Use (TCMU)
 - Village (V)
 - Business Development (BD)
 - Commercial (C)
 - Limited Industrial (LI)
 - General Industrial (GI)
 - Institutional (I)
 - Major Public Facilities (MPF)
 - Route 222 Economic Development Corridor (Rt222 EDC)
 - Streams
 - Parcels
 - Study Area
 - Municipality
 - Limited Industrial Overlay District



Data source: Berks County GIS; SSM

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SSM

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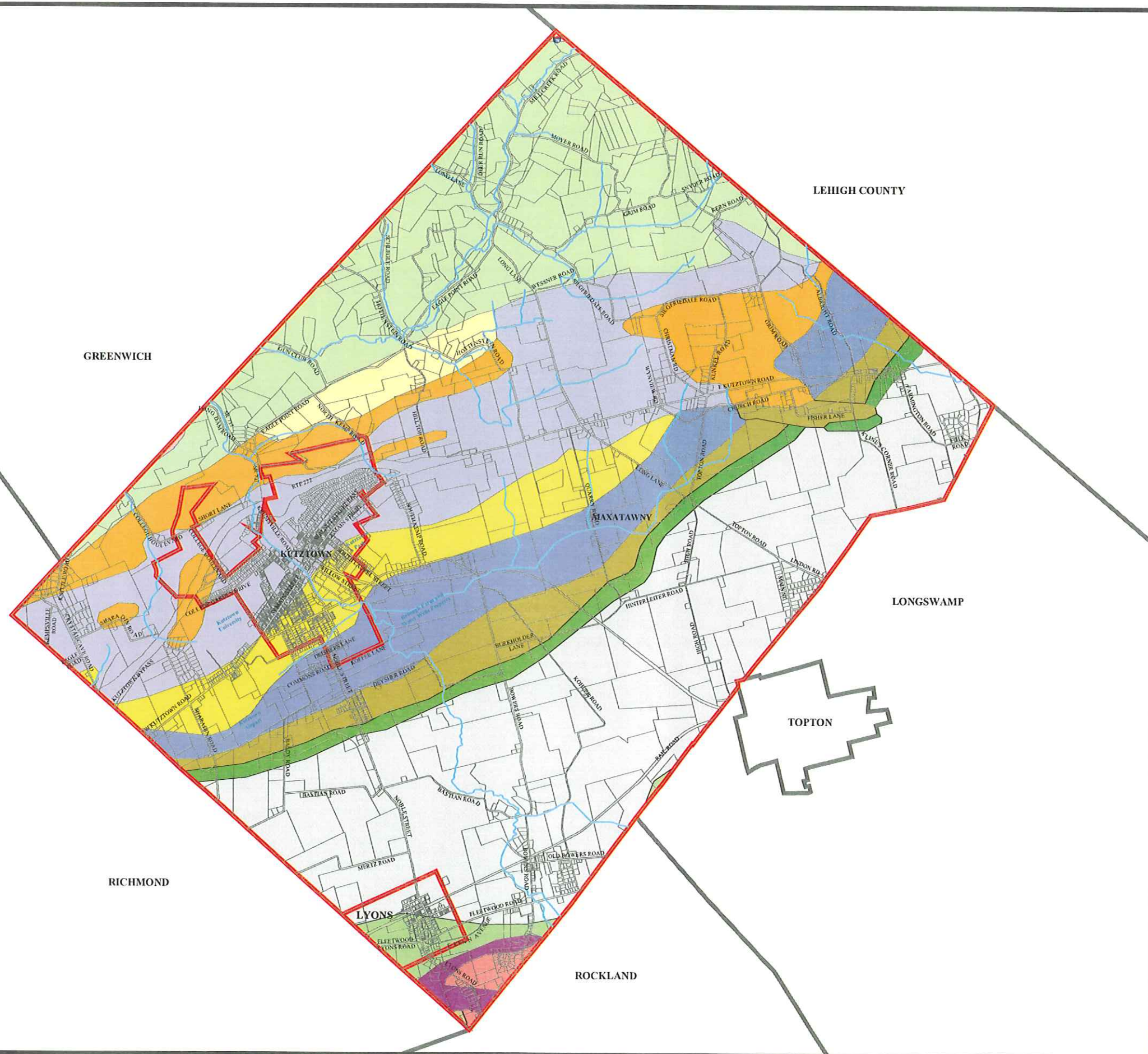
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Note: While categories of Major Public Facilities and Institutional have been included on the Future Land Use Plan to identify the location of existing land uses, zoning maps enacted pursuant to this Plan may not have Public and Institutional zoning districts. It is not the intent of this Plan to recommend that land be zoned only for public purposes.

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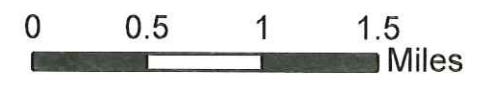
10/16/06

Geologic Formations and Aquifers Kutztown and Lyons Boroughs, and Maxatawny Township Joint Comprehensive Plan



- Streams
 - Parcels
 - Study Area
- Geologic Formations and Aquifer Yields**
- Allentown Fm (60-210 gpm)
 - Epler Fm (15-25 gpm)
 - Granitic Gneiss (20 gpm)
 - Hamburg Sequence (10-50 gpm)
 - Hamburg Sequence (Shale with Graywacke) (10-50 gpm)
 - Hardyston Fm (20 gpm)
 - Hornblende Gneiss (10 gpm)
 - Jacksonburg Fm (20 gpm)
 - Leithsville Fm (100 gpm)
 - Martinsburg Fm (32 gpm)
 - Martinsburg Fm (Shale with Graywacke) (32 gpm)
 - Ontelaunee Fm (200 gpm)
 - Rickenback Fm (100 gpm)
 - Stonehenge Fm 100 gpm)

Aquifer yields extracted from "Engineering Characteristics of the Rocks of Pennsylvania, Geyer and Wilhusen, 1982."



