THE JOINT COMPREHENSIVE PLAN FOR AMITY TOWNSHIP EXETER TOWNSHIP ST. LAWRENCE BOROUGH

October 2005

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INTRODUCTION TO THE COMPREHENSIVE PLAN

Why a Comprehensive Plan?

The St. Lawrence, Amity and Exeter area is a distinctive and unique place. It has beautiful, unspoiled rural areas affording scenic views; historic villages; traditional neighborhoods; recreational opportunities in and along its parks, woodlands, trails, streams, and river; a vivid history and interesting historic resources; and a rich agricultural heritage. In the St. Lawrence, Amity and Exeter area there is still an opportunity to really plan to make a difference. The purpose of this Comprehensive Plan is work proactively to address the future of the area so that it may be shaped by the municipalities' own vision, rather than by the pressure of forces acting upon the Borough and the Townships. This plan will manage rather than react to growth pressures in the area, work to retain the vitality of the Borough and existing development, and protect the area's many assets and resources.

The Borough and the Townships 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 the face of development trends and pressures in the region; to develop common goals and objectives for land use, circulation, community facilities, housing, open space and recreation, natural resources, municipal services, and resource preservation; analyze interrelationships with surrounding municipalities; coordinate land use, housing, transportation, community facility and utility, economic development, and resource preservation planning; and acknowledge the Comprehensive Plan for Berks County.

Planning jointly allows allocation of land uses, housing types, densities, and development patterns over the entire region, rather than trying to plan for 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, and transit throughout the region; and coordinated planning along the common road corridors in the region. An overall approach to economic development can be provided, addressing retention of one component of the economy, agriculture, and allowing for appropriate commercial and industrial development which complements rather than detracts from existing downtowns at appropriate locations. An opportunity for coordinating with County and State agencies to provide joint input during the planning process is afforded.

What does a Comprehensive Plan Accomplish?

The Comprehensive Plan contains a vision of what the Borough and the Townships 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 area'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 Townships and the Borough. The appropriate locations, amount, and patterns of development are established and 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 the beginning. It is the basis for the attainment of the goals and objectives established within the plan, which can be accomplished only with the support of the elected officials, 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 just 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 St. Lawrence, Amity and Exeter area will continue to be attractive places 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 and essential.

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 suitability of the Plan's objectives, policies, and implementation program.

Benefits of Multi-Municipal Planning

- Provides a regional planning approach and allocation of land uses
 - Where
 - How much to accommodate population projections
 - Patterns of development
- Establishes growth areas and future growth areas regionally
 - Coordination with infrastructure
 - Opportunities for infill
- Provides coordinated planning along the common boundaries of the municipalities
- Supports existing centers rather than weaken them
- Coordinates road corridor planning, standards, and management
- Provides for linkages between municipalities
- The Plan and implementing ordinances are considered by state agencies in permitting decisions
- Addresses review of "developments of regional impact"
- Identifies opportunities for future joint efforts
- Promotes common land use designations and definitions
- Establish goals for economic character over the entire Region
- Provides support for municipalities in zoning challenges
- Enables Transportation Impact Fees across municipal boundaries

- Enables Transfer of Development Rights across municipal boundaries
- Enables priority consideration in state funding programs
- Provides opportunity to learn from neighbors' shared experiences
- Enhances the Region's attractiveness to quality development
- Enables developing a "specific plan" for an area designated for non-residential development, preparing regulations for that area, and streamlining the approval process

COMMUNITY DEVELOPMENT GOALS AND OBJECTIVES

VISION FOR AMITY-EXETER-ST. LAWRENCE REGION

The municipalities of Amity, Exeter, and St. Lawrence will actively strive to maintain and enhance the quality of life in the region by preserving remaining rural character through preservation of farmland, woodlands, stream corridors and other open spaces; managing and establishing high standards for future growth; protecting and preserving natural, historic and cultural resources; managing the region's transportation problems, particularly Route 422, and enhancing the safety, mobility and appearance of the region's road corridors; and providing additional recreational, trail and greenway opportunities for area residents. Amity, Exeter and St. Lawrence will cooperatively plan to slow the high residential growth rates of the past and encourage light industrial, office and limited, managed, attractive commercial development to provide a balanced tax base. The three municipalities will establish additional organizational, pedestrian, vehicular and transit connections among the municipalities and to municipalities and destinations outside the region. Area residents will be provided with expanded community facilities and services to serve their needs, and opportunities for regional cooperation will be identified. Amity, Exeter and St. Lawrence will tie growth to the capacity of the region's infrastructure and resources, particularly water supply, to adequately support that growth and direct growth to where adequate public infrastructure exists or can be efficiently and appropriately extended. The municipalities will stress infill among and logical extensions of existing developed areas. We realize growth is inevitable, but we will insist that growth be managed, environment-friendly and recognize the region's heritage and character.

GOALS AND OBJECTIVES

This chapter of the Comprehensive Plan presents the goals and objectives of the Borough and Townships. Goals are general statements indicating the desired direction for municipalities, and reflect a long-term state, which they wish establish or maintain. Objectives are more specific, relatively short-term policy guidelines for municipalities to follow. Goals are achieved through accomplishment of the stated objectives.

Natural and Scenic Resources

Goal: Protect, conserve, sustain and enhance the natural and scenic resources of Amity, Exeter, and St. Lawrence for the benefit and enjoyment of current and future generations.

- Prepare and implement a resource protection and management strategy for the Region.
- Protect water resources within the municipalities and thus the quantity and quality
 of surface and groundwater. Water courses of particular concern are the
 Schuylkill River, the Antietam, Manatawny, Monocacy, Limekiln, Heisters,
 Ironstone, and Owatin Creeks, Trout Run, tributaries to the creeks, wetlands and
 floodplains along the river and creeks, and steep slopes draining to the water
 courses.
- Protect groundwater throughout the municipalities, including remaining limestone areas where the potential for pollution and groundwater resources tend to be greatest.
- Protect and improve water quality within the region.
- Encourage recharge of the water table as development occurs.
- Protect and manage woodlands within the municipalities and encourage new planting of trees within developments and reforestation.
- Protect the steep slopes within the municipalities, including Neversink Mountain, Monocacy Hill, Schwarzwald Hill and Guldin Hill; and preserve visible ridgelines which contribute to the scenic character of the region.
- Protect watersheds and wellhead areas for existing and potential community water supplies within Amity, Exeter and St. Lawrence.
- Preserve the scenic viewsheds and scenic road corridors within the region.
- Support water conservation efforts.
- Protect and maintain the rural character in portions of the Townships still possessing that rural character.
- Protect and conserve unique natural areas in the region, such as Neversink Mountain, the Schuylkill River, the Amityville Floodplain, and other identified PNDI sites.
- Conserve, enhance, manage and connect the ecosystems within the Planning Area.

- Strengthen municipal zoning and subdivision ordinance to provide further protection to the region's natural and scenic resources.
- Require developers to utilize appropriate erosion and sedimentation control techniques and minimize and mitigate sinkhole occurrence.
- Utilize existing programs and ordinances and initiate new programs to protect and/or acquire development rights or title to, the key natural resources in the region, such as agricultural areas, woodlands, hills, and greenways and buffers along waterways and wetlands.
- Encourage the design of new development to complement the region's scenic character and cultural heritage.
- Recognize the potential of the Schuylkill River corridor, support the designation of the Schuylkill River as a scenic river and efforts to preserve the River corridor, and foster recreational opportunities along the River.
- Promote alternatives to motor vehicle use to improve air quality.
- Ensure businesses comply with state and federal air quality emission standards.
- Improve the appearance of the Route 422 Corridor through use of design and performance standards and coordinated signage standards and programs.

Historic and Cultural Resources

Goal: Preserve and enhance the historic, architectural and cultural heritage of Amity, Exeter and St. Lawrence.

- Encourage property owners and developers to preserve, protect, rehabilitate and enhance historic resources and their context.
- Discourage demolition by neglect and deterioration of historic resources.
- Foster increased public awareness of the history of and historic resources within the municipalities.
- Support efforts of organizations to identify, mark, register and protect historic resources and work with local and state agencies to protect historic resources.

- Require new development to reflect and consider the history, architecture and development patterns of the municipalities in order to preserve the important historic and architectural resources of the region.
- Determine the role which the municipalities should play in historic preservation through land use ordinance incentives, controls and regulations, and efforts to create historic districts and/or historic overlay zoning.
- Encourage adaptive re-use of historic structures where appropriate.
- Identify existing contemporary sites which could be considered part of the historical or cultural heritage of future generations and preserve these sites for future generations.
- Support cultural events which celebrate the historic and cultural heritage of the region.

Agricultural Resources

Goal: Preserve remaining agricultural areas for agricultural use and support the continuation of agricultural activities in the region.

- Promote the preservation of agricultural areas within the Townships through conservation development, agricultural security areas, purchase and donation of development rights, tax provisions and conservation easements.
- Continue and consider expansion of effective agricultural zoning in the Townships.
- Assure policies regarding public sewer and water do not encourage development pressure on designated agricultural areas.
- Limit economic development in agricultural areas to businesses which support agricultural activities.
- Minimize impacts of non-agricultural uses around the perimeter of agricultural areas.

Open Space and Recreation

Goal: Provide open space within the municipalities through the preservation and acquisition of farmland, river and stream corridors, woodlands and hills, and the development and retention of recreation areas and parks.

- Assure areas desired as open space are not designated as growth areas and restrict infrastructure improvements which would encourage development in the open space areas.
- Designate concentrated growth areas which will reflect infill among and logical extension of existing developed areas.
- Link recreation areas and natural areas within the municipalities through open space, greenway, and trail systems.
- Foster innovative land development techniques which will minimize land consumption and preserve natural resources, open space, and ecosystems.
- When appropriate, require developers to provide open space and recreation areas for active and passive recreation; to coordinate open space systems among adjoining developments; and provide both visual and physical access to the open space system. Otherwise, require fees in lieu to implement recreation, park and open space plans.
- Maintain, expand and enhance of open space and recreation areas.
- Provide for accessible and diverse park and recreation facilities and programs which meet the needs of all Amity, Exeter and St. Lawrence residents.
- Work with surrounding municipalities to link open spaces and recreational facilities in this region with those outside the region.
- Provide both indoor and outdoor and both active and passive recreation facilities.
- Encourage and support cooperative recreational use of facilities among municipal governments, local organizations and school districts.
- Locate recreational facilities with consideration of serving areas not adequately served, and coordinating recreation planning within the region.

Land Use and Housing

Goal: Plan a regional pattern of land use which recognizes the existing character and land use patterns of the municipalities and will be consistent with the goals of preserving the natural, scenic, historic, agricultural and open space resources of the region.

- Manage growth in order to preserve the natural environment and remaining rural character and agricultural areas.
- Designate growth areas which are logical extensions of existing concentrations of development, have appropriate access, can be efficiently served by the circulation system, and can be efficiently served by public sewer and water systems.
- Encourage a compact development pattern which minimizes land consumption and maximizes open space.
- Direct new development in the municipalities to the designated growth areas.
- Discourage development in areas not suitable for on-site sewage disposal which cannot be feasibly sewered.
- Coordinate policies for land use, circulation and community facilities and services to assure they do not have conflicting results.
- Minimize the conflict between non-residential and residential uses through proper allocation of land use and utilization of performance and design standards and buffer yards. Discourage proximity of incompatible land uses within the area and along adjoining municipalities.
- Coordinate future development with the transportation infrastructure to minimize traffic volumes and congestion.
- Allow for a variety of housing densities, development patterns, and attractive residential housing types for all age groups in appropriately designated areas, within the natural and service constraints of the municipalities.
- Encourage land development techniques, such as conservation development, based on land characteristics which will preserve natural resources, agricultural lands, and open space.

- Provide for well-planned development in each municipality which will be consistent with community character.
- Discourage development in areas susceptible to sinkhole development unless adequate mitigation measures are practiced.
- Encourage infill development among existing developments where appropriate because of available infrastructure and lack of environmental constraints.
- Establish a permanent open space system.
- Provide for community facilities to serve the needs of all residents.
- Provide for adequate, safe and sound housing for present and future residents of the region.
- Provide for the maintenance of the character of existing residential areas and housing stock through appropriate land use controls.
- Address the housing needs of the elderly and disabled in the community.
- Provide opportunities for appropriate, environmentally responsible and compatible commercial, office, and industrial activities at appropriate locations, within the context of existing land use patterns, support services, transportation networks, natural constraints, and environmental concerns.
- Manage development in the Route 422, 562 and 662 corridors and require development to employ techniques to prevent the decline of and enhance the aesthetics, safety and mobility of the corridors.
- Consider opportunities for transit oriented development if the Schuylkill Valley Metro becomes a reality.
- Provide for a mix of land uses which will balance growth with the need to preserve open land, manage traffic, maintain the quality of life in the area, and have manageable tax structures.
- Protect and enhance the existing character of St. Lawrence Borough and the villages in the Townships such as Douglassville, Limekiln, Jacksonwald, Amityville, Weavertown, Yellow House, Stonersville and Monocacy.

Circulation

Goal: Achieve a safe and efficient regional circulation system which will enhance pedestrian and bicycle movement, ease vehicular travel within the municipalities, minimize adverse impacts on residential neighborhoods, enhance the safety, mobility and livability of road corridors within the region, and relieve congestion.

- Coordinate land use and road improvement policies to maintain the integrity of existing and future roadways and support the reduction of vehicular trips.
- Preserve and improve the capacity of the existing roads within the area as future development occurs through cooperative efforts with developers and PennDOT as applicable.
- Monitor impacts on roadway capacity from new development and require developers to address projected increased traffic volumes in the road system by improving the existing system.
- Support the development of the Schuylkill Valley Metro system.
- Work to accomplish completion of the Route 422 By-pass from the Pottstown By-pass to the West Shore Bypass in the most efficient and cost effective manner.
- Promote coordinated access management programs along the road corridors within the area, to minimize the number of access points to the road system.
- Establish coordinated design, performance and signage standards for regional road corridors.
- Preserve the scenic road corridors within the region.
- Improve and expand bus and paratransit service in the region to connect residential areas, employment areas, commercial areas, and community facilities.
- Work with BARTA to enhance its bus system to attract riders.
- Provide maintenance of the existing road system as necessary.
- Work with State, County, and other municipal officials to address areas of traffic concern within and adjoining the region.

- Develop, expand, and link pedestrian and bicycle systems, including sidewalks, shared bikeways, paved shoulders, trails and greenways.
- Plan for a system of roads within future growth areas and existing developed areas to provide for convenient local circulation and access to primary routes of travel, such as consideration of a connection between Route 562 and Route 422 and linkages between subdivisions.
- Address existing deficiencies and safety concerns in the circulation system with landowners, PennDOT and developers as appropriate.
- Implement means of relieving congestion on area roadways, particularly Route 422, such as increased use of public transportation, improved traffic management and signalization policies, and relationships of workplaces and residence-serving businesses with residences.
- Improve intersections and turning movements along Routes 562, 662, and 422.
- Facilitate pedestrian and bicycle access to community facilities, including schools and recreation facilities.
- Develop policies to discourage the use of streets in residential areas as shortcuts for externally generated through traffic.
- Improve the safety of Route 422.
- Examine opportunities for transit-oriented development near stations of the Schuylkill Valley Metro.
- Expand multi-modal facilities in the region.
- Eliminate excess signage and traffic distractions.
- Work with businesses to implement congestion management strategies.

Community Facilities and Services

Goal: Provide essential facilities and services necessary to meet the existing and future needs of area residents, protect the environment and the health and safety of area residents, and support managed, concentrated development.

- Evaluate the need and opportunity for additional, expanded or improved community services and facilities and plan for the efficient and economical provision of those services and facilities.
- Ensure that required infrastructure is constructed by developers.
- Identify opportunities and/or needs for regionalization and/or sharing of services, equipment and facilities and determine what efficiencies can be obtained in the provision of services to the region's residents.
- Protect water supplies in the region and require development to demonstrate adequate capacity that will not adversely affect other water supplies.
- Work with the School Districts to assure adequate, local school facilities are available to area residents and new facilities are located to be consistent with the goals and objectives of this plan.
- Identify opportunities for cooperation among municipalities and school districts in providing facilities and programs to area residents.
- Develop an energy conservation plan.
- Require developers to adequately manage stormwater runoff and erosion and sedimentation in manners consistent with the protection of natural resources in the region.
- Plan for a safe, clean water supply which will adequately serve the region in the future.
- Provide a variety of recreation facilities and programs for area residents.
- Support water conservation measures.
- Assure that the scale of development in the region is consistent with the capacity of the region's infrastructure.

- Provide for adequate enforcement of municipal regulations and ensure regulations are up-to-date.
- Plan for coordinated, adequate emergency management services in the region.
- Support recycling and waste reduction programs and development of an effective, environmentally sound long range waste management system.
- Minimize adverse landfill impacts on the community and maximum future benefits from reuse of the landfill to the community.
- Coordinate public sewer and water planning with land use policies and establish growth areas where public sewer and water facilities are available.
- Restrict the extension of public sewer and water facilities to areas proposed to remain rural and in open space.
- Encourage cooperation among fire companies in the area to address the fire protection needs of the community.