Data source: Berks County GIS and PA Bureau of Topographic and Geologic Survey

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F. 610 621 2001
LEHIGH VALLEY

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610 433 4188
F. 610 433 3459

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340 777 7275
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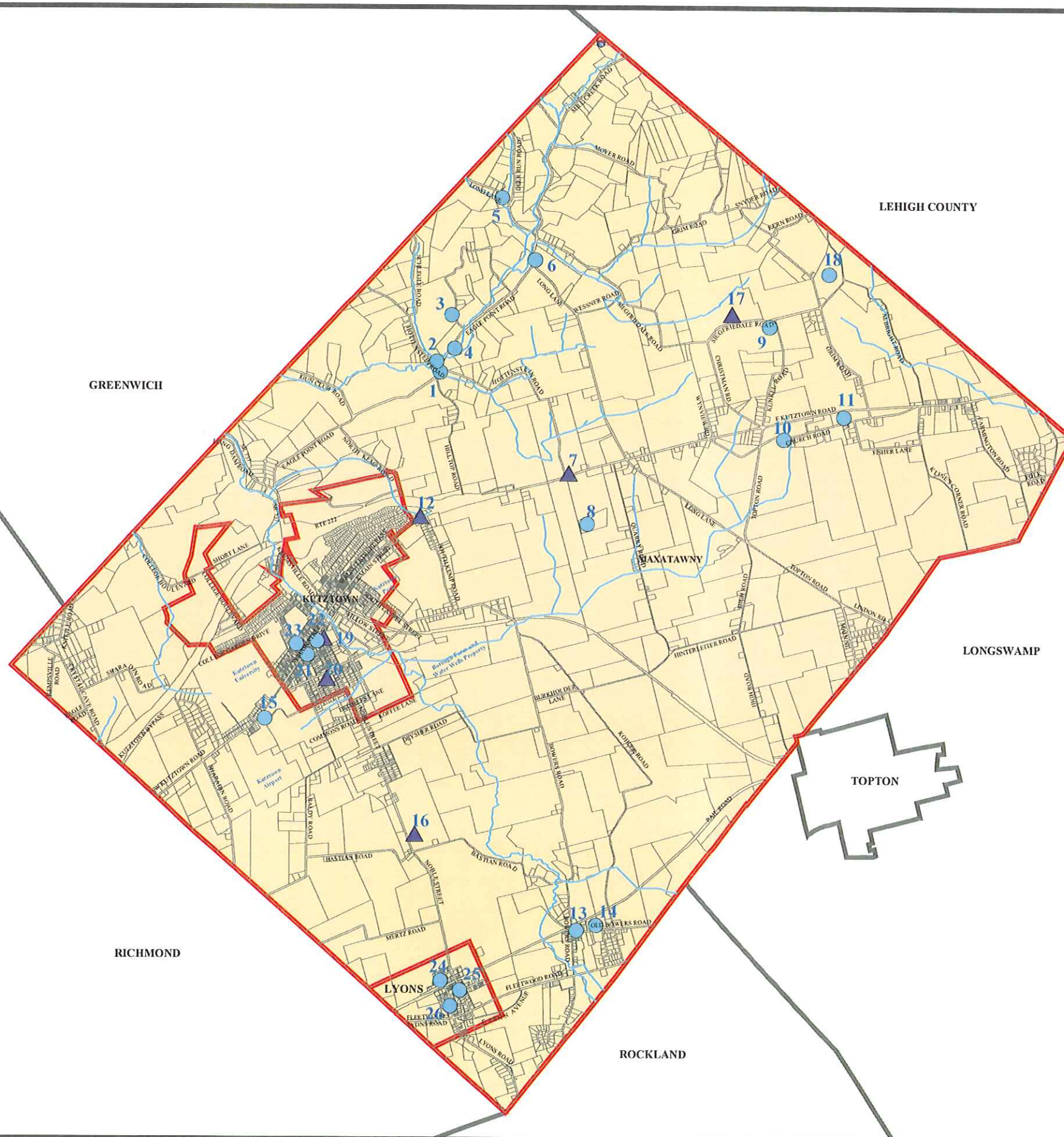
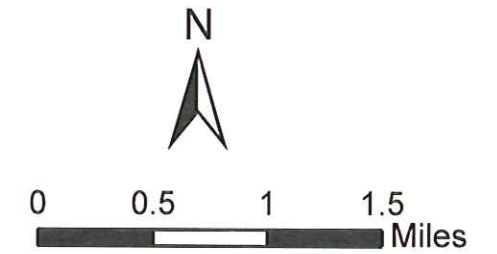
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2/10/04

Historical Resources Map Kutztown and Lyons Boroughs, and Maxatawny Township Joint Comprehensive Plan

-  Historical Sites
-  On PHMC National Register of Historic Sites
-  Streams
-  Parcels
-  Study Area



Data source: Berks County GIS

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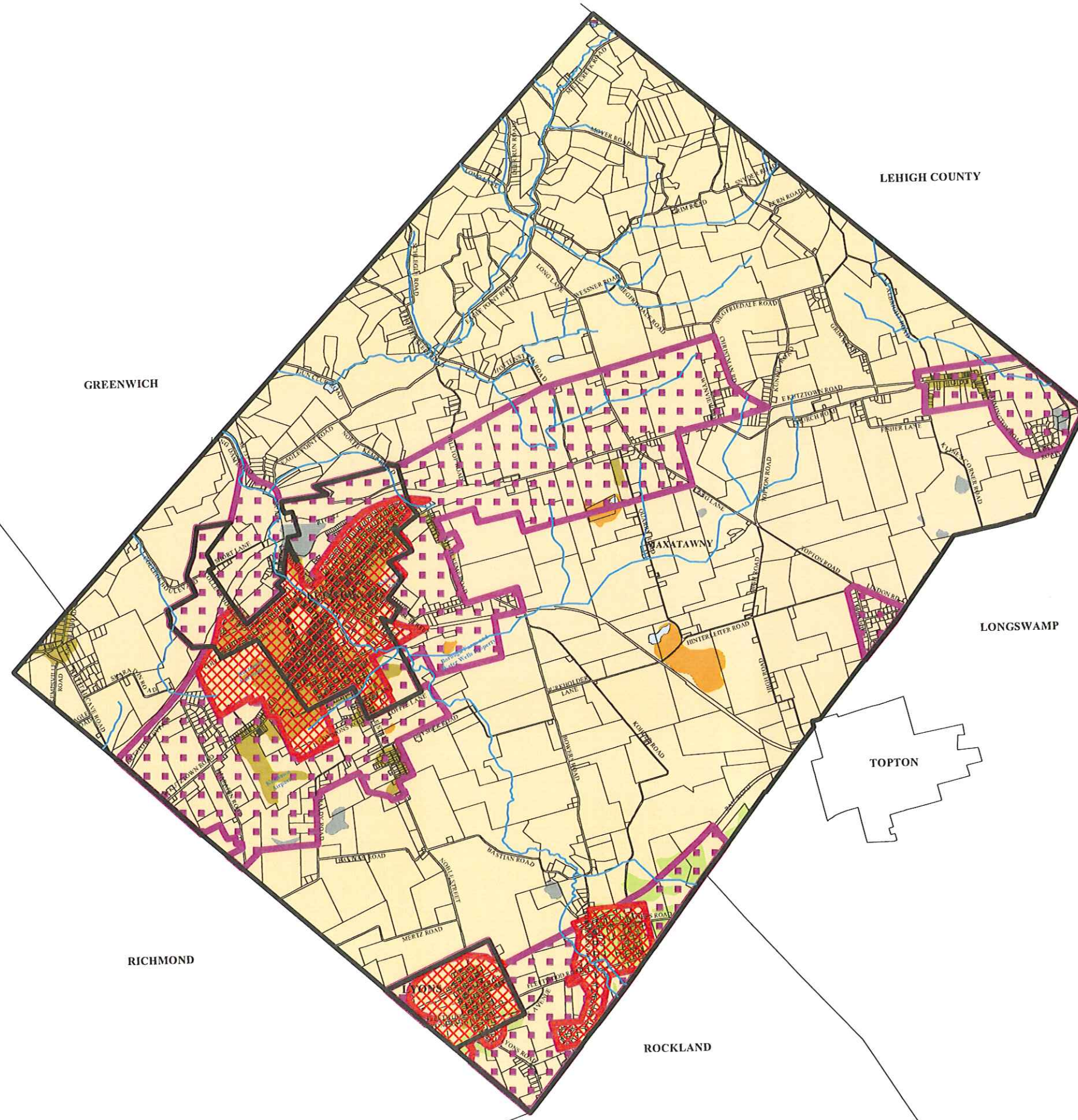
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2/10/04


Existing and Proposed Future Sewer Service Areas and Soil Suitability for On-Site Sewage Disposal

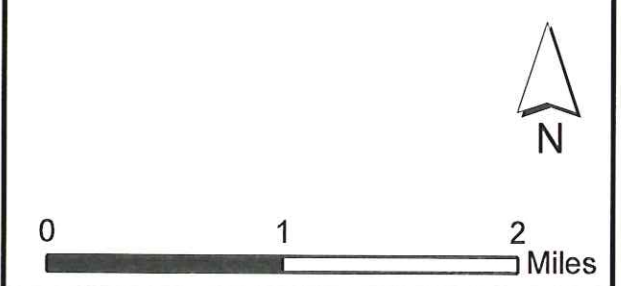
Kutztown and Lyons Boroughs, and Maxatawny Township Joint Comprehensive Plan