Economic Development

Goal: Provide for additional light industrial, office and commercial development to enhance the region's tax base, provided such development occurs at designated appropriate locations, does not adversely affect the built and natural environment and the region's infrastructure, is compatible, attractive, and environment-friendly.

- Provide land for and encourage additional environmentally responsible industrial and office development in the Route 422-Railroad corridor and along Route 662.
- Provide for managed, limited, attractive, additional commercial development in the Route 422 corridor.
- Encourage appropriate adaptive re-use of vacant and underutilized commercial and industrial properties.
- Encourage the retention and expansion of existing desirable businesses in the region.

- Encourage the continuation of agriculture as a component of the economy of the Townships.
- Work with the business community to identify ways of improving the region's business climate.
- Coordinate the location of businesses and transportation systems to limit traffic impacts on residential areas.
- Direct new business development to areas where it can be served by public sewer and water facilities.
- Encourage the enhancement of the aesthetics of the Route 422 corridor.
- Identify desired new businesses for the region.
- Assure commercial, office and industrial properties are properly maintained.
- Review the merits of tax abatement programs to attract businesses to the region.
- Retain, enhance and promote the historic and cultural heritage of the region as a means to promote tourism.
- Support agencies promoting economic development in the region.

Planning

Goal: Recognize that this Comprehensive Plan is just the beginning of a process to achieve the vision, goals, and objectives found in this plan, and assure the plan will be an integral element in the decision making of Township and Borough officials and commissions.

- Continue the process wherein the three municipalities work together to address planning issues and review development and traffic plans of common interest.
- Work with surrounding communities, conservation agencies, Berks County, regional planning organizations and PennDOT to address transportation, land use, conservation, community facility and economic development issues.
- Consider formation of a standing regional planning body and/or forum.

- Establish a framework for education regarding planning issues in the region.
- Encourage increased public participation in the planning process.
- Implement municipal functional plans and consider regional functional plans.

Implementation

Goal: Assure that this plan will be implemented by the three municipalities.

- Discuss the benefits of this plan and the need to implement it with the governing bodies, commissions, and residents.
- Each year review the goals, objectives and policies of the Plan, their continued relevance, the extent to which they have been accomplished, and the need for revision, and establish a work program for implementation of the Plan.
- Identify how the Townships and the Borough can work together to accomplish the goals and objectives of the plan.
- Identify and pursue adequate funding of implementation actions.
- Promote public-private cooperation in implementation of this Plan.
- Develop more effective informational gathering tools to assist in plan implementation.
- Be responsive to municipal and resident needs.
- Participate in Berks County and State programs encouraging intermunicipal cooperation.
- Adopt compatible zoning and subdivision ordinance regulations and incentives which reflect sound land use planning and resource protection in order to implement this Plan.
- Encourage developers to incorporate designs into their proposals which will implement the goals and objectives of this Plan.

•	Develop indicators which can measure success in implementation of this Plan and establish a program for measuring those indicators in the future.
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OVERVIEW OF THE ST. LAWRENCE, EXETER AND AMITY REGION

Villages

Unique rural settlements are found in the region, such as Limekiln, Stonersville, Amityville, Monocacy, and Yellow House. They have mixed use, small town character, and maintaining that character and their vitality is important.

Churches

Rural churches such as Exeter Friends Meeting House and St. Paul's United Church of Christ have played an important religious and social role in the community for almost two centuries.

Neversink Mountain

Neversink Mountain plays many roles: scenic resource, wildlife habitat, watershed, recreational resource for hiking, and environmental moderator of runoff, sedimentation and pollution.

Trails

The Region has a nucleus of trails such as the Thun Trail, those on Neversink Mountain, and Monocacy Hill, trails in the Daniel Boone Homestead, and the trail along the Schuylkill River in the area of the Trout Run Recreation Area and River Bend Park in Exeter Township. Additional trails can link these trails; link the Region's villages and the Borough; link the Region's recreational and historic resources; and link residential subdivisions, workplaces, and elements of the circulation system. Analysis of and designation of routes will be necessary.

Agricultural Land

Agriculture is a contributor to the Region's economy, a major land use, and provides rural atmosphere to the St. Lawrence, Exeter and Amity region. Exeter and Amity Townships contain agricultural security areas and farms for which conservation easements have been purchased. Exeter Township has effective agricultural zoning. While public support for continued rural areas in the Region is strong, continuation of family farms in the Region cannot always be assured.

Recreational Opportunities

There are a variety of recreational opportunities in St. Lawrence, Exeter and Amity area. The Daniel Boone Homestead, Monocacy Hill, school district facilities and a variety of municipal facilities are complemented by active and passive opportunities along the Schuylkill River and streams and commercial recreational facilities. An important need is to provide additional active recreational facilities for the youth of the area. In the provision, management and scheduling of recreational facilities within St. Lawrence, Exeter and Amity, regional cooperation can be a plus.

Borough Center

St. Lawrence historically has been a residential community with supportive commercial facilities and limited industrial uses. It is expected to continue to play this role in the future. To maintain the vitality of the Borough, need for revitalization efforts should be monitored along the Borough's "Main Streets". Other keys to the continued vitality of the Borough are appropriate adaptive re-use of any vacated industrial and commercial buildings, managing traffic on its streets, regulating conversion of existing single family dwellings, and meeting needs of its elderly.

Schuylkill River

The Schuylkill River was important in the development of Berks County. Its importance in transportation and industrial development has lessened, but its importance for recreation continues to increase, as evidenced by interest in constructing trails and parks along the River.

Route 422

Route 422 links the St. Lawrence, Exeter and Amity region to other portions of the State and its interchanges have provided stimulus to economic development. On the other hand, traffic in the Region increases as people drive to and exit the expressway. Traffic congestion and safety is a major problem, tying up traffic, damaging the road, and highlighting the need for coordinated corridor management in the Region. Traffic especially impacts the commercial area of Exeter Township and the Village of Douglasville. Exeter and Amity have experienced commercial and/or industrial development along the corridor, and this development will continue in the future. Proper land use allocation and management of traffic patterns is key along the corridor.

Route 662

Route 662 in Amity is another major road in the region. Access management is crucial to promoting mobility and safety. Route 662 carries substantial through traffic, but is narrow and has inadequate shoulder and bridge widths for the volumes and truck traffic it

experiences. The Route 662 and 422 intersection at the north end of the Village of Douglasville is of particular concern to area drivers, but is under the jurisdiction of PennDOT. As additional residential, commercial and industrial development occurs along Route 662, intersections with the northern portion of the road will be of increasing concern. Such development could also affect the scenic character of portions of this road, which links many of the settlements, recreation resources, and historic sites in the Township.

Public Utilities

The greatest population and business concentration is found along and north of the Route 422 corridor in Exeter and Amity Townships. This is made possible by public sewer and water service. In the future, public sewer could be used to concentrate growth around the areas so served. A key issue is to restrict extension of public sewer into those areas planned for agriculture, open space and rural character.

Residential Growth

To retain the remaining rural/suburban character of St. Lawrence, Exeter and Amity, housing development must be managed and sprawl prevented. Residents do not want to experience overdevelopment and the resultant traffic, infrastructure, tax and quality of life consequences of that overdevelopment. Concentrating reasonable growth near existing centers such as St. Lawrence and Douglasville is essential to managing growth.

Alternative Modes of Travel

Concern about traffic on roads helps to build support for alternative modes of travel, including rail service to Reading; bus service on Route 422 to the Reading area; bus and paratransit service within the region connecting the villages and Borough and residents to commercial and recreational uses, with particular concern for the mobility of the elderly and youth; park and ride facilities at major roads and near the Borough and villages and at multi-modal facilities such as the possible Schuylkill Valley Metro train station; and additional walking and bicycling trails.

The residents of St. Lawrence, Exeter and Amity highly value the character, open spaces and natural, historic and recreational resources of the region, and a challenge of this plan will be to preserve these resources for current and future generations.

KEY COMMUNITY LEADER INTERVIEWS AND QUESTIONNAIRE RESULTS

Interview Results

As part of the public participation process, thirty Key Community Leader interviews were conducted based on ten leaders identified by each community. The interviews were designed to provide an opportunity for community leaders and residents to participate directly in the joint comprehensive planning effort. Interview topics were developed to poll key leaders on their attitudes, both subjectively and objectively, on a variety of subjects. A total of twelve topic areas were posed to each interviewee. Topics were selected to elicit attitudes toward a series of issues, which included the balance between different land uses, transportation, the preservation of open space, the opportunity for recreation, historic preservation, and environmental protection.

In general, interview respondents stated that it was the rural character of the Townships and the small-town atmosphere of the Borough that either attracted them to the area or influenced their decision to remain in the area. An overwhelming majority of respondents stressed that the pace and intensity of new development are the most important issues facing the area at present. When articulating their vision of the future of the area, an overwhelming majority of respondents stated they preferred to see future development concentrated in areas where it already exists, while preserving farmland and open space where possible. A number of respondents also stated the importance of enhancing and promoting a sense of community. When responding to what they are most dissatisfied with in the area, half of the respondents replied that it was past development trends. A quarter of respondents stated they were most dissatisfied with the loss of farmland and open space, while another quarter replied that they were most dissatisfied with traffic in the area. All respondents felt that agricultural land in the Townships should remain as such. However, respondents were split on the issue of whether or not communities should take an active role in preserving this resource. respondents interviewed thought that municipalities should take a more active role in preserving farmland, specifically in the form of zoning. Half the respondents, while supporting the continuation of agriculture as a land use, felt that although municipalities should encourage the continuation of agriculture, more stringent regulations were not necessary. On the issue of what are the most important environmental challenges or issues facing the area over the next ten years, a majority of respondents felt that the quantity and quality of ground water resources was most important. A few respondents, residents of the Borough, felt that air quality was an important environmental issue facing the area.

When asked about open space needs in the area, most respondents stated that linkages between existing open space resources were important, such as the Daniel Boone Homestead and Monocacy Hill, as well as access along the Schuylkill River. discussion concerning recreation facilities, a majority of respondents felt that current facilities were sufficient to support area residents. A quarter of those responding, all residents of either Exeter or Amity Townships, felt that there was a need for a community youth center. When presented with a discussion on Route 422 and transportation in general, half of those responding felt that a bypass to Route 422 was key in addressing transportation and circulation issues along the Route 422 corridor. The other half of those interviewed felt that a bypass would lead to too much additional development and produce even greater growth pressures on the area. Other areas of concern included access management on Routes 562 and 662, traffic volumes on Shelborne Road and the need for a cross-town connector connecting 562 and 422 from the Borough through Exeter Township. In the discussion regarding the amount of commercial, industrial and office development, a majority of respondents felt there was enough commercial development in the area to support residents. A quarter of those interviewed felt that municipalities should support additional industrial development, environmentally friendly industries and office campus development. Finally, when asked about tourism in the area, all respondents expressed support but felt that its "growth" was something best achieved on a countywide basis.

Planning Questionaire

In the course of developing this Comprehensive Plan, planning questionnaires were sent out to households in St. Lawrence, Exeter and Amity Region. The people to receive questionnaires in each municipality were identified by Joint Planning Committee members from the municipality. The results of each questionnaire are contained in Appendix I. The highlights of the St. Lawrence, Exeter and Amity questionnaire results are given below.

Questionnaire Results Highlights

- 1. Respondents appear not willing to continue to accept new residential growth in the area at the same rates of growth the area experienced from 1990 to 2000.
- 2. The preferred types of development are conservation development in which conservation areas containing special features of a tract are protected and large areas of the tract remain in open space; large individual lots scattered throughout the Townships, cluster developments in which higher density housing concentrations are offset by open space and recreation areas; followed by assisted living facilities and retirement communities.

- 3. A clear majority of the responses were in favor of industrial development in planned industrial parks or on individual sites near existing industries within the Region.
- 4. A clear majority of respondents felt that commercial development in the Region should stay the same or decline. Those in favor of commercial development would prefer new restaurants and entertainment, motels, home furnishing stores, and day care centers.
- 5. An overwhelming majority of respondents were in favor of the agricultural land in the Townships remaining as agricultural land, to keep farmland available for future generations to farm and to limit development in the community.
- 6. The majority of respondents were in favor of programs to increase landscaping, decorative lighting, benches, building façade appearance and similar amenities in the Borough and villages.
- 7. The major transportation concerns are a Route 422 Bypass, intersection improvements, inadequate parking, inadequate public transit, lack of bikeways and walking trails, inadequate road maintenance, and congestion.
- 8. When asked if they would use the Schuylkill Valley Metro, the majority of respondents stated that they would occasionally use it. When asked if it would be an asset to the Region a majority said yes.
- 9. A majority of residents would use new biking and hiking trails and see a need for these trails to connect existing recreation facilities and settlements.
- 10. A clear majority of the respondents were in favor of providing additional public recreation facilities in the area, particularly the addition of trails.
- 11. The majority stated the level of commercial development along Route 562, Route 662, and Route 422 should stay the same.
- 12. Respondents also felt the level of industrial and office development along Route 562, Route 662 and Route 422 should stay the same.
- 13. When asked what they liked most about living in the St. Lawrence-Exeter-Amity Region, the majority responded they liked the rural setting/open space and its convenient location.
- 14. The majority said that the most important issues facing the Region today are development pressure, traffic, and taxes.

15.	When asked what kind of community you want the Region to be in the future, people indicated they would like it to be a quiet, safe, friendly community with rural areas retained and residential development managed and less than in the past.
	4.4

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 Preservation and Rural Conservation areas, 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, and where soils are not suitable for onsite sewage disposal.

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 existing recreational facilities, proposed recreational facilities, and potential opportunities for recreational facilities. The Plan discusses a series of 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 open space and recreation uses.

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 the proposed light rail line, pedestrian trails and local bus service and multi-modal facilities should explored and encouraged.

RELATIONSHIP TO BERKS VISION 2020

The existing and proposed development of the St. Lawrence, Exeter and Amity area is generally consistent with the objectives and plans of the County Comprehensive Plan, Berks Vision 2020.

In the County Plan, the northern and central portions of the Region and northeastern Amity Township are designated for Agriculture and Rural Conservation. This is consistent with the Agricultural Preservation, Rural Conservation and Rural Preservation designations in the Future Land Use Plan for St. Lawrence, Exeter, and Amity.

In the County Plan, in the two townships most of the land in the Route 422 and Route 662 corridors is designated as Existing Development, Designated Growth, and Future Growth areas. In the Region's Future Land Use Plan, much of this land is also considered as existing development with areas for future growth, consistent with the County plan. These corridors are shown as a mix of Highway Commercial, Low, Medium, and High Density Residential, Rural Village, Light and General Industrial, Neighborhood Commercial, Shopping Center Commercial, Office Park, and Restricted Office/Commercial on the Regional Future Land Use Plan.

In the Borough, most land is designated Existing Development in the County Plan, with the northern portion of the Borough designated Rural Conservation. This is consistent with the Regional Plan, which designates the northern portion of the Borough Rural Preservation and the remainder Medium and High Density Residential, Town Center, Shopping Center Commercial, Light Industrial, Highway Commercial, and Public.

Three major open spaces, the Borough of St. Lawrence Watershed, Daniel Boone Homestead, and Monocacy Hill are designated Permanent Open Space/Recreation in the County Plan. These areas are designated Public in the Regional Plan.

The Schuylkill River Corridor and major stream corridors in the Region are designated Environmental Hazard in the County Plan. River Conservation has been shown along the Schuylkill River in the Regional Plan. The major stream corridors are designated as stream corridor preservation on the Stream Corridor Preservation Map.

RELATIONSHIP TO ADJOINING MUNICIPALITIES

The existing and proposed development of the St. Lawrence, Exeter and Amity area is in many cases compatible with the existing and proposed development and plans in contiguous municipalities. Where there are disparate uses, buffers are recommended.

A map of Zoning of adjacent municipalities is found in Chapter 19, Regional Influences. Most adjoining land in southern Oley and Earl Townships is zoned Agricultural Preservation, Rural, or Woodland Agricultural Conservation. Residential and Rural Village are designated at Limekiln and Yellow House, respectively. The southeastern corner of Earl Township is zoned Industrial. Land in Douglass Township is zoned Rural Conservation, Rural Residential, Rural Suburban Residential and Commercial. Adjoining land in Mt. Penn and Lower Alsace Township is Residential, with densities varying, except for commercial land along Route 422 and Rural Conservation land on Neversink Mountain. Land designated for Commercial, Industrial and Higher Density Residential in Cumru, Robeson, Union Townships and Birdsboro is buffered by the Schuylkill River.

Adjoining land in Alsace Township is zoned Rural Residential, Commercial, and Woodland Conservation.

Agricultural Preservation and Rural land in Oley Township is generally consistent with Agricultural Preservation and Rural Preservation categories in Exeter and Amity. Designation of Villages is consistent. The WAC designation in Earl is not a major conflict with the Agricultural Preservation and existing development in Amity Township, but where industrial abuts Agricultural Preservation in Amity, any industrial development in Earl Township should be buffered along agricultural lands in Amity Township.

Commercial land in Alsace Township is not consistent with Low Density Residential in Exeter Township, and any new commercial development should contain buffers. The Woodland Conservation in Alsace and Rural Preservation in Exeter are consistent.

Land in Mt. Penn Borough is zoned high density residential and commercial. Adjoining land in St. Lawrence is designated light industrial (inconsistent, but existing), commercial along Route 422 (consistent), and Rural Preservation along the southern portion of Mt. Penn. This portion of Mt. Penn is already developed.

The Medium Density Residential area in Exeter Township is consistent with the residential zoning in Lower Alsace Township north of Mt. Penn. The Rural Preservation in northern Exeter is intended for a lower density of development than the low density residential area in adjoining Lower Alsace. South of Mt. Penn, the Rural Preservation designation on Neversink Mountain in Exeter is consistent with the Rural Conservation zoning in Lower Alsace.

buffering occurs on	ustrial land in a should occur in Rural Resident	f industrial d tial land in n	evelopment of orthern Dougl	ccurs. If res	idential develon, it should pro	opment
buffer afor	ng adjoining agr	icuiturai prese	ervation land i	n Amity Town	snip.	

COMMUNITY FACILITIES AND SERVICES PLAN

Introduction

The goal for community facilities and services is to provide facilities and services, on a coordinated regional basis where possible, to meet the existing and future needs of the residents of St. Lawrence Borough, Exeter Township and Amity Township consistent with the financial capabilities of the Borough and Townships. The following are the objectives for community facilities:

- Evaluate the need and opportunity for additional, expanded or improved community services and facilities and plan for the efficient and economical provision of those services and facilities.
- Ensure that required infrastructure is constructed by developers.
- Identify opportunities and/or needs for regionalization and/or sharing of services, equipment and facilities and determine what efficiencies can be obtained in the provision of services to the region's residents.
- Protect water supplies in the region and require development to demonstrate adequate capacity that will not adversely affect other water supplies.
- Work with the School Districts to assure adequate, local school facilities are available to area residents and new facilities are located to be consistent with the goals and objectives of this plan.
- Identify opportunities for cooperation among municipalities and school districts in providing facilities and programs to area residents.
- Develop an energy conservation plan.
- Require developers to adequately manage stormwater runoff and erosion and sedimentation in manners consistent with the protection of natural resources in the region.

- Plan for a safe, clean water supply which will adequately serve the region in the future.
- Provide a variety of recreation facilities and programs for area residents.
- Support water conservation measures.
- Assure that the scale of development in the region is consistent with capacity of the region's infrastructure.
- Provide for adequate enforcement of municipal regulations and ensure regulations are up-to-date.
- Plan for coordinated, adequate emergency management services in the region.
- Support recycling and waste reduction programs and development of an effective, environmentally sound long range waste management system.
- Minimize adverse landfill impacts on the community and maximum future benefits from reuse of the landfill to the community.
- Coordinate public sewer and water planning with land use policies and establish growth areas where public sewer and water facilities are available.
- Restrict the extension of public sewer and water facilities to areas proposed to remain rural and in open space.
- Encourage cooperation among fire companies in the area to address the fire protection needs of the community.

Coordination of Sewer and Water Facilities and Land Use Planning

One of the objectives is to coordinate sewer and water planning with land use planning. It is critical that policies on provision of public sanitary sewer and water facilities be coordinated with the Future Land Use Plan. The municipalities should work with the St. Lawrence Borough Authority, Exeter Township Authority, Amity Township Municipal Authority, Pennsylvania American Water Company, Mt. Penn Borough Authority and other authorities which might be created with regard to water and sewer to assure coordination of policies. As sanitary sewer and water systems are expanded and sewage treatment plant capacities expanded or sold, they should be expanded or sold to serve the Medium Density Residential, portions of Low Density Residential, High Density Residential, Neighborhood Commercial, Highway Commercial, Office Park, General

Industrial, Light Industrial, Shopping Center, and Town Center areas shown on the Future Land Use Plan. In some cases in Amity Township, sewer service could be extended into Rural Conservation Areas in the western portion of the Township to serve malfunctioning on-lot sewage disposal systems and cluster development at a density of one dwelling unit per two net acres. Otherwise, public sanitary sewer and water facilities in general should not be extended into Agricultural Preservation, River Conservation, Rural Conservation, Rural Preservation, and Rural/Institutional areas unless to address pressing health concerns. Extension to Low Density Residential areas could be appropriate if such areas are adjacent to Medium Density Residential areas, and will not increase development pressure on areas not intended for intensive development.

It is important to preserve stream corridors within the area and maintain the quality of streams as habitats, water resources and recreational resources. Sewage treatment plant discharges and standards should be consistent with the highest Stream Fishery Standards classification for receiving streams so the streams will not be degraded by the discharges through the plants. This should be monitored with the owners and operators of the plants.

Cooperative Efforts

The municipalities should continue to review opportunities and/or needs for regional cooperation in the provision of services and facilities as demands for services and costs increase. Municipalities can also work with the school districts in providing facilities and programs to area residents.

Fire companies are finding it more difficult to get adequate numbers of volunteers, and cooperation among fire companies in the Region to address the fire protection needs of the community is encouraged. Water planning should involve fire companies in the area to insure that there will be adequate fire hydrants and volume and pressure of water to provide adequate fire protection in water service areas.

Other potential opportunities for regional cooperation which should be reviewed include purchase or use of equipment, such as road equipment, emergency services planning and coordination, and recreation facilities and programs.

As new school facilities are proposed by the school districts, the municipalities should work with the school districts to assure that school facilities are located to be consistent with the Comprehensive Plan. For instance, it would be desirable to consider location of school facilities in areas where development has or is expected to take place, rather than locate school facilities in Agricultural or Rural Conservation and Rural Preservation areas, which are intended to preserve rural and open space character of the region. School facilities should be located where public sewer and water is available.

To facilitate implementation of this Comprehensive Plan, and to address the needs and possibilities for cooperation in the future, municipalities should formalize the joint planning process that has begun with formation of a Joint Municipal Planning Committee. A committee comprised of representatives from all the municipalities should be created which will meet on a regular basis to review the Comprehensive Plan and to identify what steps should be taken to foster realization of the Plan. This concept of using committees composed of area residents to address major issues of concern within the area could be used on other issues.

The municipalities should continue to work together with the school districts to coordinate use of the recreation facilities within the Region.

Specific Projects

Specific projects which are included on the Community Facilities map include:

- Completion of facilities at Hill Road Recreation area.
- Connect Old Airport Road Open Space with Township property.
- Complete new Middle School along Weavertown Road.
- Construct outdoor recreation facilities at Amity Community Park.
- Develop River Bend Park.
- Develop Hunter's Run Park.
- Develop Old Farm Park.
- Develop Crestwood Park.
- At Monocacy Hill Recreation Area:
 - Continue to improve site
 - Plan an environmental education center
 - Secure clear title
- Construct new Exeter Community Library
- Upgrade selected facilities at Lake Drive Recreation Area
- Construct new elementary school along Monocacy Creek Road

Monitoring of Needs

It is important to continue to monitor the need, and opportunities, for additional, expanded or improved community services and facilities. Municipalities must plan for the efficient and economical provision of services and facilities and determine what efficiencies can be obtained in the provision of services.

Trail and Greenway Planning

Introduction

In the St. Lawrence, Exeter and Amity area, settlements were generally founded along major travel routes, such as current Routes 422, 562, and 662, or along the Schuylkill River and railroad paralleling it. Residential neighborhoods, employment, community facilities, and cultural facilities were within walking distance. Increased development, sprawl, and motor vehicles have made pedestrian travel less safe and less possible. Many portions of the River are removed from pedestrian orientation.

A goal of this plan is to facilitate pedestrian circulation and connection of neighborhoods, commercial and industry areas, cultural and community facilities, the River, as well as the countryside. An inviting, convenient and safe pedestrian system is required. This may include sidewalk repairs, new sidewalks, and trails. Continuous routes, marked, safe crosswalks, handicapped access, and streetscape amenities such as benches, lighting and trash receptacles (where appropriate) should be considered.

The Schuylkill River Greenway Association is working to provide a continuous recreation trail parallel to the Schuylkill River from its headwaters in Schuylkill County to its confluence with the Delaware River. The Thun Trail transverses a portion of Amity Township before it crosses the river to the south side. Trail systems are found in Monocacy Hill in the Daniel Boone Homestead, on Neversink Mountain, and in the St. Lawrence Watershed.

A conceptual trail system throughout the Region is shown on the Pedestrian Circulation Map. The trail system would accomplish several things, including providing a recreational resource for bicycling and walking, and in some areas perhaps horseback riding; providing connections to the Schuylkill River Trail and the Horseshoe Trail, which passes through the southern portion of Berks County; connecting existing trails within the region; providing an alternative circulation system throughout the area which would provide access between developed areas, access to businesses and jobs, access to community facilities and recreation facilities, and access to historic resources. Connections would be made to the existing pedestrian circulation systems within the Borough and subdivisions.

This is a Conceptual Plan, and it will be necessary to refine the Plan with individual municipal Recreation Commissions and any Joint Trail Commission of the municipalities. Issues to be addressed are listed below.

A Feasibility Study For Neversink Mountain, Berks County, Pennsylvania was prepared in November 1997 for the City of Reading in cooperation with the Berks County Conservancy. The Report contains a proposed long range plan for development of Neversink Mountain Park within several municipalities, including western Exeter Township. Within the Plan, trail access is shown at Klapperthal and Reservoir Roads, a recreation area is shown north of Klapperthal Road, and trails in Exeter Township connect to the system of trails which extends throughout Neversink Mountain.

Land within the proposed Park in the Township is currently Berks County Conservancy owned and eased, Earl Trust land, County owned land, and privately held.

This Joint Comprehensive Plan supports continued examination of the feasibility of Neversink Park, planning for the Park, and implementation of a Plan which is acceptable to the municipalities which have land included within the Park.

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, rail beds, 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.

1994 Berks County Open Space and Recreation Plan

The County Plan identifies two greenways in the St. Lawrence, Exeter and Amity region:

- The Schuylkill River Corridor, along which the Schuylkill River Greenway Association has planned a Heritage Park that would include trail facilities.
- Antietam Creek Corridor, which would connect Antietam Lake with the Schuylkill River and the Thun Trail.

These greenways should be reserved along the streams within any parcels which are proposed for development.

Plan for the Reliable Supply of Water

Overall Approach

Both surface and groundwater should be protected with regard to quality and quantity. Examples of techniques for the protection of water quality and quantity include:

- Riparian stream buffers
- Stream corridor overlay zoning
- Minimize effects of impervious surfaces
- Protect headwaters and groundwater recharge areas
- Wellhead protection

- Hydrogeologic impact analyses
- Preserve critical areas
- Best Management Practices
- Implement storm water management plans
- Restore stream banks and crossings
- Sewage treatment and discharge practices
- Greenway development
- Growing Greener approach
- Increase watershed awareness

PROTECTING WATER SUPPLIES

Stream Corridor Protection	Aquifer Protection	Groundwater Resource Protection Provisions	Hydrogeologic Impact Analyses
 Restrict development and impervious surfaces 	Review development plans to prevent groundwater pollution	Wellhead Protection	• Proposed supply locations
Require riparian vegetative buffers	• Limit impervious surfaces	 Increase watershed awareness 	 Geologic conditions, recharge rate, degree of renovation
Encourage use of best management practices	Establish performance standards for commercial and industrial uses	 Regulation/restriction of potential contaminating uses 	• Aquifer characteristics; groundwater movement, use, yield, quality, quantity, well interference
Encourage stream habitat improvement	 Protect aquifers through controlling uses and potential polluting activities 	Performance standards	Test well results and impacts
Encourage conservation easements/donations/ dedications	• Utilize appropriate sewage disposal and water supply techniques, with appropriate standards and management	Design standards	• Plan to protect groundwater system underlying and adjacent to the site: prevention, remediation, emergency management
 Protect wetlands and wetland margins 	 Protect headwaters and groundwater recharge areas 	Operating requirements	 Monitoring of groundwater quality and quantity
 Require floodplain and wetland studies where not identified 	• Best Management Practices	Review process	
 Restore stream banks and crossings 			
Greenway development			

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

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

In order to protect the surface water within the St. Lawrence, Exeter and Amity region, Stream Corridor Preservation areas have been identified. These areas include floodplains, wetlands, and hydric soils in the Region. It is intended that the areas now in private ownership would be preserved as open space by private property owners. The granting of conservation easements or dedication of land to municipalities and conservation groups will be encouraged. If adjoining land is developed, developers will be encouraged to establish linear stream parks. Riparian forest buffers will also be encouraged.

Large areas of the Region have been designated Agricultural Preservation. Agricultural areas can serve as groundwater recharge areas, but Best Management Practices should be used by farmers.

Land along the Schuylkill River is generally designated River Conservation or Public.

Zoning Ordinance Provisions

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

- 1. Natural Resource Protection standards protecting floodplains, wetlands, wetland margins, steep slopes, watercourses, water bodies, and lake and pond shores.
- 2. Conservation zoning to protect natural resources.
- 3. Lot averaging provisions to allow flexibility in lot layout so that houses can be sited away from natural features and resources.
- 4. Steep slope protection provisions to minimize erosion and sedimentation resulting from impervious surfaces and tree clearance.
- 5. Woodland protection provisions to maintain tree cover.
- 6. Wetlands, wetland margin, and hydric soil protection provisions to protect groundwater and surface water supplies from contamination and allow infiltration.

- 7. Floodplain protection provisions to protect surface water quality and quantity.
- 8. Aquifer protection standards to protect groundwater supplies from contamination through use and impervious restrictions and design standards.
- 9. Wellhead protection provisions to protect central water supplies by restricting and regulating potential contaminating substances and uses.
- 10. Stream Corridor Overlay Zoning to protect surface water from adverse impacts from development and other nearby disturbance.
- 11. Minimizing impervious cover.
- 12. Environmental performance standards and environmental assessment requirements for developments.

Other Strategies

Zoning strategies should be coordinated with efforts of the Berks County Conservation District, Penn State Cooperative Extension, Watershed Associations, and other agencies to restore, protect, and stabilize stream banks and use other Best Management Practices to protect stream quality. Development of impervious surfaces should be limited, riparian buffers established, and stream habitats improved.

When development plans are reviewed, developers should be required to adequately manage storm water runoff and erosion and sedimentation in manners consistent with the protection of water resources in the area. Storm water management should be considered as part of the hydrologic cycle with consideration of infiltration, reducing pollution, and reducing thermal impacts through BMPs. Recommendations and ordinances pursuant to adopted Act 167 Stormwater Management Plans should be implemented.

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

Developers should also be required to identify the resources within their tracts, analyze the impacts of development, and 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 and that such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities. Commercial agricultural production impacts water supply sources; and, Best Management Practices should be applied to mitigate the impact on water supply sources.

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

Environmental Advisory Councils should be charged with protecting water resources in the region.

Public education programs should encourage the community to be aware of potential sources of water supply in their watersheds and to exercise good "housekeeping" and stewardship practices to help protect them.

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

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

In 2002 the Water Resources Planning Act was passed. This Act establishes a State Water Resource Committee which will be responsible for coordinating the development of a state Water Plan for Pennsylvania. The Plan is to be completed by December, 2007. The recommendations of that plan will have to be reviewed as they may affect water suppliers in the Region.

Where separate water systems serve adjoining areas, and where appropriate and feasible, water systems should be interconnected for times of emergency and in order to provide better service.

Drought contingency plans should be prepared by all water suppliers to establish how water supplies will be continued during times of drought. Elements to address include alternative sources of supply, interconnections between systems, emergency water transfer agreements, and water conservation provisions.

Even outside times of drought, water suppliers should implement water conservation programs for both the system and individual users.

Monitoring groundwater quality relative to hazardous substances and drinking water quality is an ongoing process monitored by the PADEP and local health departments.

Stormwater management practices are increasingly being used to not only control stormwater runoff volume and velocity from sites being developed but also to protect surface water quality and preserve the hydrological cycle (i.e., the water budget). Precipitation (rain and snow) is ultimately the source of drinking water. For sites that rely on groundwater for a water supply, it is the precipitation that falls on the property and percolates into the ground that creates and replenishes the aquifer. When a property is developed, more impervious surface area is created, reducing the amount of precipitation that can percolate into the groundwater table. Furthermore, on site wells construct for new developments draw water from the existing aquifer, potentially reducing the groundwater table.

The objective of recharging stormwater runoff is to compensate for the loss of natural infiltration due to the addition of impervious surfaces. Other best management practices relative to water supply include the treatment and discharge of wastewater on site when appropriate (e.g., septic systems) rather than collecting wastewater and conveying it to an off site treatment facility.

The expansion of the public sewer system in Amity Township will help address groundwater and surface water pollution from malfunctioning on-site sewer systems. The Future Land Use Plan directs future growth to areas which will be served by public sewer or could potentially be served by public sewer in the future. In areas not to be served by public sewers, municipalities should work to establish programs to have malfunctioning systems addressed by lot owners (on-lot septic system management programs).