-  Existing Sewer Service Area
-  Proposed Future Sewer Service Area

Soil Suitability for On-Site Sewage Disposal

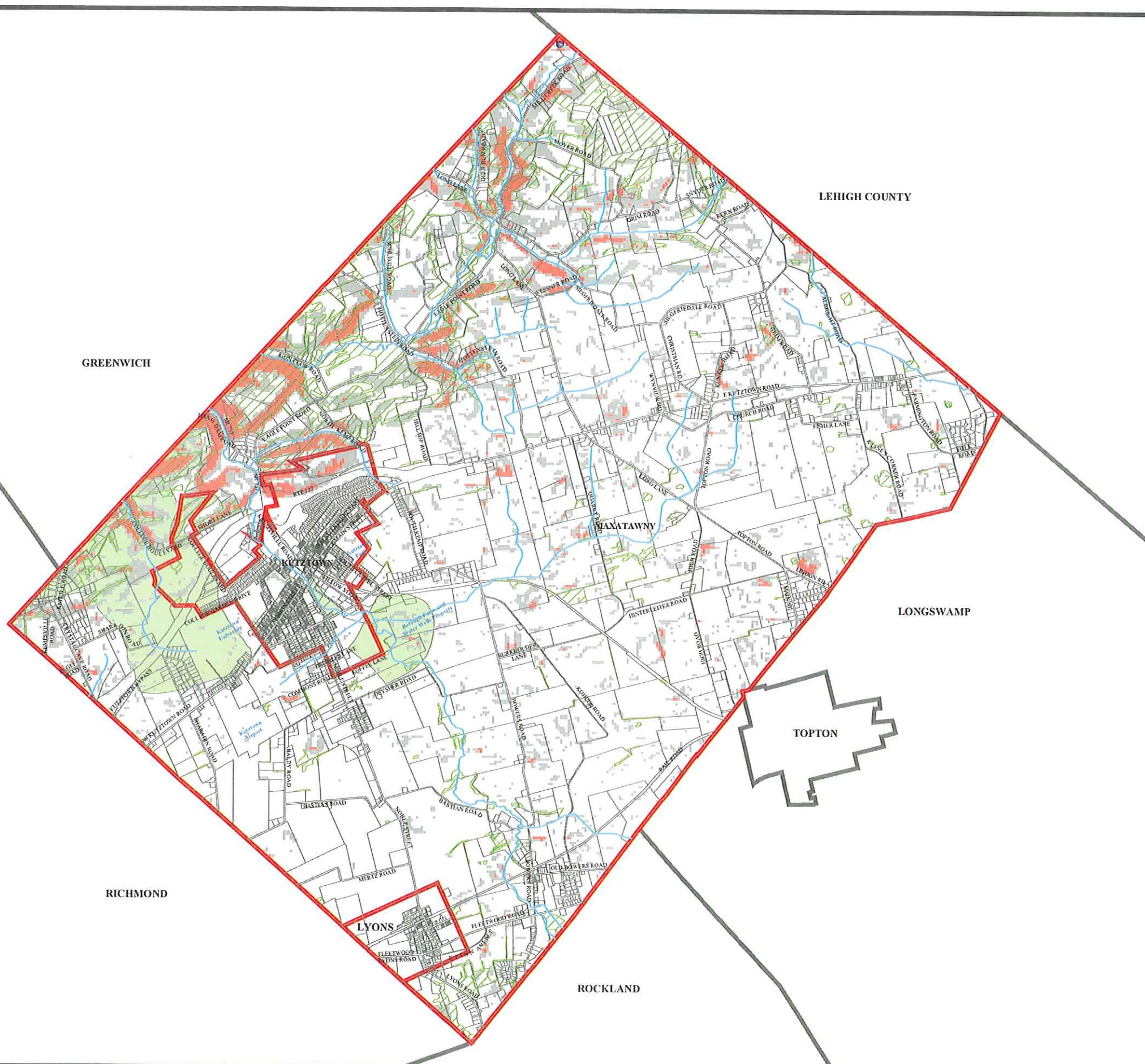
-  Moderate
-  Severe
-  Limitation
-  Quarry
-  Udorthent
-  Water
-  Streams
-  Parcels



Data source: BCPC, Soil Survey (SSURGO) data base for Berks County, Pennsylvania 1997 and Berks County Regionalization Study, SSM
 Published by the Berks County Planning Commission

Prepared by:
 The Berks County Planning Commission
 Spotts | Stevens | McCoy
 Finalized: March 2009

*Natural Resources
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan*



- Streams
- Parcels
- Study Area
- Woodland
- 15-25% Slope
- Greater than 25% Slope
- Natural Area



Data source: Berks County GIS

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PO Box 6337
Reading, PA 19510-0307
610.621.2000
F. 610.621.2001
LEHIGH VALLEY

MacArthur Office Plaza, Suite 401
3722 Lehigh Street
Wilmington, PA 19852-3439
610.433.4188
F. 610.433.3499

US VIRGIN ISLANDS
PO Box 8339
St. Thomas, USVI 00801
340.777.7275
F. 340.777.7230



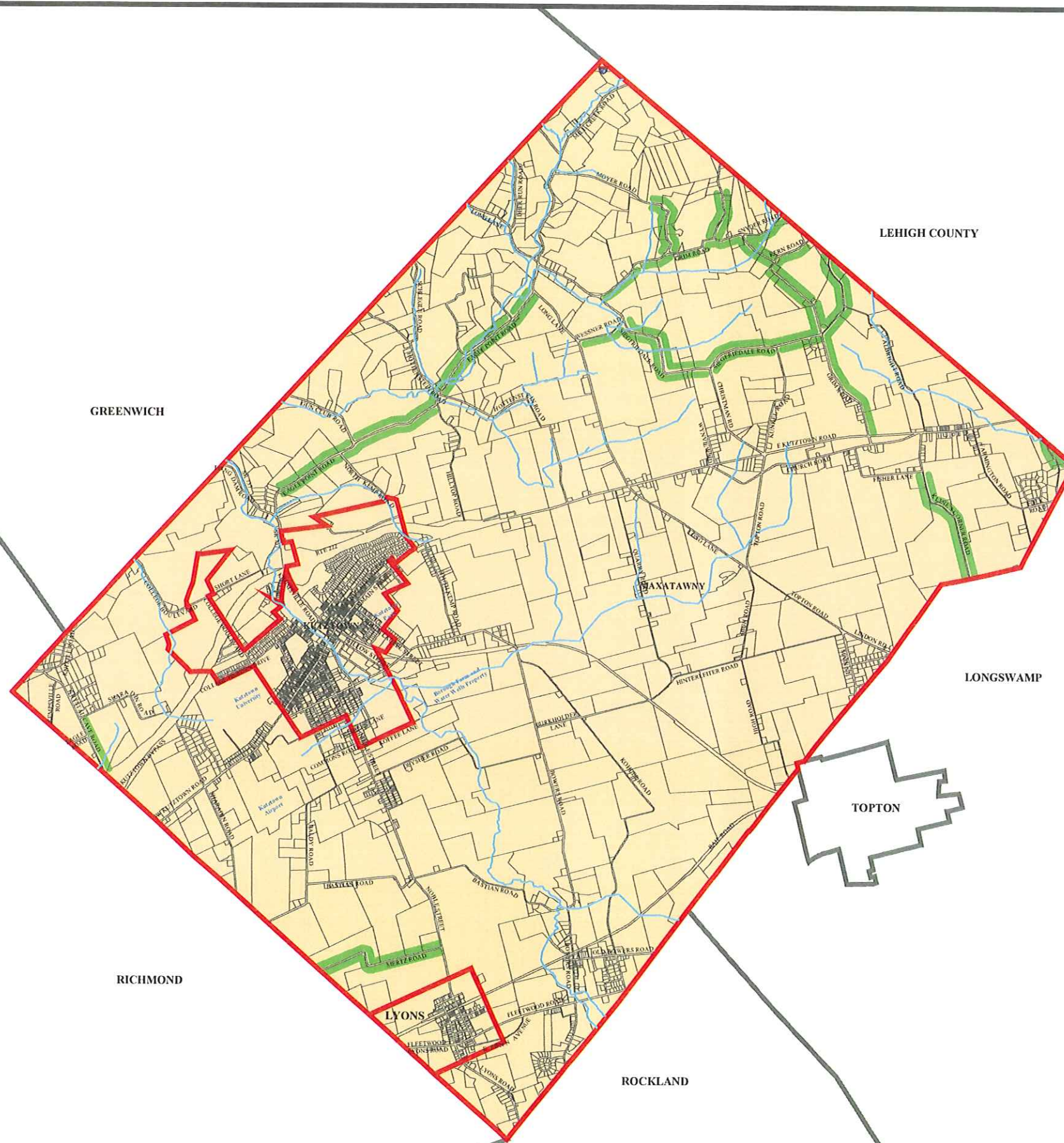
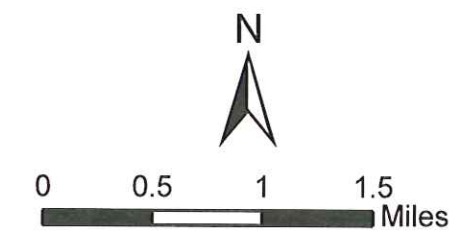
SPOTTS | STEVENS | McCOY
Engineers and Consultants
ssmgroup.com