Wellhead Protection

Wellhead protection programs are an element of protecting groundwater sources. Key elements of wellhead and watershed protection programs include:

- delineation of critical recharge areas surrounding groundwater sources;
- adoption and enforcement of ordinance provisions to ensure compatibility of land use with groundwater protection within delineated critical recharge areas;
- groundwater quality monitoring surrounding water supply sources;
- inventory of contaminant activities surrounding groundwater supply sources;

•	coordination with EPA and DEP regarding enforcement of permitting, registration, or emergency planning requirements for contaminant activities; and
•	creation of agreements with the County conservation district for routine inspection of land development erosion and sedimentation plans within delineated critical recharge areas.
	6-14

CHAPTER 7

FUTURE LAND USE AND HOUSING PLAN

INTRODUCTION

The Future Land Use Plan establishes policies for guiding future land use within the area and serves as a guide on which to base regulatory controls, such as municipal zoning maps and zoning ordinances. The Future Land Use Plan is not a zoning map nor does it change zoning in a municipality. The zoning ordinances and maps separately adopted by the municipalities establish zoning district boundaries, permitted land uses and the permitted density of development. In the land use categories established below, the types of land uses recommended in each category will be indicated, as well as the proposed density range.

The Future Land Use Plan has been developed in recognition of remaining rural areas and agricultural lands, charming villages and Borough, historic sites in the villages and rural areas, existing traditional neighborhood development, existing recreational opportunities and trails, stream valleys, Schuylkill River valley, steep slopes, visual access to hills and ridgelines, and areas with restraints to development. This plan is intended to preserve and enhance assets valued by the residents of the St. Lawrence, Exeter and Amity Region and retain areas of open space and rural character in the face of development pressure.

Development is not prohibited, but it is managed and controlled. The appropriate locations for development have been determined with the intent to direct most development to areas where public sewer and water are or could be available, and in some cases allow for appropriate orderly expansion of existing developed areas. This logical growth pattern will allow for the retention of areas of rural character in the Region and conservation of natural features.

Improving the quality of development which occurs is also a concern, particularly along the Route 422 corridor. The following indicates ways of improving the quality of development which occurs in the Region through ordinance provisions.

IMPROVING THE QUALITY OF DEVELOPMENT THROUGH ORDINANCES

- Establish interactive process with developers to convey expectations
 - Pre-design meetings
 - Joint Site visits

- Establish data and analysis requirements
 - Submission requirements
 - Impact studies requirements
 - Relate use and area and bulk regulations to character of area
- Adopt design and performance standards
- Promote flexibility
 - Conditional uses
 - Built in negotiation processes
- Use incentives for good design
- Use buffering requirements
- Improvements requirement and standards

Goals and Objectives

The goal for land use and housing is to plan a regional pattern of land use which recognizes the existing character and land use patterns of the municipalities and will be consistent with the goals of preserving the natural, scenic, historic, agricultural and open space resources of the region. The goal for natural and scenic resources is to protect, conserve, sustain and enhance the natural and scenic resources of Amity, Exeter, and St. Lawrence for the benefit and enjoyment of current and future generations. The goal for historic and cultural resources is to preserve and enhance the historic, architectural and cultural heritage of Amity, Exeter and St. Lawrence. The goal for agricultural resources is to preserve remaining agricultural areas for agricultural use and support the continuation of agricultural activities in the region. The goal for open space and recreation is to provide open space within the municipalities through the preservation and acquisition of farmland, river and stream corridors, woodlands and hills, and the development and retention of recreation areas and parks.

The economic development goal is to provide for additional light industrial, office and commercial development to enhance the region's tax base, provided such development occurs at designated appropriate locations, does not adversely affect the built and natural environment and the region's infrastructure, is compatible, attractive, and environment-friendly.

The following are the specific objectives the Future Land Use Plan is designed to meet:

- Mange growth in order to preserve the natural environment and remaining rural character and agricultural areas.
- Designate growth areas, which are logical extensions of existing concentrations of development, have appropriate access, can be efficiently served by the circulation system, and can be efficiently served by public sewer and water systems.
- Encourage a compact development pattern, which minimizes land consumption and maximizes open space.
- Direct new development in the municipalities to the designated growth areas.
- Discourage development in areas not suitable for on-site sewage disposal, which cannot be feasibly sewered.
- Coordinate policies for land use, circulation and community facilities and services to assure they do not have conflicting results.
- Minimize the conflict between non-residential and residential uses through proper allocation of land use and utilization of performance and design standards and buffer yards. Discourage proximity of incompatible land uses within the area and along adjoining municipalities.
- Coordinate future development with transportation infrastructure to minimize traffic volumes and congestion.
- Allow a variety of housing densities, development patterns, and attractive residential housing types for all age groups in appropriately designated areas, within the natural and service constraints of the municipalities.
- Encourage land development techniques, such as conservation development, based on land characteristics, which will preserve natural resources, agricultural, lands, and open space.
- Provide for well-planned development in each municipality, which will be consistent with community character.
- Discourage development in areas susceptible to sinkhole development unless adequate mitigation measures are practiced.

- Encourage infill development among existing developments where appropriate because of available infrastructure and lack of environmental constraints.
- Establish a permanent open space system.
- Provide community facilities to serve the needs of all residents.
- Provide for adequate, safe and sound housing for present and future residents of the region.
- Provide for the maintenance of the character of existing residential areas and housing stock through appropriate coordinated land use controls.
- Address the housing needs of the elderly and disabled in the community.
- Provide opportunities for appropriate, environmentally responsible and compatible commercial, office, and industrial activities at appropriate locations, within the context of existing land use patterns, support services, transportation networks, natural constraints, and environmental concerns.
- Manage development in the Route 422, 562 and 662 corridors and require development to employ techniques to prevent the decline of and enhance the aesthetics, safety and mobility of the corridors.
- Consider opportunities for transit-oriented development if the Schuylkill Valley Metro becomes a reality.
- Provide for a mix of land uses, which will balance growth with the need to preserve open land, manage traffic, maintain the quality of life in the area, and have manageable tax structures.
- Protect and enhance the existing character of St. Lawrence Borough and the villages in the Townships such as Douglasville, Limekiln, Jacksonwald, Amityville, Weavertown, Yellow House, Stonersville and Monocacy.

Land Use Categories

The following is a summary of the categories shown on the Future Land Use Plan:

Agricultural Preservation - Agricultural Preservation areas are intended to be retained as areas where agriculture will be practiced and appropriate uses related to agriculture

allowed. Residential development is discouraged. Some of the most productive farmland within the Region can be preserved for agricultural use and the value of agricultural land that remains can be retained by limiting adverse effects from the encroachment of residential development on agricultural uses. If the Townships utilize effective agricultural zoning, as Exeter Township now does, the intent is to severely restrict residential development through zoning. Administrative means for agricultural preservation detailed in this chapter and Chapter 14 could also be used. If a Township determines that it does not want effective agricultural zoning or will consider it in the future, primarily reliance would be an administrative means to preserve agriculture.

Rural Conservation- The intent of the this category is to encourage the retention of rural character of portions of Amity Township that are not going to be designated Agricultural Preservation or River Conservation. These areas now contain a mix of agriculture, woodland, recreation, and single-family development. The density of development for single family dwellings would be two net acres per dwelling. Conservation development is the preferred means of development.

Rural Preservation - The intent of this category is to protect areas with severe limitations to development and vulnerable natural area such as steep slopes, woodlands, watersheds, water courses, and wildlife habitats from intensive development. This also serves to perpetuate rural character and landscapes outside designated growth areas. The density of development for single-family dwellings would be three net acres per dwelling. Conservation development is the preferred means of development.

Rural/Institutional – This category recognizes an existing large cemetery area. On land not developed for cemetery use, single family dwellings on one acre lots would be permitted.

River Conservation – The Schuylkill River is a tremendous asset to and key natural area within the St. Lawrence, Exeter and Amity Region. The intent of this land use category is to preserve the character of the River and protect its floodplains and wetlands, wildlife habitats and recreation areas. Conservation and related recreation uses and acquisition for public or quasi-public open space are encouraged.

Low Density Residential - The Low Density Residential areas are intended to provide for single-family residential development at a density of ½ to 2 net acres per dwelling, depending on sewer and water facilities, or in areas abutting developed land where low density residential development has occurred or was proposed and considered appropriate. Conservation development is the preferred means of development.

Medium Density Residential - The Medium Density Residential areas are intended to accommodate most of the residential growth in the region. The types of units and density of development would depend upon the availability of public sewer and water facilities.

Many Medium Density areas are or are likely to be sewered. Others adjoin areas that will be or are sewered, and could be sewered in the future. Types of units and density of development would also vary by municipality. In the Townships, with on-site sewage disposal, typically single-family homes at a density of one dwelling per one or two net acres would be permitted. If public sewer and water facilities were available, the municipalities could, if they felt it appropriate, allow two family development and/or apartments and townhouses. With public sewer and water, the typical density for single-family dwellings would be two to five dwellings per acre. The maximum density of development, which would be for two-family, apartment, and townhouse development, would range up to three to six dwelling units per acre with public sewer and water. In the Borough, with public sewer and water, single-family development would be permitted, and two-family development could be considered.

High Density Residential - The High Density Residential areas are intended to accommodate residential growth in the region, with the highest permitted densities. All proposed High Density areas currently have public sewer facilities along their frontage. Types of units and density of development will vary by municipality and sewer capacity. With public sewer and water, the typical density for single-family dwellings would be one to six dwellings per acre. The maximum density of development, which would be for two-family, apartment, and townhouse development, would range up to five to ten dwelling units per acre with public sewer and water.

Town Center - This category is found in the Borough of St. Lawrence. The intent of this category is to permit a mix of residential development, commercial uses intended to serve the day-to-day needs of the residents of the Borough and surrounding areas, offices and personal services. Public sewer and water facilities would be required. The types of residential uses permitted would include single family and townhouses at a density of four to seven units per acre, depending upon zoning district.

Rural Village – This category is found in the Townships. The intent of this category is to permit a mix of residential development and commercial uses intended to serve the day-to-day needs of residents based on historic settlement patterns. The density of residential development would depend upon the availability of public sewer and water facilities. Typically, if public sewer and water facilities were available, single family homes on lots as small as one-fifth acre would be allowed. If public sewer and water were not available, single family dwellings would be permitted on one acre lots.

Mobile Home Park – This category reflects the areas of existing mobile home parks in Amity Township, where such uses will be allowed in the future.

Shopping Center Commercial - The intent of these Commercial areas is to provide for a wide range of commercial uses, including those serving the day-to-day needs of area residents and some regional-oriented commercial uses, which could include highway

oriented commercial uses and tourist-oriented uses. Typically, residential development is not permitted. Commercial development occurs as well-planned, unified developments.

Highway Commercial - The intent of the Commercial areas is to provide for a wide range of commercial uses, which would include commercial uses, such as highway oriented commercial uses and tourist-oriented uses. Typically, residential development is not permitted.

Neighborhood Commercial - The intent of the Commercial areas is to provide for a limited range of commercial uses, including those serving the day-to-day needs of area residents and would not included "heavier" commercial uses, such as highway oriented commercial uses. Typically, residential development is not permitted.

Office Park – The Office Park area is intended for the development of a well-planned, unified office park of professional and corporate offices.

Light Industrial - The Light Industrial area is intended for uses such as office, wholesaling, warehousing, research, limited manufacturing, packaging, and assembling. Typically, commercial and residential uses are not allowed.

General Industrial - The Industrial area is intended for uses allowed in Light Industrial areas and for "heavier" industrial uses, such as junkyards, surface mining and landfills. Typically, commercial and residential uses are not allowed.

Public - This category includes public buildings, such as municipal buildings and schools, and recreational uses such as the Daniel Boone Homestead and municipal parks.

Restricted Office/Commercial – This area reflects and is intended to allow continuation of a mix of single family dwellings, professional services and businesses, and professional or governmental offices and studios.

In all areas intended for non-residential development it is expected that any development which occurs will not have adverse impacts on residential areas, will not adversely impact the public health, safety, and general welfare, and will be subject to appropriate buffering requirements and design and performance standards.

ST. LAWRENCE-EXETER-AMITY FUTURE LAND USE PLAN CATEGORIES

LAND USE CATEGORY	POTENTIAL PRIMARY TYPES OF USES ALLOWED	LIKELY DENSITY RANGE	POSSIBLE TECHNIQUES EMPLOYED
Agricultural Preservation	Agriculture and agricultural related, single family dwellings	5 to 10 acre lots to 40 acre farms (1 acre lots for developed parcels if use sliding scale)	Large lot zoning, Agricultural Preservation Zoning (large parcel or sliding scale), administrative procedures, transfer of development rights; depending upon municipality
Rural Conservation	Single family dwellings, agriculture, conservation uses, recreation	1 dwelling unit per 2 acres net tract area	2 acre lots, cluster development, Growing Greener subdivisions (open space developments [conservation development]), transfer of development rights
Rural Preservation	Single family dwellings, agriculture, conservation uses, recreation	1 dwelling unit per 3 acres net tract area	3 acre lots, Lot averaging, cluster development, Growing Greener subdivisions, transfer of development rights
Rural/Institutional	Cemetery, single family dwellings, conservation uses	1 acre lots	1 acre lots
River Conservation	Open space, recreation, trails, municipal	None	Floodplain and wetland protection
Low Density Residential	Single family dwellings	2 acre to ¼ acre lots, depending on sewer and water facilities	2 acre to ¼ acre lots, cluster development, Growing Greener subdivisions

LAND USE CATEGORY	POTENTIAL PRIMARY TYPES OF USES ALLOWED	LIKELY DENSITY RANGE	POSSIBLE TECHNIQUES EMPLOYED
Medium Density Residential	Single family dwellings, two family dwellings, townhouses, apartments, elderly housing, mobile home parks, mixed housing – depending on zoning district and municipality	2 net acres to 1/5 acre lots SF, depending on sewer and water facilities; 2 acre to 1/7 acre lots TF, depending on sewer and water; 3 to 6 units per acre MF, public sewer and water required; depending on zoning district and municipality	Standard lot developments, cluster development, Growing Greener subdivisions, planned residential developments, traditional neighborhood development
High Density Residential	Single family dwellings, two family dwellings, townhouses, apartments	1 acre to 1/6 acre lots SF; 1 acre to ½ acre lots TF; 5 to 10 units per acre MF; depending upon municipality, district, and sewer and water availability	Standard lot developments, traditional neighborhood development
Rural Village	Single family dwellings, community facilities, public and quasi-public, limited commercial, serving the day-to-day needs of residents (limited retail sales), professional offices, financial institutions, restaurants, personal and household service establishments), bed and breakfasts, historic buildings	1 acre to 1/5 acre lots, depending on sewer and water facilities	Standard lot development, village pattern
Town Center	Single family dwellings, professional offices, residential conversion, retail sales, personal and household services, restaurants, offices, financial institutions, funeral homes, townhouses, contractors, retirement community, nursing home, depending on zoning district	1/4 acre to 1/7 acre lots	Standard lot development, traditional neighborhood development, borough infill

LAND USE CATEGORY	POTENTIAL PRIMARY TYPES OF USES ALLOWED	LIKELY DENSITY RANGE	POSSIBLE TECHNIQUES EMPLOYED
Shopping Center Commercial	Retail sales, offices, financial institutions, restaurants, personal and household services, indoor places of amusement	3 acres sites, smaller pad sites permissible	Unified community shopping centers
Neighborhood Commercial	Limited commercial serving the day-to- day needs of residents; professional offices, financial institutions, restaurants, personal and household service uses	1 acre to ¼ acre lots, depending on sewer and water facilities	Standard lot development, mini-malls
Highway Commercial	Neighborhood commercial uses; vehicle-related uses; vehicle sales; funeral homes; nursing, personal care, and retirement homes; indoor places of amusement; lumber and building materials supply; contractors; hotels and motels; nurseries and greenhouses; country club; retirement community; office park; research park	2 acre to ½ acre lots, depending on sewer and water facilities	Standard lot development, mini-malls, neighborhood shopping centers, stressing access management and performance and design standards
Office Park	Offices; research and testing; medical use, excluding hospitals	1 acre lots	Standard lot development; office; research and business parks; campus
Light Industrial	Offices; wholesaling and warehousing; printing and publishing; research and testing; manufacturing, processing, packaging, assembling; self-storage units	3 to 5 acre lots	Standard lot developments; industrial, office, research and business parks; campus; transit oriented development near Schuylkill Valley Metro if appropriate

LAND USE CATEGORY	POTENTIAL PRIMARY TYPES OF USES ALLOWED	LIKELY DENSITY RANGE	POSSIBLE TECHNIQUES EMPLOYED
General Industrial	Light Industrial uses; junk yards; surface mining; sanitary landfills; adult uses; race tracks; truck distribution center	3 to 5 acre lots	Standard lot developments; industrial office, research and business parks; campus; transit oriented development near Schuylkill Valley Metro if appropriate
Public	Public Uses		
Restricted Office/ Commercial	Single family dwellings, professional services and business, professional or governmental office or studio	1 acre to ¼ acre lots, depending on sewer and water facilities	Standard lot development, conversion of existing buildings

IMPLEMENTATION TECHNIQUES

<u>Agricultur</u>	ral Preservation	Environmental Protection		ervation and Preservation
Zoning	Administrative Means	Zoning	Zoning	Administrative Means
Percentage of tract		>25 Slopes – restrict development	Conservation Development	Donation
Sliding Scale	see attached list	15-25 Slopes – larger lots	Cluster Development	Purchase with fees
Large Lot	see attached list	Floodplains – restrict development	Open Space Requirements	Purchase with tax revenue
Conservation		Wetlands – restrict development	Net out Provisions	Purchase with grants
Development		Hydric Soils – restrict development pending wetlands study	Lot Averaging	Purchase with bond issues
		Wetlands Margins – restrict development		Conservation easements
		Woodland – limit clearing		Transfer of development rights
		Riparian Buffers/Stream Corridor Overlay Zoning		
		Net out provisions		
		Larger Lot Sizes		

ADMINISTRATIVE MEANS FOR AGRICULTURAL PRESERVATION

- Work with local farmers to ensure participation in County's Purchase of Agricultural Conservation Easements Program
- Establish Township Purchase of Agricultural Conservation Easements Program
- Establish Transfer of Development Program within a municipality or across municipal boundaries
- 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 (Growing Greener) as an option
- 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, and give disincentives to inefficient development techniques

Acreages in Future Land Use Plan Categories

The following table indicates the available acres contained in certain categories on the Future Land Use Plan. To arrive at available acreage, land classified as Open and Farm on the Existing Land Use Map has been totaled.