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2/10/04

*Scenic Views/Viewshed
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan*

-  Roads and Viewsheds
-  Streams
-  Parcels
-  Municipality
-  Study Area



Data source: Berks County GIS; SSM

READING
1047 North Park Road
PO Box 6597
Reading, PA 19516-0307
610.621.2000
F. 610.621.2001

LEHIGH VALLEY
MacArthur Office Plaza, Suite 401
3722 Lehigh Street
Whitehall, PA 18052-3439
610.433.4188
F. 610.433.3499

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PO Box 8393
St. Thomas, USVI 00801
340.777.7275
F. 340.777.7269














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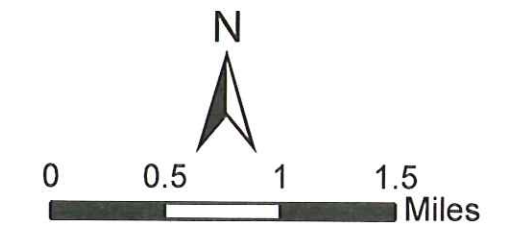
10/16/06

Transportation Map Kutztown and Lyons Boroughs, and Maxatawny Township Joint Comprehensive Plan

Functional Classifications

-  Principal Arterial/Interstate
-  Principal Arterial/Other
-  Minor Arterial
-  Major Collector
-  Minor Collector
-  railroad
-  Streams
-  Parcels
-  Study Area
-  Roads
-  Half a Mile Buffer from the Study Area

5785 Current Average Annual Daily Traffic



Data source: Berks County GIS and PennDot 2003

READING
1047 North Park Road
PO Box 6317
Reading, PA 19610-0307
610 433 4168
F. 610 621 2001
LEHIGH VALLEY

MagArthur Office Plaza, Suite 401
3722 Lehigh Street
Whitehall, PA 18052-3439
610 433 4168
F. 610 433 3459

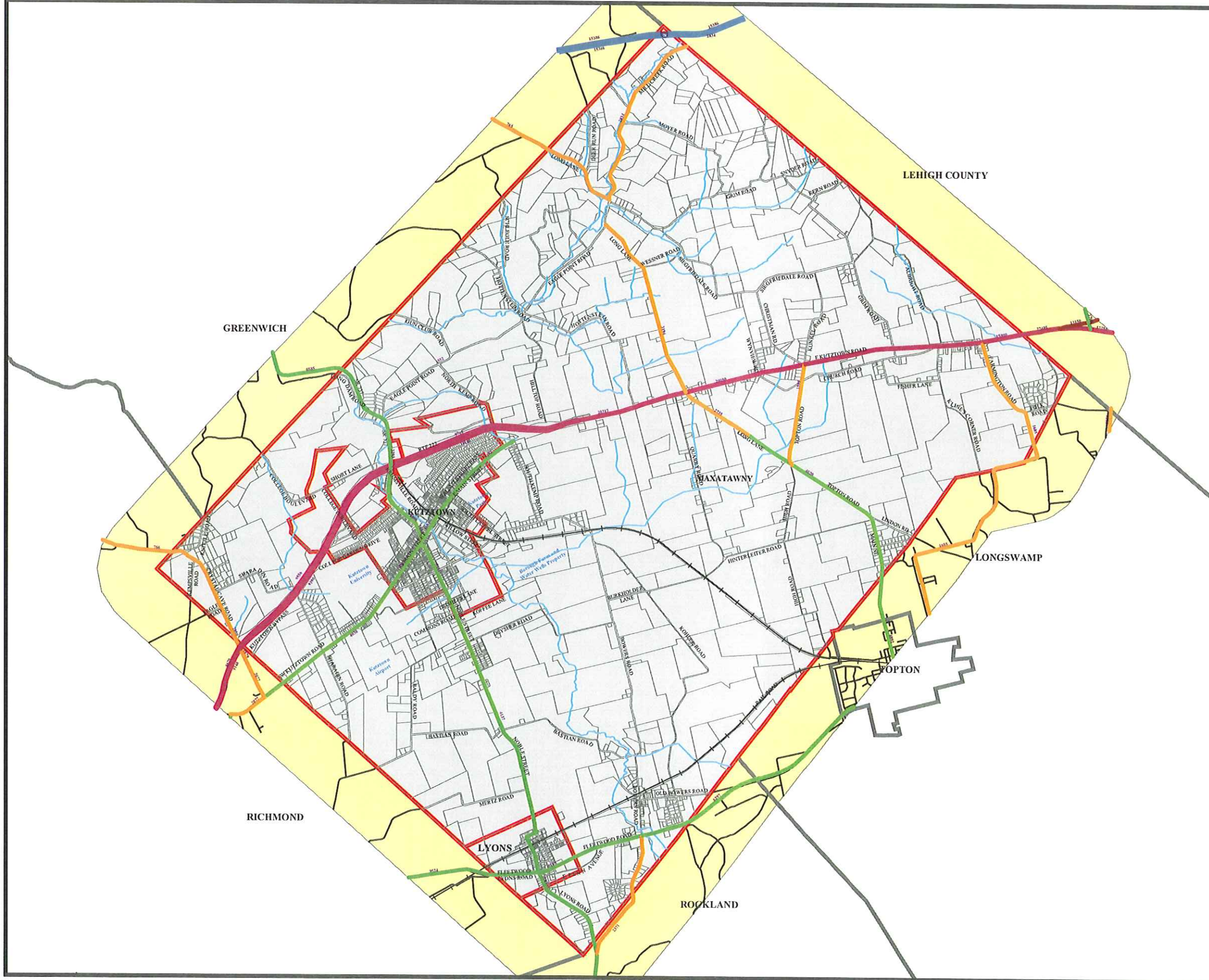
US VIRGIN ISLANDS
PO Box 8093
St. Thomas, USVI 00801
340 777 7275
F. 340 777 7260