Rural Preservation 21	71
Rural Conservation 27	53
Town Center 0.	68
Shopping Center Commercial	55
Highway Commercial 4	41
Neighborhood Commercial	5
Office Park	62
Light Industrial 6	73
General Industrial	13
Low Density Residential 8	64
Medium Density Residential 16	28
High Density Residential	66

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 St. Lawrence, Exeter and Amity region, the Designated Growth Area includes land within the High Density Residential, Medium Density Residential, Town Center, General Industrial, Light Industrial, Highway Commercial, Neighborhood Commercial, Shopping Center Commercial, Office Park, and Restricted Office/Commercial land use categories, and the Rural Village in Douglassville.

Future Growth Area

The Municipalities Planning Code also includes the concept of future growth area, which is an area of a multi-municipal plan outside of and adjacent to a designated growth area where residential, commercial, industrial and institutional uses and development are permitted or planned at varying densities and public infrastructure services may or may not be provided, but future development at greater densities is planned to accompany the orderly extension and provision of public infrastructure services. The potential Future Growth Areas would be the Low Density Residential areas in Amity Township; but those areas have already been planned for residential development, so they have not been designated as Future Growth Areas.

Public Infrastructure Areas

Another concept identified in the Municipalities Planning Code is public infrastructure area, which is a designated growth area or all or any portion of a future growth area described in a multi-municipal comprehensive plan where public infrastructure services will be provided and outside of which such public infrastructure services will not be required to be publicly financed. No area within the St. Lawrence, Exeter and Amity area has been designated as a public infrastructure area because the municipalities within the area will not guarantee the financing of public infrastructure services to and for developments on the behalf of developers. Municipal policy is that the cost of expanding the necessary infrastructure to developments be borne by the developers, and not by the municipalities.

Rural Resource Areas

Rural resource areas are areas described in a multi-municipal plan within which rural resources including, but not limited to, agriculture, timbering, mining, quarrying and other extractive industries, forest and game lands and recreation and tourism are encouraged and enhanced, development that is compatible with or supportive of such uses is permitted, and public infrastructure services are not provided except in villages. Rural resource areas are further categorized as areas where: (1) rural resource uses are planned for; (2) development at densities that are compatible with rural resource uses are or may be permitted; (3) infrastructure extensions or improvements are not intended to be publicly financed by municipalities, unless the participating or affected municipalities agree that such service should be provided to an area for health or safety reasons or to accomplish one or more of the purposes set forth in Section 1101 of the Municipalities Planning Code.

No rural resource areas have been designated in this Comprehensive Plan because no areas appropriately fit all the criteria which have been established. In the proposed

Future Land Use Plan, areas for agriculture, mining, quarrying and other extractive industries, recreation, tourism and development compatible with or supportive of such uses are typically found in separate land use categories, which may allow some of these uses. No area has been established for the wide range of these uses. For example, in Agricultural preservation areas, typically extractive industries are not permitted. Extractive industries will typically not be permitted where residential development, forest, recreation and tourism are encouraged. Some rural resource uses, such as quarrying and other extractive industries, could be permitted within industrial areas, which are considered Designated Growth Area.

Environmental Considerations for Future Development

As development occurs in the region, care must be taken to preserve and protect identified sensitive environmental resources. The following approaches should be taken when development takes place.

- An ongoing awareness of and sensitivity toward the natural resources of the area 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 preservation of scenic viewsheds and scenic road corridors should be encouraged.
- Steep slopes should be avoided.

- The protection, preservation and enhancement of historic resources should be encouraged.
- The adaptive reuse of historic structures should be encouraged where appropriate.
- Innovative land development techniques should be used to minimize land consumption, preserve ecosystems, preserve agricultural lands and preserve natural resources and open space.
- The provision of open space and recreation areas for active and passive recreation should be encouraged. Visual and physical access to the open space system should be provided.
- The coordination of open space and circulation systems among adjoining developments should be encouraged.
- A system of bicycle paths and sidewalks should be encouraged.
- Incorporation of resources into development plans should be encouraged.
- Flexible approaches to site design to recognize resources should be encouraged.

Housing

The objectives for housing are to provide for adequate, safe and sound housing for present and future residents; to allow for a variety of housing densities, development patterns, and attractive residential housing types for all age groups in appropriately designated areas within the natural and service constraints of the municipalities; to provide for maintenance of the character of existing residential areas and housing stock through appropriate coordinated land use controls, and address the housing needs of the elderly and disabled in the community. No significant housing problems within the area have been identified.

Provision for a variety of housing densities, housing types, and development patterns in appropriately designated areas is accomplished through the Land Use Plan. 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.

residents of the area maintain or keep the identify various prog retain their homes.	can find themselver properties. The grams that are avail	municipalities shable to help then	where it is increased ould work with on meet their housi	ngly difficult to lder residents to ng expenses and
development.				

CHAPTER 8

CIRCULATION PLAN

INTRODUCTION

The goal for circulation is to achieve a safe and efficient regional circulation system which will enhance pedestrian and bicycle movement, ease vehicular travel within the municipalities, minimize adverse impacts on residential neighborhoods, enhance the safety, mobility and livability of road corridors within the region, and relieve congestion. Objectives for circulation are as follows:

Objectives:

- Coordinate land use and road improvement policies to maintain the integrity of existing and future roadways and support the reduction of vehicular trips.
- Preserve and improve the capacity of the existing roads within the area as future development occurs through cooperative efforts with developers and PennDOT as applicable.
- Monitor impacts on roadway capacity from new development and require developers to address projected increased traffic volumes in the road system by improving the existing system.
- Support the development of the Schuylkill Valley Metro system.
- Work to accomplish completion of the Route 422 By-pass from the Pottstown By-pass to the West Shore Bypass in the most efficient and cost effective manner.
- Promote coordinated access management programs along the road corridors within the area, to minimize the number of access points to the road system.
- Establish coordinated design, performance and signage standards for regional road corridors.
- Preserve the scenic road corridors within the region.
- Improve and expand bus and paratransit service in the region to connect residential areas, employment areas, commercial areas, and community facilities.

- Work with BARTA to enhance its bus system to attract riders.
- Provide maintenance of the existing road system as necessary.
- Work with State, County, and other municipal officials to address areas of traffic concern within and adjoining the region.
- Develop, expand, and link pedestrian and bicycle systems, including sidewalks, shared bikeways, paved shoulders, trails and greenways.
- Plan for a system of roads within future growth areas and existing developed areas to provide for convenient local circulation and access to primary routes of travel, such as consideration of a connection between Route 562 and Route 422 and linkages between subdivisions.
- Address existing deficiencies and safety concerns in the circulation system with landowners, PennDOT and developers as appropriate.
- Implement means of relieving congestion on area roadways, particularly Route 422, such as increased use of public transportation, improved traffic management and signalization policies, and relationships of workplaces and residence-serving businesses with residences.
- Improve intersections and turning movements along Routes 562, 662, and 422.
- Facilitate pedestrian and bicycle access to community facilities, including schools and recreation facilities.
- Develop policies to discourage the use of streets in residential areas as shortcuts for externally generated through traffic.
- Improve the safety of Route 422.
- Examine opportunities for transit-oriented development near stations of the Schuylkill Valley Metro.
- Expand multi-modal facilities in the region.
- Eliminate excess signage and traffic distractions.
- Work with businesses to implement congestion management strategies.

Future Functional Classification of Roadways

The future roadway classification is as follows:

Expressway/Major Arterials include: U.S. Route 422

Minor Arterials include: Route 82, Gibraltar Road (from Route 422 to the southern boundary of Exeter Township), East Neversink Road (from the West Shore Bypass to Route 422), Old Swede Road (Route 662), Boyertown Pike (Route 562), and Shelbourne Road.

Major Collectors include: Butter Lane, Bingaman Street, Five Points Road, Limekiln Road, Oley Turnpike Road, Gibraltar Road (from Shelbourne Road to Route 422), East Neversink Road (from the West Shore Bypass to Painted Sky Road, Painted Sky Road, Lorane Road, Lincoln Road, West Neversink Road (from Route 422 to East Neversink Road), Daniel Boone Road, River Bridge Road, Old Airport Road, Blacksmith Road, Monocacy Creek Road, Weavertown Road and Pine Forge Road.

Minor Collectors include: Wegman Road, Dautrich Road, Church Lane, Schoffers Road, Rugby Road, Stonetown Road, Pineland Road, Daniel Boone Road, Old Tulpehocken Road, Red Lane, Fairview Chapel Road, Weavertown Lane, Toll Gate Road, Monocacy Hill Road, Hill Road, Amity Park Road, Russel Avenue and Morlatton Drive.

Local Access Roads include: all other roads.

Proposed Road Improvements

Proposed road improvements are shown on the Circulation Plan and listed below. The municipalities will need to review these with the Reading Area Transportation Study and PennDOT in conjunction with the Route 422, Section 31S Corridor Study Alternatives Analysis which contains a number of candidate Short-Term, Medium-Term, and Long-Term Improvements to the Route 422 Corridor in Exeter and Amity Townships. Projects acceptable to the municipalities should be prioritized and programmed.

Route 422 Intersection Improvements - Eastbound

- Widen Rt. 422 and 47th Street at the intersection to provide right turning lane;
- Widen Rt. 422 and Lincoln Drive at the intersection to provide right turning lane;

- Widen Rt. 422 and Cardinal Drive at the intersection to lengthen existing right turning lane;
- Widen Rt. 422 and Fairview Chapel Road at the intersection to provide right turning lane;
- Eliminate access to Rt. 422 from Donna Drive due to sight distance problems;
- Improve Rt. 422 and Red Lane intersection to enhance sight distance;
- Improve Rt. 422 and S. Baumstown Road intersection to address alignment and sight distance problems. The intersection should also be widened to provide a right turning lane. In addition, S. Baumstown should be posted right turn only from Rt. 422 eastbound.
- Widen Rt. 422 and Riga Lane at the intersection to provide right turning lane for trucks serving the industrial facilities in this area;
- Widen Rt. 422 and Hill Avenue at the intersection to provide right turning lane;
- Improve the intersection of Routes 422 and 662 eastbound to provide for a left turning lane.
- Improve Rt. 422 and River Bridge Road intersection by installing a traffic signal eastbound.
- Improve sight distance at Stonersville Road and Rt. 422

Route 422 Intersection Improvements – Westbound

- Post no left turn on River Bridge Road and direct traffic to left turn on Maplewood Avenue.
- Improve Rt. 422 and River Bridge Road intersection by installing a traffic signal westbound.
- Routes 422 and 662 intersection, where pavement markings should be revised to provide a separate right turn lane for westbound traffic. This can be done within the existing cartway;
- Widen Rt. 422 and Maplewood Avenue at the intersection to provide right turning lane;

- Widen Rt. 422 and Old Airport Road at the westbound intersection to provide a left turning lane;
- Improve Rt. 422 and Monocacy Hill Road to address alignment and sight distance;
- Widen Rt. 422 and Daniel Boone Road at the westbound intersection to provide for a left turning lane;
- Widen Routes 422 and 82 at the westbound intersection to provide fro a left turning lane;
- Improve Rt. 422 and Pineland Road westbound intersection to provide a jug handle for traffic making right turns;
- Eliminate access to Rt. 422 from Hartline Avenue due to sight distance and inadequate shoulders and rights-of way;
- Eliminate access to Rt. 422 from Virginia Avenue due to sight distance and inadequate shoulders and rights-of way;
- Eliminate access to Rt. 422 from Fairmont Avenue due to sight distance and inadequate shoulders and rights-of way;
- Widen Rt. 422 and Lincoln Drive at the intersection to provide right turning lane;

Proposed Roads

Construction of a road segment facilitating access between Rt. 562 in St. Lawrence Borough and Business Route 422 in Exeter Township. The proposed road segment would connect Rt. 562 via Elm Street with a bridge over Antietam Creek to Dunham Drive and from Dunham Drive to Gibraltar Road. The alignment and construction in both the Borough and Township is being coordinated between Exeter and St. Lawrence. Completion of such a road segment will provide an alternative route to Shelborne Road, St. Lawrence Avenue, Prospect Street and Bingaman Street. Thereby, alleviating congestion on some of the local roads.

Parallel access roads should also be explored connecting Pineland and Daniel Boone Roads, South Baumstown Road and Rt. 422, South Baumstown Road and Riga Lane, Red Lane and Fairfield Chapel Road, Shelbourne Square Sopping Center and Loraine Road, Orchard Place and Wisteria Avenue, Woodland Avenue and Parkview Road, and 37th Street and Parkview Road. Thus providing an alternative to congested Rt. 422 and to

attract local traffic on routes on the fringe of developed areas. Their purpose would be to link subdivisions together and to the existing area circulation system and provide a more extensive road system throughout developed areas.

Improvements to Existing Areas of Concern

The future Transportation Map shows additional roadway concerns, including right-ofway preservation issues, pedestrian enhancement issues, access management issues and transit oriented development areas. Each municipality should continue to work toward improvement of these areas through multi-year transportation planning.

Cooperation Among Municipalities

While some road improvements will be handled on an individual municipality basis, cooperation of municipalities will be important, particularly along the major roadways, where the impacts of traffic have created congestion and can affect the quality of life in all municipalities. Of particularly regional importance are the Rt. 422, Business Route 422 and the Route 562 and 662 corridors.

Consideration should be given to forming a regional transportation authority. The authority could facilitate looking at all aspects of transportation, including transit, on a regional basis.

Scenic Roads

Scenic roads are an important element within the circulation system within the St. Lawrence, Exeter and Amity area and maintenance of a system of scenic roads is encouraged. The Future Land Use Plan proposes concentrating most future growth in areas where development has already occurred, and proposes substantial agricultural and open space areas, and this will help maintain the scenic road system. In Rural Conservation and Rural Preservation areas, developers will be encouraged to incorporate natural features and resources into an open space system within developments which do occur, and to site homes with consideration of the natural features and resources.

The municipalities should discuss whether it would be appropriate to adopt scenic road overlay zoning along scenic roads. Within such overlay areas, greater setbacks along the roads could be required, additional landscaping and screening requirements could be established, and design standards for siting of buildings could be established in order to minimize visual impacts of any development.

Discouraging intensive development along the scenic roads also has another benefit. This can lessen traffic volumes and driveway intersections along roads, which are typically not suited for intensive traffic volumes.

US 422 Bypass

The Steering Committee took a position during the development of this plan that it supports the development of a bypass of the current Route 422 through both Exeter and Amity Townships. In taking this position, the Committee did not identify a specific location for the corridor but identified the need to address congestion and safety in the long term.

PennDOT has prepared scenarios for partial bypasses within Exeter Township. The next step will be to pursue prioritization and funding of the bypass project with the Reading Area Transportation Study and PennDOT.

Schuylkill Valley Metro

After much debate, the Steering Committee also took a position on the location of the proposed Schuylkill Valley Metro stations in the Village of Douglasville and at the Lincoln Corporate Center in Exeter Township. The Committee felt that the proposed locations were not consistent with its proposed vision of the region and because: (i) the development of a station in the Village of Douglasville would have a negative impact on existing viable businesses in the Village, the historical character of the Village as well as a number of historical buildings located in the Village; (ii) the location of the Village does not lend itself to the effective and efficient flow of traffic and based on the existing location of Route 422 could have an impact on safety along the corridor; (iii) the population to support a proposed station lives to the north of Route 422 and the current alignment of the road does support a safe and convenient flow of pedestrians to and from the proposed station; (iv) the area adjacent to the proposed location at the Lincoln Corporate Center has been developed thus impacting the future expansion of the station or additional parking that may be required to support the station; and finally, (v) pedestrian access to this site is also impacted by the current road network and the lack of sidewalks and/or trails in the area.

The Committee recommended to the Berks County Planning Commission that consideration be given to a site north of the Borough of Birdsboro, along Route 82 and accessed from the Birdsboro Bridge in place of the proposed locations in Douglasville and at the Lincoln Corporate Center. The site was formerly a freight terminal along the Reading Railroad right-of-way. The Committee believes that this site provides the best location for the development of a Schuylkill Valley Metro station for the following reasons: (i) the site contains an existing station building; (ii) there is ample room for the development of parking associated with the station; (iii) ridership can be drawn from a larger geographic area, specifically Birdsboro and Robeson and Union Townships; (iv) pedestrian access to the site could be easily achieved for residents of the Borough, where sidewalks are in place; (v) the impacts from traffic generated by use of the station would

be minimized; and finally, (vi) the area lends itself to any future expansion that may be needed to support the station.

Mass Transit

Congestion on Route 422 is a major concern, particularly with traffic volumes expected to increase in the Region. Incremental steps can be taken to improve conditions along this road. One of those incremental actions is encouraging the development of the Schuylkill Valley Metro and the enhancement of the BARTA bus system.

If passenger rail service to the area is developed, a multi-modal facility should be established at the train station, to accommodate and facilitate pedestrian, bus, automobile and bicycle traffic. An objective will be to develop and then expand service rail service while encouraging BARTA to provide service to the proposed station. Elements in trying to develop and expand service will be well-located stops, attractive and safe stops with shelters and connections to the transit hub in Reading. The proposed trail system is designed to provide connections to public transit routes, pedestrian and bicycle routes to stops, and bicycle racks and safe shelter for bicycles.

As additional development occurs within the area, consideration should be given to addressing expanded routes throughout the area and provide greater access to the BARTA system. The expansion of routes could be planned in conjunction with the municipalities, BARTA, and area businesses. The Region should work with BARTA to encourage BARTA to provide adequate connections of the villages and borough via bus routes serving major residential, employment and retail areas, with cooperation with and support from the local business community.

The Transportation Plan shows a proposed Circulator Route, which would connect the proposed train station with a route along Route 422, Route 622, Route 562 and Shelborne Road with a connection to the Borough. If this would not be a regular BARTA route, then a system of mini-buses should run along Route 422 to connect the communities. Circulator access is also shown to the residential area in southern Exeter Township, the industrial areas along Lincoln Road and the Exeter High School and Middle School complex.

Additional transit service to the region is important to serve older residents who do not move freely throughout the Region, to provide access to such facilities as the Reading Hospital.

Providing park and ride systems should be encouraged. In the future, it may be appropriate to plan for a transit hub in Exeter, or where sufficient land would be available along Route 422 if land could not be secured in the Township. The Future Traffic Circulation Map identifies Park and Ride Facilities near the intersection of Route 422 and

Business Route 422, near Lincoln Road and Route 422, at the intersection of Route 82 and Route 422 and near the intersection of Route 662 and Route 422 in Douglasville. The use of carpooling throughout the area should be encouraged. Businesses within the area could take the lead in encouraging employees to carpool. Pedestrian access should be provided from Park and Ride facilities to Circulator stops.

Road and access road design in the future should consider accommodating potential bus traffic. As infill, redevelopment and development occur in the area where bus service is likely, provision should be made for pull-offs, stops and shelters and pedestrian access to the stops and shelters.

Access Management

Access management will be a concern along all roads within the area, but particularly along Route 422 and Route 662, and the collector road system. The municipalities should consider working with PennDOT to develop an access management plan for the area.

The major elements in access management include the following:

- Driveway design standards
- Reduce number of road entrances
- Traffic Impact Analysis where development is proposed
- Left turn lanes and right turn lanes constructed at road and driveway intersections
- Install medians
- Adequate parking lot/internal circulation design in developments
- Shared access to properties
- Interconnect properties developed along roads
- Improve intersection design/spacing
- Signalized high volume driveways
- Control of access
- Direct development access roads to signalized driveways
- Prohibit inappropriate turning movements

Transportation Development Districts

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

While the Transportation Development District approach may not be appropriate at the present time, the appropriateness of it along Route 422 in Exeter and Routes 422 and 662 in Amity Township, and in the area of St. Lawrence Avenue and Route 562 in St. Lawrence Borough should be monitored.

Congestion Management System Strategies

Congestion management system strategies have been used by some communities in the past to reduce traffic. The major elements are:

- Employee trip reduction plans to increase average vehicle occupancy
- Creation of transportation management associations in which municipalities work with local business community in identifying travel demand reduction measures such as:
 - -- reducing vehicle concentrations at peak periods by staggering work hours:
 - -- encouraging commuting by carpool and public transit rather than by single occupancy vehicles;
 - -- eliminating unnecessary commutes;
 - -- funding informal para-transit/vanpool operations; and
 - -- hiring a transportation coordinator to organize transportation alternatives.

As increased commercial and industrial development occurs in the Region, the appropriateness of these strategies should be reviewed.

Impact Fees and Negotiated Financial Contributions

The Municipalities Planning Code allows municipalities to assess a traffic impact fee provided municipalities have adopted a traffic impact fee ordinance. With a traffic impact fee system in place, a municipality can collect fees to finance improvements to the road system. Exeter and Amity Townships currently have traffic impact fee systems and should determine whether other areas should be included. One possible district which should be investigated for future development is at the intersection of Route 82 and Route 422.

The Municipalities Planning Code indicates that when municipalities have prepared a multi-municipal plan, in order to allow for the provision of transportation capital improvements in a cooperative manner, the municipalities may collectively cooperate to enact joint transportation impact fee ordinances.

Where traffic impact fee systems are not in place, financial contributions from developers for road improvements should be negotiated. Developer-financed road improvements at existing intersections and along road segments could correct current deficiencies and mitigate traffic increases associated with new development.

Shoulder Improvements

Developers should be required to improve shoulders along the frontages of their tracts when they develop. In addition, the municipalities should take it upon themselves to improve shoulders along existing roads. Shoulders should be a minimum of 4 ft. wide, but should be the minimum width necessary to provide for trails in accordance with the guidelines in the Statewide Bicycle and Pedestrian Master Plan.

Gateways

Gateways should be considered at the entrances to the St. Lawrence, Exeter and Amity area, especially at the entrances to the Borough and the Townships along major roads. 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 the entrances. Consistent road corridor overlay zoning could be adopted along the major roadways.

Along the length of Route 422 and at various points, 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. 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.

Design guidelines addressing the following elements could also be applied within the Region:

- discouraging the use of drive-thru facilities
- encourage 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
 - -- Utilizing similar numbers and spacing of windows and doors in the facade
 - -- 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)
- -- Utilizing similar entry treatments to buildings
- -- Using similar building heights
- -- Having store fronts, upper facades, and cornices of commercial buildings compatible with existing buildings
- -- Using colors which are harmonious throughout the area

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. The intent of bonuses is to provide incentives to developers, not just regulation, to allow economic use of property.

Pedestrian Circulation

As streets are maintained and improved, walkability should be addressed, including the radii at intersections. Limiting radii at intersections to the minimum necessary to allow safe traffic flow can make intersections more pedestrian friendly. Pedestrian crossings at street intersections, particularly along the major trail routes within the area, should be facilitated through crosswalks, stop signs, pedestrian islands, limitation of cartway radii and the use of pedestrian buttons and cycles that signalize street intersections. Access to circulator and bus stops from park and ride areas and neighborhoods should be enhanced. Gaps in the sidewalk system such as those along St. Lawrence Avenue should also be addressed. Access to community facilities and commercial areas in the Borough and Villages should be enhanced through expanded and repaired sidewalks and establishing crosswalks. Streetscape amenities such as benches, trash receptacles, landscaping and lighting can be provided in the downtown portions of the villages and Borough as deemed appropriate.

Parking Programs in St. Lawrence

Adequacy of parking in the Borough should continue to be monitored. If it is determined by the Borough to increase the availability of parking in the future, a number of issues could be addressed with regards to parking in the Borough:

- There needs to be public/private cooperation
- Identification/Direction to Existing Facilities (such as the Borough building)

- Tenants utilize spaces designated for tenants. Tenants living above commercial uses should not park in front of the commercial uses.
- Maintain existing on-street parking
- Permit and encourage sharing of spaces by private parties
- Investigate use of fee-in-lieu of parking option

Berks Vision 2020

The Comprehensive Plan for Berks County lists several transportation priorities which would affect the Region:

Short Range -

US 422 East (Exeter Township) – provision of improved channelization and intersection controls. This will conserve capacity and improve safety until a new region connection can be provided in the corridor.

US 422 Jughandle at SR 2033 (Shelborne Road) – construct jughandle turning lane in southwest quadrant of intersection to reduce congestion and improve safety.

US 422/PA 662 –Intersection – provision of west bound right turn lane from US 422 to PA 662 and related improvements to eastbound US 422 at River Bridge Road. These will conserve capacity and improve safety until a new regional connection can be provided in this corridor.

PA 82 Bridge – replacement of posted structure crossing Schuylkill River. This bridge provides for important access between growth areas on both sides of the river and to the Borough of Birdsboro.

Intermediate Range -

The County initiated a study of US 422 to assess a range of transportation solutions to satisfy long-term safety and capacity. The results of the study recommended functional, cost-effective improvements to address transportation, community and environmental needs of the corridor. A decision has not been made on whether the corridor will receive operational improvements sufficient to address safety

and congestion concerns until such time funding becomes available to complete the remaining expressway link.

US 422/Neversink Road Interchange – reconstruct this partial interchange to provide full range of movements and provide safe, efficient access to surrounding growth areas.

PA 562 – minor widening and realignment with improvements at hazardous intersections from US 422 Business to PA 73

PA 662 – minor widening and realignment with improvements at hazardous intersections from US 422 to PA 562.

Long Range -

No long range projects listed in the area

Traffic Calming

As development in the Region occurs, and traffic volumes increase, there can be increased traffic flow on residential streets. Means of dealing with traffic volumes discussed previously are road improvements, increased utilization of mass transit, internalized trips within the area, providing increased opportunities for pedestrian and bicycle traffic, supporting efforts to increase automobile occupancy rates and parking lot opportunities, and access management. If those steps are not completely 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 that streets are not just for cars and that residents have rights. Streets should be 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)

Regional planning efforts and opportunities to use alternative modes have been discussed. The methods available along local streets include active speed reduction, passive speed reduction and streetside design.

1. Active Speed Reduction (Construct barriers)

- a. Speed bumps and speed tables are raised areas in the street surface, which extend across the width of the street. Speed bumps present liability and are also annoying to local residents. Speed tables, which are really raised pedestrian crosswalks, could be more successful. They 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 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 the area. The intent is to have the driver recognize the street as not just a wide-open roadway designed for benefit of a car, but as a place where residents of a neighborhood will also be using the street. Any designs for streets should be compatible with the character of the neighborhood. Landscaping should be easy to maintain and not affect clear sight triangles.

Implementation

Prior to implementation of any traffic calming program, it is necessary to clearly identify the specific problems which are to be addressed, identify and evaluate the alternative techniques and their drawbacks, benefits, and cost; identify alternative traffic patterns that could result from implementation of the techniques and the effects of those patterns on other streets and neighborhoods; and involve citizens of the community in the evaluation and selection of techniques. Techniques should not detract from the character or attractiveness of a neighborhood.

Primary Emphasis on Passive Techniques

Primary emphasis should be given to the passive traffic calming techniques. The use of active traffic calming techniques should be employed only if passive techniques are not successful because of the cost and inconvenience to residents.

Areas where more active traffic calming could be used would be on St. Lawrence Avenue and along the side-streets in the Village of Douglasville. Bumpouts could be considered at some street intersections. The bumpouts would physically protect parking and shorten the distance across the road for pedestrians.

Optimization of Traffic Signalization along Route 422

In order to increase system capacity and reduce intersection delays, traffic signal timing along Route 422 should be kept current.

Consideration should be given to implementing a closed loop system to enhance the operation of coordinated signalized intersections in the Route 422 corridor. Presently the signals in the Exeter could be coordinated with those in Amity Township. Currently there are several closed loop systems in operation within PennDOT District 5-0. The systems will require hardware (vehicle detectors) in the field as well as a computer, software and communication lines to a municipal office and to the PennDOT District Office. They will also require a consultant or employee trained to monitor the system. Although the system would allow for real time signal timing adjustments, PennDOT policy currently allows timing adjustments to be made only by PennDOT. This inhibits the ultimate effectiveness of the closed loop system; however as these systems become more prevalent, we expect that PennDOT will respond with a more effective policy.

Transportation Strategies

A set of priorities has been established to address specific issues within the region. Priorities have been identified as an immediate (1-2 years), short-term (3-5 years) and long term (5-10 years). The specific municipal body (i.e., Board of Supervisors/Borough Council or Planning Commission) responsible for the individual strategies have also been identified as well as the effective planning tool to implement the strategy.

Priorities

Immediate (1-2 years)	Implementation	Tool
Access Management Provisions Capital Improvement Plans and	PC/BOS BOS	ZO/SALDO CIP
Programs		
Conservation Easements and	BOS/LLT	EP
Local Land Trusts	DC/DOC	70
Corridor Access Management Overlay District	PC/BOS	ZO
Official Maps	PC/BOS	OM
Residential Street Design	PC/BOS	ZO/SALDO
Site Analysis Plans	PC/BOS	SALDO
Slope Management	PC/BOS	ZO/SALDO
Traditional Neighborhood	PC/BOS	ZO/SALDO
Development		

Transit Design Standards	PC/BOS	ZO/SALDO
Transit Oriented Development	PC/BOS	ZO/SALDO
Vegetation Management	PC/BOS	ZO/SALDO
Traffic Calming Standards	PC/BOS	ZO/SALDO
and Design		

Short-term Strategies (3-5 years)

Park and Ride Programs	PC/BOS/PADOT	PRP
Pedestrian/Bikeway Facilities	PC/BOS	ZO/SALDO
Design		
Performance Zoning	PC/BOS	ZO
Right-of-Way Preservation	PC/BOS	ZO/SALDO
Riparian Buffers	PC/BOS	ZO/SALDO
Traffic Signal Systems	BOS/PADOT	
Village Protection Programs	PC/BOS	ZO/SALDO
Parallel Access Road Standards	PC/BOS	ZO/SALDO/OM
And Design		

Long-term (5-10 years)

PC/BOS	ZO/SALDO
PC/BOS	ZO
PC/BOS/IFAC	CIP
PC/BOS	ZO
	PC/BOS/IFAC

<u>Implementation</u>

PC – Planning Commission

BOS – Board of Supervisors

LLT – Local Land Trust

PADOT – Pennsylvania Department of Transportation

IFAC – Impact Fee Advisory Committee

<u>Tool</u>

ZO – Zoning Ordinance

SALDO – Subdivision and Land Development Ordinance

CIP – Capital Improvements Plan

EP – Easement Purchase

OM – Official Map

PRP – Park and Ride Program

CHAPTER 9

PLAN FOR THE PROTECTION OF NATURAL AND HISTORIC RESOURCES

Natural resources are identified in Chapter 14, where agricultural resources are discussed; Chapter 15, where floodplains, wetlands, hydric soils, streams, steep slopes, wooded areas and natural features of special interest are discussed; Chapter 16, where aquifers are discussed; and Chapter 17, where scenic resources are discussed. Historic Resources are discussed in Chapter 22.

Natural Resources

The following goal and objectives have been established:

Goal: Protect, preserve, sustain and enhance the natural and scenic resources of Amity, Exeter and St. Lawrence for the benefit and enjoyment of current and future generations.

Objectives:

- Prepare and implement a resource protection and management strategy for the region.
- Protect water resources within municipalities and thus the quantity and quality of surface and groundwater. Water courses of particular concern are the Schuylkill River, the Antietam, Manatawny, Monocacy, Limekiln, Heisters, Ironstone, and Owatin Creeks, Trout Run, tributaries to the creeks, wetlands and floodplains along the river and creeks, and steep slopes draining to the water courses.
- Protect groundwater throughout the municipalities, including remaining limestone areas where the potential for pollution and groundwater resources tend to be the greatest.
- Protect and improve water quality within the region.
- Encourage recharge of the water table as development occurs.
- Protect and manage woodlands within the municipalities and encourage new planting of trees within developments and reforestation.