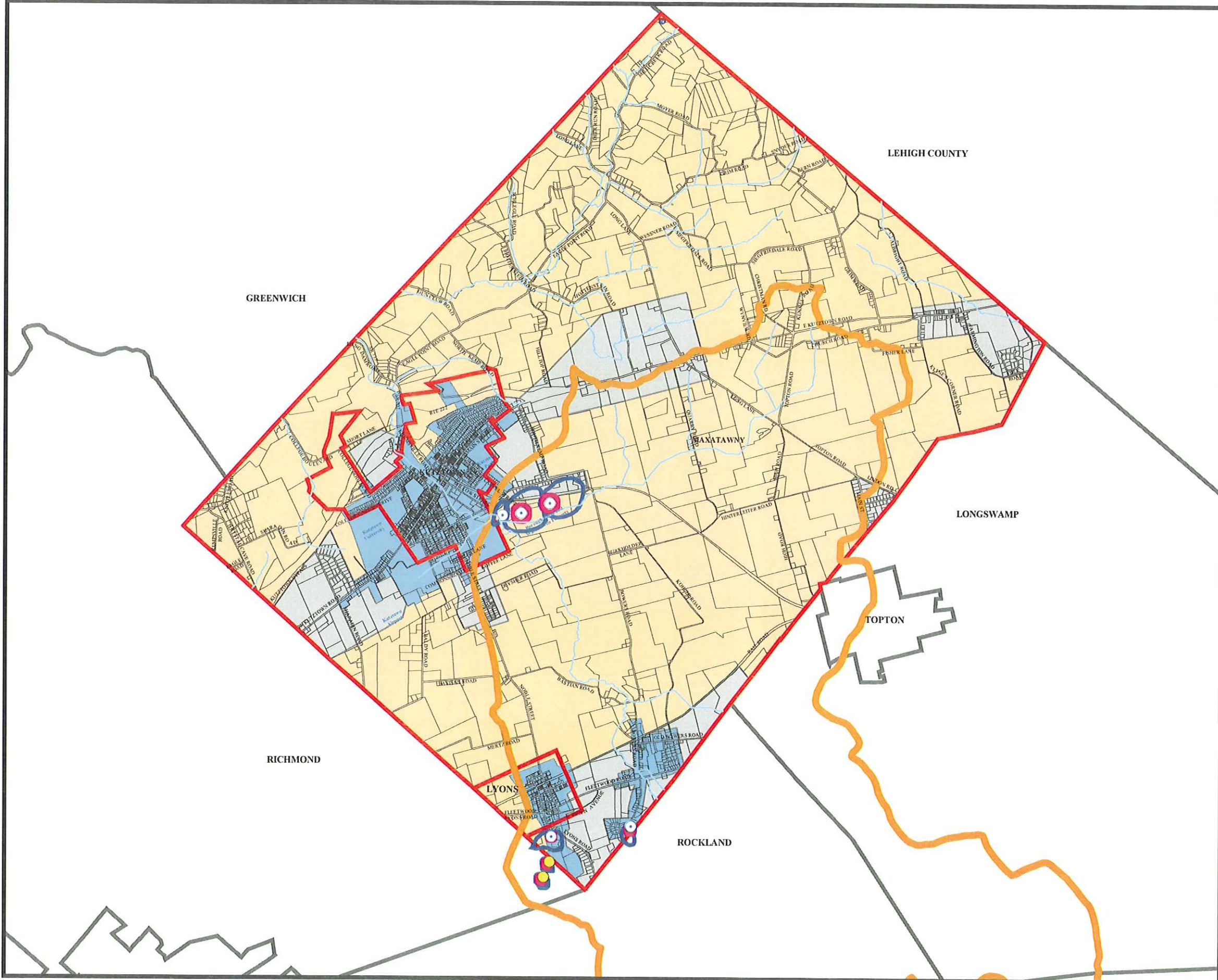
SPOTTS | STEVENS | McCOY
Engineers and Consultants
ssmgroup.com