- Protect the steep slopes within the municipalities, including Neversink Mountain, Monocacy Hill, Schwarzwald Hill and Guldin Hill; and preserve visible ridgelines, which contribute to the scenic character of the region.
- Protect watershed and wellhead areas for existing and potential community water supplies within Amity, Exeter and St. Lawrence.
- Preserve the scenic viewsheds and scenic road corridors within the region.
- Support water conservation efforts.
- Protect and maintain the rural character in portions of the Townships still possessing that rural character.
- Protect and conserve unique natural areas in the region, such as Neversink Mountain, the Schuylkill River, the Amityville Floodplain, and other identified PNDI sites.
- Conserve, enhance, manage and connect the ecosystems within the Planning Area.
- Strengthen municipal zoning and subdivision ordinances to provide further protection to the region's natural and scenic resources.
- Require developers to utilize appropriate erosion and sedimentation control techniques and minimize and mitigate sinkhole occurrence.
- Utilize existing programs and ordinances and initiate new programs to protect and/or acquire development rights or title to, the key natural resources in the region, such as agricultural areas, woodlands, hills, and greenways and buffers along waterways and wetlands.
- Encourage the design of new development to complement the region's scenic character and cultural heritage.
- Recognize the potential of the Schuylkill River corridor, support the designation of the Schuylkill River as a scenic river and efforts to preserve the River corridor, and foster recreational opportunities along the River. Foster preservation of a greenway along the river corridor. Consider participating in the following goals which have been established for a Schuylkill River Greenway in adjoining Montgomery County:

- Preserve natural resources of the Schuylkill River Valley environment, while revitalizing existing river-front communities in ways that respect the characteristics and qualities of the Schuylkill River.
- Provide access to the water and encourage recreation along the river in ways that minimize conflicts between river users, and protect the natural features and sense of solitude along the river.
- Protect water quality, enhance natural diversity, and improve overall aesthetic appearance of the river.
- Promote sustainability and economic development in existing riverfront communities.
- Conserve and enhance the cultural resources of the river corridor.
- Preserve important open space lands for passive recreation, riparian buffers protection and protection of native species habitat along the river.
- Establish a cooperative framework for education, planning, and coordination between public and private greenway partners.
- Promote alternatives to motor vehicle use to improve air quality.
- Ensure businesses comply with state and federal air quality emissions standards.
- Improve the appearance of the Route 422 Corridor through use of design and performance standards and coordinated signage standards and programs.

Relationship to Future Land Use Plan

Watercourses within the region have been identified as Stream Corridor Preservation areas on the Stream Corridor Preservation Map. One way to protect these watercourses is to establish Stream Corridor Preservation Overlay Districts through zoning ordinance regulations. Regulations for these overlay districts should be written to establish, protect, and manage riparian buffers along the watercourses. These regulations would protect groundwater discharge/recharge areas, protect the quantity and quality of surface and groundwater, and restrict further development in the corridor to protect the water quality. This will also help to establish and maintain corridors for future greenway and park development for the residents of the Region.

River Conservation is designated along the Schuylkill River. Agricultural Preservation, Rural Conservation and Rural Preservation areas have been identified throughout most of

the northern and central portions of Exeter and Amity Townships. Only limited development will be allowed in the Rural Conservation and Rural Preservation areas in order to protect watersheds, woodlands, and steep slopes. Limiting development will protect watercourses and water supplies, vulnerable wooded areas, and conserve ecosystems by maintaining an adequate critical mass through connecting ecosystems. Distinctive hills in the Region will be protected. The River Conservation areas are located within environmentally sensitive areas along the Schuylkill River. Only very limited development will be permitted in Agricultural Preservation areas, which protect agricultural resources, serve as recharge areas, and contain wildlife habitats.

Riparian Buffers

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

Buffers provide the following benefits:

- filter runoff Rain that runs off the land can be slowed and infiltrated in the buffer, settling out sediment, nutrients and pesticides (nonpoint source pollution) before they reach streams.
- take up nutrients Fertilizers and other pollutants that originate on the upslope land are taken up by tree roots. Nutrients are stored in leaves, limbs and roots instead of reaching the stream. Through a process called "denitrification," bacteria in the forest floor convert nitrate to nitrogen gas, which is released into the air.
- provide shade The leaf canopy's shade keeps the water cool, allowing it to retain more dissolved oxygen, and encouraging growth of plants and aquatic insects that provide food for fish.
- contribute leaf food Leaves that fall into the stream are trapped on fallen trees and rocks where they provide food and habitat for organisms critical to the aquatic food chain.
- provide habitat Streams that travel through woodlands provide more habitat for fish and wildlife. Woody debris provides cover for fish while stabilizing stream bottoms.
- provides migration corridors for wildlife.
- safeguard water supplies by protecting groundwater recharge areas.

- provide flood control.
- provide stormwater management potential natural vegetation provides a basis for innovative stormwater management systems. Stormwater flows from retention basins can be directed to, and allowed to flow through, buffers to reduce nutrient and sediment loads.
- improve water and air quality.
- stimulate economic opportunities such as by providing valuable open space which may increase land values and, therefore, the tax base.
- provide some federal tax incentives to landowners (depending on a landowner's financial situation) willing and able to place some of their lands under conservation easement.
- reduce grounds maintenance.
- provide recreational opportunities, and associated economic benefits for recreationrelated businesses.
- provide educational and research opportunities for local schools and colleges.
- provide windbreak, shade and visual buffer.

Actions to Protect Natural Resources

The following actions should be taken to protect the natural resources within St. Lawrence Borough, Exeter Township and Amity Township:

- 1. Update zoning maps to reflect the Future Land Use Plan.
- 2. Update zoning ordinances to reflect the Future Land Use Plan and Goals and Objectives of this Plan to include:
 - a. Natural Resource Protection Standards and Net Out Provisions
 - b. Steep Slope Protection
 - c. Watershed and Wellhead Protection
 - d. Groundwater and Surface Water Protection
 - e. Tree and Woodland Protection, Management, and Planting
 - f. Wetland, Wetland Mitigation and Hydric Soil Protection
 - g. Floodplain Protection
 - h. River and Stream Corridor Overlay Zoning, Riparian Buffers

- i. Limestone Area Overlay District Zoning
- j. Scenic Road and Scenic Viewshed Overlay Zoning
- 3. Promote active involvement of municipal Environmental Advisory Committees
- 4. Support acquisition/protection of key natural areas through conservation easements, fee simple, donation and dedication, stream easements, stream corridor management, in cooperation with conservation groups and community groups.
- 5. Encourage expansion of agricultural security areas and encourage purchase of agricultural conservation easements.
- 6. Discourage public sewer and water for areas to remain agricultural or rural, coordinate with Act 537 Planning.
- 7. Investigate wellhead protection and watershed planning opportunities under the growing greener initiative and other programs.
- 8. Encourage Act 167 Stormwater Management Planning, stormwater management, and use of Best Management Practices.
- 9. Form watershed associations.
- 10. Complete water supply and quality studies.
- 11. Effective agricultural preservation zoning should be maintained in Exeter Township. This should be supplemented by administrative means for agricultural preservation.
- 12. Appropriate zoning and/or administrative means should be used to further agricultural preservation in designated areas in Amity Township.
- 13. Utilize zoning techniques such as Conservation Zoning and lot averaging to protect natural and historic resources on tracts.
- 14. Plan for greenways and riparian buffers.
- 15. Update Open Space and Recreation Plans.
- 16. Support efforts to protect critical treasures in the Highlands Region of Pennsylvania.

Historic and Cultural Resources

The following goal and objectives have been established:

Goal: Preserve and enhance the historic, architectural and cultural resources of Amity, Exeter and St. Lawrence.

Objectives:

- Encourage the preservation, protection, and enhancement of historic and architectural resources and their context.
- Discourage demolition by neglect and deterioration of historic resources.
- Foster increased public awareness of the history of and historic resources within the municipalities.
- Support efforts of organizations to identify, mark, register and protect historic resources and work with local and state agencies to protect historic resources.
- Require new development to reflect and consider the history, architecture and development patterns of the municipalities in order to preserve the important historic and architectural resources of the region.
- Determine the role which municipalities should play in historic preservation through land use ordinance incentives, controls and regulations, and efforts to create historic districts and/or historic overlay zoning.
- Encourage adaptive re-use of historic structures where appropriate.
- Identify existing contemporary sites which could be considered part of the historical or cultural heritage of future generations and preserve these sites for future generations.
- Support cultural events, which celebrate the historic and cultural heritage of the region.

Actions to Protect Historic Resources

The following actions should be taken to protect historic resources within the Region:

1. Utilize Historic Resource Overlay Zoning.

- 2. Utilizing demolition by neglect provisions in zoning ordinances.
- 3. Adopt Town Center and Rural Village design standards.
- 4. Require historic resource impact studies in subdivision and land development ordinances.
- 5. Encourage active involvement of Historical Commissions to:
 - Identify, evaluate, mark and foster awareness of historic resources
 - Investigate participation in Certified Local Government Program
 - Investigate creation of historic districts
 - Inform and involve public
 - Encourage retention, restoration, enhancement and appropriate adaptive re-use of historic resources and discourage removal of historic structures
 - Conceive programs, events and interpretive signage and exhibits which emphasize the history of the region
 - Identify contemporary sites for future preservation

State Grants Available to Help Fund the Preservation of Historic Resources

Guidelines pertaining to the PHMC's three primary grant programs are found in this section. The programs and eligibility criteria are described in detail. Prospective applicants may determine how the Commission's multiple funding opportunities can best meet their needs and the needs of their constituents and can best serve the people of Pennsylvania. Guidelines can be obtained for each grant type on the PHMC's website. The Bureau for Historic Preservation awarded competitive grants based on the recommendations of independent review panels, which evaluated hundreds of applications. Since 1995, the PHMC has awarded more than 2,300 grants – totaling more than \$45 million- in communities across the state. Grants are awarded to museums, historical societies, municipal governments, and local institutions to support their programs and operation, preserve historic properties and districts, and assist in a wide variety of projects designed to interpret and protect PA's cultural heritage.

The following are the PHMC's available grants to preserve historical resources:

- 1. **Certified Local Government Grant Program** Funding under this program is limited to federally designated Certified Local Governments. There is only one type of grant.
 - Competitive
 - Matching
 - Maximum Award \$25,000
 - Funding in the Categories of Cultural Resource Surveys, National Register Nominations, Technical and Planning Assistance, Educational and Interpretive Programs, Staffing and Training, and Pooling CLG Grants and Third Party Administration.
- 2. **Keystone Historic Preservation Grant Program** Funding under this program is available to nonprofit organizations and local governments for capital improvements on historic resources listed in or eligible for listing in the National Register of Historic Places. (Private property owners are not eligible for funding under this program and may wish to refer directly to PHMC Programs of Interest for information on investment tax credits and historic homesites program.) There is one type of grant.
 - Competitive
 - Matching
 - Maximum Award \$100,000
 - Funding in the Categories of Preservation, Restoration, and Rehabilitation.
- 3. **Pennsylvania History and Museum Grant Program** Funding under this program is designated to support a wide variety of museum, history, archives and historic preservation projects, as well as nonprofit organizations and local governments. There are 10 types of grants listed below with descriptions of each following:
 - Archives and Records Management Grants
 - General Operating Support Grants for Museums
 - General Operating Support Grants for Official County Historical Societies
 - Historic Preservation Grants
 - Historical Marker Grants
 - Local History Grants
 - Museum Project Grants
 - Statewide Conference Grants
 - Statewide Organization Grants
 - Technical Assistance Grants

- 4. **Archives and Records Management Grants** PHMC grants help communities share Pennsylvania's rich and diverse history.
 - Organizations and local governments can bring historical documents and records to life for their communities with grants for archival care and accessibility.
 - Organizations and local governments can contribute to a community's understanding of its heritage through oral and written histories, public programs of all types, historical research, and educational programs for students of all ages.
- 5. **General Operating Support for Museums Grants -** Museums are eligible to apply for grant funding to support their general operations.
 - Noncompetitive
 - Matching
 - Maximum Award \$10,000
 - No Special Categories
- 6. General Operating Support Grants for Official County Historical Societies Grants Official county historical societies receive general operating support grants as a way to recognize the outstanding work these societies do for their communities. These grants are:
 - Noncompetitive
 - Matching
 - Maximum Award \$10,000
 - No Special Categories
- 7. Achieves and Records Management Grants are:
 - Competitive
 - No Match Required to \$5,000
 - Matching to \$20,000
 - Maximum Award \$20,000
 - Funding in the Categories of Access and Preservation Programs, and County Records Improvement Programs
- 8. **Historic Preservation Grants** Applicants may apply for grants that cover every aspect of historic preservation, including:
 - restoration and rehabilitation of historic properties
 - cultural resource surveys
 - historic preservation studies and plans
 - educational and interpretive programs
 - nomination to the National Register of Historic Places

• archaeological research

Historic Preservation Grants are:

- Competitive
- No Match Required to \$5,000
- Matching to \$15,000
- Maximum Award \$15,000
- Funding in the Categories of Cultural Resource Surveys, National Register Nominations, Planning and Development Assistance, Educational and Interpretive Programs, and Archaeology

9. Historical Markers Grants are:

- Selective
- Matching
- Maximum Award \$650
- No Special Categories

10. Local History Grants are:

- Competitive
- No Match Required to \$5,000
- Matching to \$15,000
- Maximum Award \$15,000
- Funding in the Categories of Public Programs, Research and Writing, and Educational Programs

11. Museum Project Grants are:

- Competitive
- No Match Required to \$5,000
- Matching to \$15,000
- Maximum Award \$15,000
- Funding in the Categories of Institutional Development, Collections Management, and Educational and Interpretive Program
- 12. **Statewide Conferences Grants** Organizations planning to sponsor conferences with a statewide, regional or national audience may apply for "seed" money to assist with conference preparation.
 - Selective
 - No Match Required
 - Maximum Award Generally Does Not Exceed \$5,000
 - No Special Categories

13. Statewide Organizational Grants are:

- Selective
- No Match Required
- Maximum Award Generally Does Not Exceed \$100,000
- No Special Categories
- 14. **Technical Assistance Grants -** Offer options to a wide range of applicants for solving institutional problems, developing staff skills, and increasing overall professionalism. The grants bring experts in the field to the organizations' sites or provide staff training. These grants are:
 - Competitive
 - No Match Required
 - Maximum Award \$1,500
 - No Special Categories

Action Steps for Protection of Historic Resources:

- 1. Historic Resource Overlay District.
- 2. Demolition by Neglect Provisions.
- 3. **Identify, evaluate, mark and foster awareness of historic resources** These resources should be reviewed and one or more historic contexts developed as a precursor to conducting a *comprehensive survey of historic resources*. An historic context is defined as a broad pattern of historical development in a community that may be evidenced in the historic resources.
- 4. **Investigate the creation of Certified Local Historic Districts** requires appointment of an historic architectural review board to advise the local governing body on the appropriateness of the construction, reconstruction, alteration, restoration, demolition or razing of buildings in the district-contributing and non-contributing. Evaluate the potential for historic districts and support their creation if warranted. If created, support the adoption of Design Guidelines and Sign Controls for Historic District(s).
- 5. **Inform and involve the public** The Historical Society of Berks County and local historical associations can provide assistance in identifying historic resources and developing an educational outreach for broad-based community support.
- 6. **Historic Overlay Zoning** Individual sites and clusters documented and identified on a Historic Resource Map may be protected from inappropriate

development that would destroy the character of the historic neighborhoods. Zoning ordinances could require buildings similar in type and scale to those already existing. Requirements to replicate the existing building line, and height and bulk would also help to preserve existing neighborhood character.

- 7. Encourage retention, restoration, enhancement and appropriate adaptive re-use of historic resources and discourage removal of historic structures.
- 8. Conceive programs, events and interpretive signage and exhibits, which emphasize the history of the region.
- 9. Identify contemporary sites for future preservation.

This plan for the protection of natural and historic resources is not intended to be inconsistent with and exceed the requirements imposed under acts identified in Section 301.(a).(6) of the Pennsylvania Municipalities Planning Code, nor prohibit the conduct of forestry operations.

CHAPTER 10

ECONOMIC AND COMMUNITY DEVELOPMENT

The goal for economic development is to provide for additional light industrial, office and commercial development to enhance the region's tax base, provided such development occurs at designated appropriate locations, does not adversely affect the built and natural environment and the region's infrastructure, is compatible, attractive, and environment-friendly.

The objectives which have been established are:

- Provide land for and encourage additional environmentally responsible industrial and office development in the Route 422-Railroad corridor and along Route 662.
- Provide for managed, limited, attractive, additional commercial development in the Route 422 corridor.
- Encourage appropriate adaptive re-use of vacant and underutilized commercial and industrial properties.
- Encourage the retention and expansion of existing desirable businesses in the region.
- Encourage the continuation of agriculture as a component of the economy of the Townships.
- Work with the business community to identify ways of improving the region's business climate.
- Coordinate the location of businesses and transportation systems to limit traffic impacts on residential areas.
- Direct new business development to areas where it can be served by public sewer and water facilities.
- Encourage the enhancement of the aesthetics of the Route 422 corridor.
- Identify desired new businesses for the region.
- Assure commercial, office and industrial properties are properly maintained.

- Review the merits of tax abatement programs to attract businesses to the region.
- Retain, enhance and promote the historic and cultural heritage of the region as a means to promote tourism.
- Support agencies promoting economic development in the region.

Overall Strategy

Economic development is important to the Region. Enhanced tax revenue from business development can balance the residential share of the property tax base. Jobs can be created and maintained for local residents. The objective will be to not just provide any jobs, but family sustaining jobs in a variety of appropriate employment fields. But it is also critical that when economic development occurs, the natural environment must be protected and adequate infrastructure must be in place or put in place to accommodate the impacts of development. Businesses must be active participants in protecting the Region's resources and providing infrastructure improvements.

Commuting patterns in terms of minutes in commuting time for Exeter and St. Lawrence residents are closer to the pattern of the County as a whole and the State than the pattern for Amity Township. Likely because of the higher number of people residing in Amity and commuting to jobs in the greater Philadelphia region, longer commutes are more typical for Amity residents. Job creation within the Region could help reduce the length of commutes for some residents.