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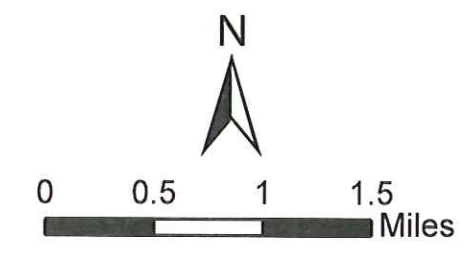
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**Existing and Proposed
Water Facilities
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan**



- Well
- Spring
- Streams
- Zone 1
- Zone 2
- Zone 3
- Existing Water Service Area
- Possible Future Water Service Area
- Parcels
- Study Area



Data source: Berks County GIS and Berks County Regionalization Study; SSM

READING
1547 North Park Road
PO Box 6397
Reading, PA 19610-0397
610.621.2000
F. 610.621.2001
LEHIGH VALLEY



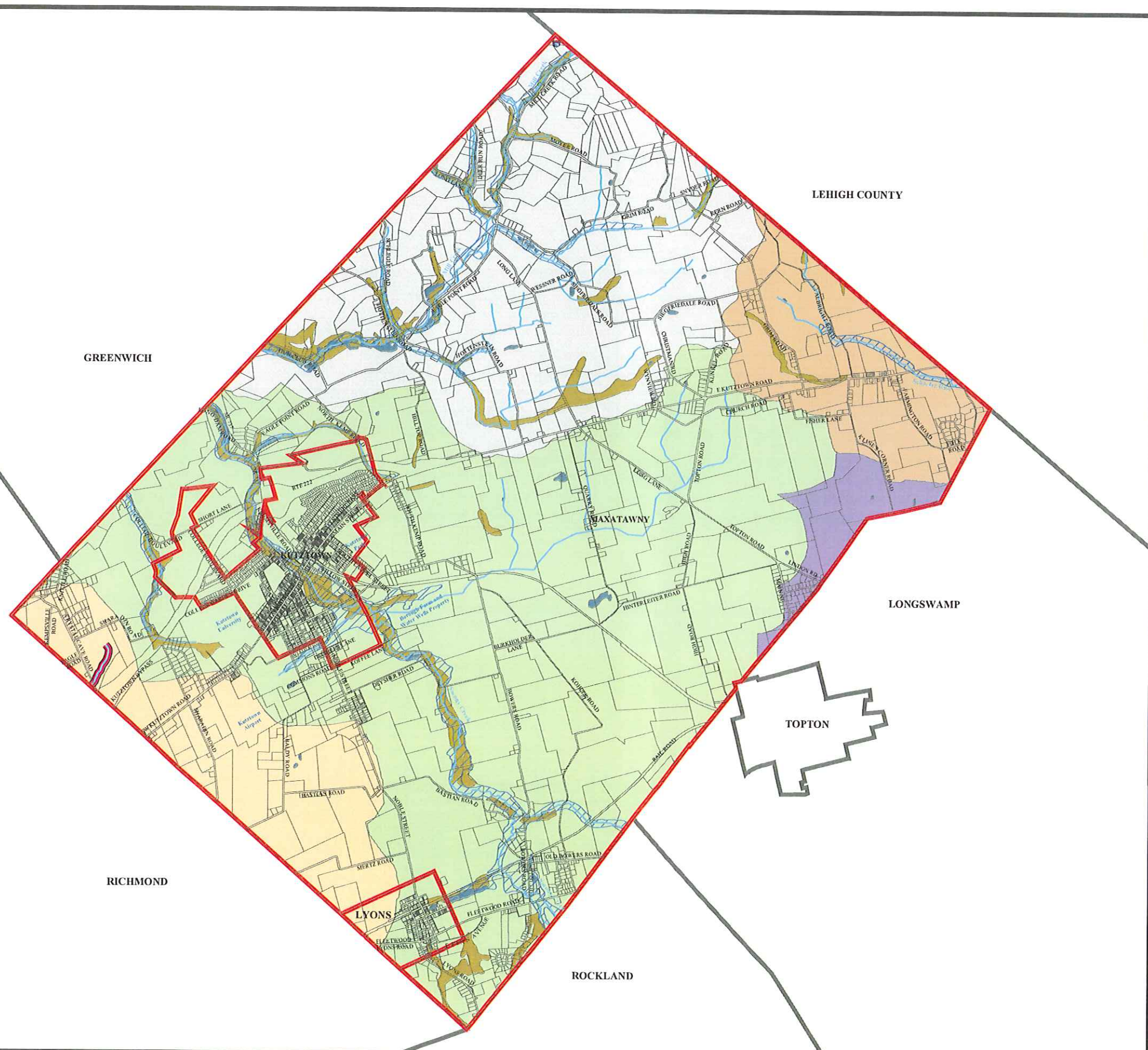
MacArthur Office Plaza, Suite 401
3122 Lehigh Street
Schenectady, PA 16052-3439
610.433.4188
F. 610.433.3499

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Engineers and Consultants
ssmgroup.com

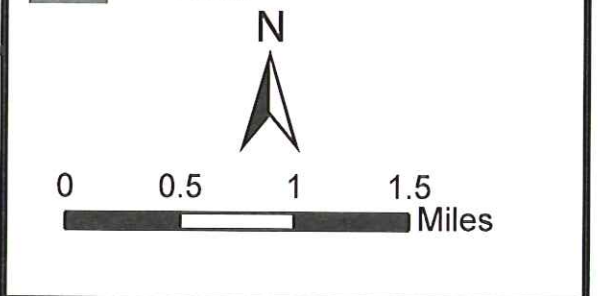
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1/9/2007

**Water Related Features Map
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan**




- Streams
- High Quality Stream
- Floodplain
- Wetland
- Hydric Soil
- Watersheds**
- MILL CREEK
- MOSELEM CREEK
- SACONY CREEK
- SCHAEFER RUN
- TOAD CREEK
- Parcels
- Study Area
- Municipality



Data source: Berks County GIS

READING
1047 North Park Road
PO Box 6307
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F. 610.621.2201
LEHIGH VALLEY

US VIRGIN ISLANDS
PO Box 8333
St. Thomas, USVI 00901
340.777.7275
F. 340.777.7280

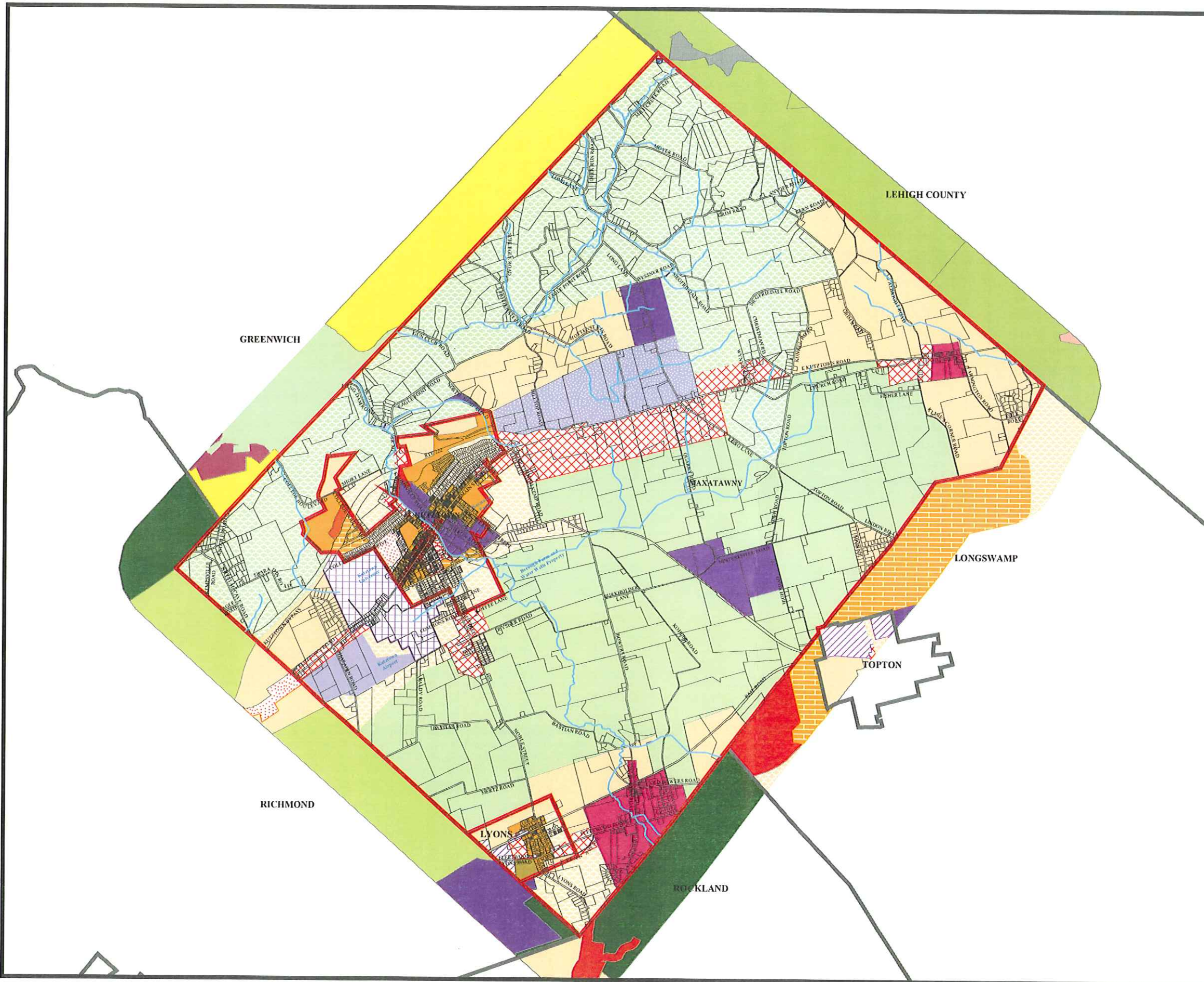


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2/10/04

**Existing Zoning and Zoning of Land Adjacent to the Region
Kutztown and Lyons Boroughs,
and Maxatawny Township
Joint Comprehensive Plan**



Zoning	L-1
A-P	PMD
A-R	PR-O
C	R
C-1	R-1
C-2	R-2
C-3	R-3
CC	R-4
NC	R-5
I	HDR
I-1	R-A
IN	R-C
L-1 Lehigh Zoning	
Mixed Uses	
Office/Business	
Rural	
Streams	
Municipality	
Parcels	
Study Area	

0 0.5 1 1.5 Miles

N

Data source: Berks County GIS

<p>READING 1347 North Park Road PO Box 6307 Reading, PA 19610-0307 610.621.2000 F. 610.621.2601</p> <p>LEHIGH VALLEY MacArthur Office Plaza, Suite 401 3722 Lehigh Street Whitehall, PA 18052-3430 610.433.4188 F. 610.433.3499</p> <p>US VIRGIN ISLANDS PO Box 8393 St. Thomas, USVI 00801 340.777.7275 F. 340.777.7289</p>	<p>SSM</p> <p>SPOTTS STEVENS McCOY</p> <p>Engineers and Consultants</p> <p>ssmgroup.com</p>
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