	<u>Travel Time in Minutes, 2000</u>						
	<u>Under 15</u>	<u>15-29</u>	<u>30-44</u>	<u>45-59</u>	<u>60-89</u>	90 or More	
Pennsylvania	30.4	36.1	18.4	7.6	4.9	2.6	
Berks County	33.1	40.6	15.5	5.2	3.8	1.8	
Amity Township	20.5	34.6	21.9	11.6	8.4	2.9	
Exeter Township	28.5	49.7	10.7	5.2	4.4	1.8	
St. Lawrence Borough	30.4	46.7	13.0	4.4	4.2	1.2	

Source: U.S. Census

Cooperative efforts of municipalities, the County and County economic development agencies, businesses, legislators, educational institutions, and state government must continue if appropriate jobs are to be created in the Region. The <u>Industrial Site Assessment, Berks County, PA</u> prepared for Berks County identified the Route 422 corridor as having potential for additional economic development. Organizations within

the County which play a role in economic development include Berks County Community and Economic Development, Berks County Chamber of Commerce, Kutztown University Small Business Development Center, Berks County Industrial Development Authority, Berks Economic Partnership, Reading and Berks County Visitors Bureau, and Greater Berks Development Fund.

Areas considered appropriate for economic development have been identified on the Future Land Use Plan. Generally, such development is directed to the Route 422 corridor, a portion of the Route 562 corridor in St. Lawrence, a portion of the Route 662 corridor near Douglassville and in villages.

Economic development should be done right. Alternatives should be provided to strip commercial development. This can occur through well-planned developments, such as business and industrial parks, and interconnected and integrated commercial areas.

A mix of economic development is encouraged through a variety in types of zoning districts. A range of retail, office, service, and light industrial uses is envisioned.

Standards should be imposed by municipalities to improve the design and appearance of new development and redevelopment. Given the age of some of the commercial development within the 422 corridor and reduction in the amount of available sites, redevelopment in the corridor is likely. Standards for such redevelopment should be put in place.

Appropriate attention should be paid to landscaping, lighting, building design, buffering, signage, setbacks, screening, and pedestrian amenities. Development should be designed and constructed to meet environmental performance standards, eliminate adverse impacts on adjacent land uses, and minimize highway access safety hazards.

Within the Region, small business incubation; "green" tourism; light industrial, research and development, high technology, office and service development to supplement existing and additional commercial development; and retention of existing and additional desirable businesses and industries would be appropriate.

Tourism will play a role in the economy of the Region, and the municipalities should continue to discuss the role that tourism should play in the Regional economy and the appropriate types of tourism to encourage in the Region. Protecting the natural, cultural, historic, architectural, and recreational resources and landscapes will enable tourism based on natural and cultural, recreation, educational and family activities. County and regional agencies can be worked with to support regionally-defined goals for tourism. The municipalities should work with the Schuylkill River Greenway Association in implementation of the Schuylkill Heritage Corridor management plan. The Schuylkill River trail, Route 422 driving route, reception area at the Daniel Boone Homestead, and

tour routes of agricultural areas in the corridor are elements of the Plan. The City of Reading is now planning to enhance its riverfront areas. Montgomery County wishes to build a Greenway Community along the Schuylkill River. It would be appropriate for this Region to likewise incorporate the Schuylkill River into the life of the Region.

Improvement and revitalization of existing developed areas will become more important to maintaining an economically vital Region. This includes such efforts as addressing transportation concerns in the Region and improving streetscapes. If the roads in the Region are too congested, some businesses may locate elsewhere. Route 422 improvements and access management are particularly crucial. If commercial areas are allowed to deteriorate in appearance, this will affect decisions to locate in the Region and the types of businesses which will locate. Streetscape programs along commercial areas of Route 422, 562, and 662 can enhance these corridors.

The Region does contain some vacant and underutilized commercial and industrial sites. Appropriate economic utilization of these properties is supported through cooperative efforts with economic development agencies, and programs of PADCED which offer financial incentives for re-use of old buildings and tax lien forgiveness to "recycle" buildings. It is possible to work with the Berks County Industrial Development Authority to secure funding for infrastructure improvements to support economic development.

It is important to address the needs of existing businesses in the Region. They should be consulted regarding their concerns and needs. The Chamber of Commerce and Berks County Career link can help local businesses, facilitate networking, and foster professional development. Suppliers of existing businesses and businesses related to existing businesses in the Region should be encouraged to locate in the Region.

St. Lawrence Borough does not have a true downtown or commercial core. Most commercial development has occurred along Route 422 near Route 562, along Route 562 (St. Lawrence Avenue) near Route 422 (particularly the Antietam Valley Shopping Center), Prospect Street, and Oley Turnpike Road. The remainder of St. Lawrence Avenue is mixed use or residential in character.

Along Prospect Street and Oley Turnpike Road there is underutilized land. The Borough should monitor opportunities in the long-term future to develop a commercial core/downtown along St. Lawrence Avenue, Prospect Street, and Oley Turnpike Road area as businesses age and or change.

Douglassville is the largest concentrated village in the Region, but opportunities for enhancing village character are limited because of substantial through-traffic along Route 422 and the busy Route 422 – Route 662 intersection. Over the long term, road improvements, the potential for the Schuylkill Valley Metro, and the aging and changing

of businesses could improve chances to build upon village character and the cluster of historic sites in the village. Opportunities for village enhancement should be monitored.

Given the rapid rate of suburbanization of Amity and Exeter Townships, it is sometimes difficult to maintain historic sites, community character, and a sense of place when development decisions are made shortsightedly for "economic" reasons. In the long run, a region can benefit economically from demanding attractive development and maintaining a sense of uniqueness.

A "Sense of Place" is critical in any economic and community planning effort. 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.

To maintain a sense of place, it is necessary to maintain human scale and provide places for people to live, work and play safely and securely. Particularly in the Borough and settled communities, this involves maintaining pedestrian scale, recognizing streets are for people not just for cars, providing adequate parking opportunities, providing for trees and attractive streetscapes, and encouraging humane architecture which is pleasing to and does not overwhelm people. Throughout the Region, it is necessary to provide safe neighborhoods; provide convenience to jobs and necessary services; provide opportunities for human interaction by providing for open space, recreation, public places, pedestrian ways and sitting areas, community facilities and special events; providing diversity and experience in sensory involvement; providing awareness of history; maintaining unique characteristics; and recognizing the boundaries of the community.

Encouraging development that enhances the visual character of the Route 422 Corridor makes economic sense, as it can help prevent decline of the area in the future. Design principles for commercial and industrial development are critical to the long-term economic health of the region. Such design principles would result in continuity in the design of development along the corridor and take into account such factors as signage, screening, landscaping, setbacks, architecture and streetscape improvements.

The Pennsylvania Economic Stimulus Package has been recently passed. Opportunities for the Region created with such programs as Business in Our Sites and Tax Increment Financing Guarantee Program should be reviewed. Programs in the Package include:

Business in our Sites Building PA New Pennsylvania Venture Guarantee Program New Pennsylvania Venture Capital Investment Program First Industries Fund Core Industries
Second Stage Loan Program
TIF Guarantee Program
Infrastructure and Facilities Improvement Program
Keystone Innovation Zones
Section 108 Loan Pool
Elm Street

The recent elements of the package are:

- <u>Business in Our Sites</u> 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.
- <u>Building PA</u> 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.
- <u>First Industries Fund</u>. 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.
- <u>Infrastructure & Facilities Improvement Program</u> 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 is the primary contact for most of these programs.

Obviously, there is a lot that can be done to promote economic development in the Region. One difficulty is coordinating such efforts. The municipalities typically do not have available manpower to devote solely to economic development. Municipal officials and staffs may get together to discuss specific projects. Just as there can be regional open space and recreation committees and a regional planning committee, consideration should be given to appointing a regional economic development committee. Such a committee could be charged with aiding the governing bodies in further defining economic development goals and objectives for the Region, fleshing out steps to achieve those goals and objectives, targeting the government programs to be used for implementation, and forging the partnerships necessary to participate in those programs.

Areas have been set aside for industrial and commercial development in the Future Land Use Plan. Opportunities for commercial development are found throughout the Route 422 corridor, and nearby portions of Routes 562 and 662. Industrial areas are found along Route 422 Business and Bypass, Lincoln Road, and Old Swede Road. A next step should be to see how the economic development programs available can be used in the areas set aside for economic development in the Region.

GENERAL APPROACH TO STRENGTHENING CENTERS AND CORRIDORS

The key elements of programs to strengthen centers, such as Main Street Programs, are outlined below. These elements could be used in enhancing commercial cores, such as in St. Lawrence and Douglassville, and in established corridors such as the Route 422 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.

• Securing consensus and cooperation among the groups that are involved in economic development

Parties which should be involved include Borough and Township officials, business people, bankers, real estate agents, customers, the media, residents and civic groups.

Promoting the Centers and Corridors

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
- -- Marketing and promoting businesses
- -- Conduct 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
- -- 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 region's history
- -- Managing parking spaces
- -- Managing growth within the entire Region
- -- 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

- -- Enhancing the pedestrian system and coordinating with open space and recreation and greenway planning
- -- Managing road corridors
- -- Protecting remaining natural resources
- -- Encouraging appropriate mixed use
- -- Incorporating open space, natural features and public spaces so they are visible and accessible, in order to humanize areas
- -- Addressing parking needs
- -- Recognizing the assets and defining characteristics of a center or corridor and enhancing and building upon those features. Examples are building stock, variety of available services, walkability, and traditional development patterns.

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

Economic Development Task → Economic Development Incentive	Lighting Improvements	Sidewalk/Curb Improvements	Cross Walk Unique Identifier	Establish New Traffic Patterns/Traffic Improvements	Additional Trash Receptacles	Tree Replacement/Planting Program	Color Selection Coordination	Size Selection Coordination	Style Selection Coordination	Bandwidth Improvements	Overhead to Underground Conversion/Placement	Directional Signage	Deferred or Excused Payment Requirement	Commercial Development Recruitment	Create and Advertise Community Venues	Promote Adaptive Reuse Opportunities
Main Street Revitalization	X	X	X	X	X	X	X		X		X	X		X	X	X
Additional Parking																
Improvements	X	X		X								X				
Recreation Program Expansion	X	X			X	X					X	X			X	
Public Safety	- 11	11			11	71					11	11			- 11	
Improvements	X	X	X	X	X						X					
Façade Coordination/Design/ Specification							X		X							
Signage Coordination							X	X	X							
Trash/Debris Increased					X											
Communication/Internet Enhancements										X	X			X		
Flat-pad Ready to Build Sites										X	X			X		
Tax Abatement Programs													X	X		X
Utility Incentives										X				X		X
Tourism Recognition													X		X	
Transportation Access				X												

As development occurs in the Region, consideration should be given to the following:

- respecting architectural traditions of the Region
- retaining the character and integrity of historic neighborhoods and buildings
- retaining a sense of place in neighborhoods and business areas
- enhancing gateways to the Region
- limiting building heights to what is deemed appropriate and consistent with existing buildings
- addressing parking needs in business areas
- attracting commercial uses which enhance the commercial character of the Region
- providing greenspace
- encouraging owner-occupation, controlling conversions, and addressing parking needs in residential areas
- making the centers more walkable and bikeable
- protecting the character of historic areas
- providing people-oriented spaces
- encouraging building facades in character with centers
- having appropriate signage control
- coordinating business hours and meeting demands of customers
- enhancing stream-side areas, providing parkland along creeks utilizing greenways and trails to draw people to the region
- Connecting to trails and bikeways throughout the Region and facilitating wayfinding

This Plan is concerned with preserving the quality of life and conserving and enhancing the special features of the Region, assuring that the municipalities will remain attractive communities in which to live and work. This will be accomplished by managing the pace, quality, and location of development, while preserving natural features, agricultural areas, residential neighborhoods, historic resources, open space, and greenway corridors. The intent of the Plan is to balance economic growth with providing open land, maintaining the quality of life, and managing traffic. The Townships and the Borough wish to retain and enhance their character and uniqueness in the face of impacts of growth in the Region, while providing for reasonable and appropriate economic development at locations designated in the Future Land Use Plan.

Economic vitality can be approached directly, such as providing land for commercial and industrial development, providing opportunities for adaptive reuse of older buildings, fostering municipal/business partnerships to support the business community, marketing opportunities within the area, strengthening the streetscape of the commercial areas, and strengthening entry images at entrances to the municipalities. This is not the entire solution, however.

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

CHAPTER 11

ACTION PLAN

The Action Plan is the program of actions to implement this Comprehensive Plan. The following outline presents recommended future actions.

Outline of Actions

- 1. Update municipal zoning ordinances and maps.
 - A. Update zoning maps to reflect the Future Land Use Plan.
 - B. Update zoning ordinances to reflect the Future Land Use Plan and Goals and Objectives of this Plan.
 - (1) Natural Resource Protection Standards and Net Out Provisions
 - (2) Steep Slope Protection
 - (3) Watershed and Wellhead Protection
 - (4) Groundwater and Surface Water Protection
 - (5) Tree and Woodland Protection, Management and Planting
 - (6) Wetland, Wetland Margin and Hydric Soil Protection
 - (7) Floodplain Protection
 - (8) River and Stream Corridor Overlay Zoning, Riparian Buffers
 - (9) Historic Resource Overlay Zoning
 - (10) Demolition by Neglect Provisions
 - (11) Town Center and Rural Village provisions regarding scale; uses; intensity; signage; aesthetics; pedestrian amenities; parking; landscaping; access management; and use, coverage, density, intensity, and yard bonuses for architectural treatments, building design, amenities, street furniture, open spaces, and parking designs consistent with Plan objectives.

- (12) Scenic Road and Scenic Viewshed Overlay Zoning
- (13) Limestone Area Overlay Zoning
- (14) Development Techniques to Protect the Natural and Built Environment
 - (a) Lot Averaging
 - (b) Conservation Zoning
 - (c) Traditional Neighborhood Development
- (15) Access Management Provisions
- (16) Road Corridor Overlay Zoning regarding access management, landscaping, signage, parking design, setbacks, aesthetics
- (17) Transit Design Standards and Transit Oriented Development
- (18) Trip Reduction and Parking Management Consideration
- (19) In agricultural areas, determine if will have agricultural preservation zoning. Consider provisions to allow farmers to supplement income, allow farm support uses, discourage non-farm uses which could cause conflicts with agricultural practices, require buffering around the perimeter of agricultural areas by non-agricultural uses. Establish appropriate controls on intensive agricultural operations.
- 2. Update Municipal Subdivision and Land Development Ordinances
 - A. Require trail, bikeway and greenway planning
 - B. Require Stormwater Management and Best Management Practices
 - C. Require Impact Studies, Analysis, and Mitigation (Traffic, hydrogeologic, environmental, scenic, historic, cultural)
 - D. Access Management standards
 - E. Resource identification and protection requirements

- F. Open Space and Recreation Requirements and Standards
- G. Street furniture requirements
- H. Right-of-Way Preservation
- I. Traffic Calming requirements
- J. Aquifer Protection provisions
- K. Vegetation Management provisions
- 3. Administrative Actions for Resource Protection and Enhancement
 - A. Maintain the scenic road system in the Townships through the other activities listed in this Section and Scenic Road and Scenic Viewshed overlay zoning
 - B. Plan for greenways and riparian buffers along the Monocacy, Antietam and other Creeks, and the Schuylkill River.
 - C. Establish tree planting programs
 - D. Active involvement of Environmental Advisory Committees
 - E. Active involvement of Historical Commissions
 - (1) Identify, evaluate, mark and foster awareness of historic resources
 - (2) Investigate participation in Certified Local Government Program
 - (3) Investigate creation of historic districts
 - (4) Inform and involve public
 - (5) Encourage retention, restoration, enhancement and appropriate adaptive re-use of historic resources and discourage removal of historic structures
 - (6) Conceive programs, events and interpretive signage and exhibits which emphasize the history of the region
 - (7) Identify contemporary sites for future preservation

- F. Support acquisition/protection of key natural areas through conservation easements, fee simple, donation, dedication, stream easements, stream corridor management, in cooperation with conservation groups and community groups.
- G. Encourage expansion of agricultural security areas and encourage purchase of agricultural conservation easements.
- H. Discourage public sewer and water for areas to remain agricultural, coordinate with Act 537 Planning
- I. Implement/Update Open Space and Recreation Plans and charge recreation fees for new development and subdivision
- J. Investigate wellhead protection and watershed planning opportunities under the growing greener initiative and other programs.
- K. Encourage Act 167 Stormwater Management Planning.
- L. Form watershed associations
- M. Complete water supply and quality studies
- 4. Actions to assure availability of and access to recreation facilities for the region's residents.
 - A. Implement the trail plan through a joint trail committee.
 - B. Facilitate access to the recreational trail system and access to community facilities by completing links within the Borough and Townships as shown on the Pedestrian Facilities Plan. Identify and enhance appropriate pedestrian and bicycle routes connecting the entire region.
 - C. Work with the School Districts to assure retention of existing facilities and their availability to the region's residents.
 - D. Support efforts to develop County parks on Neversink Mountain and at Antietam Lake.
 - E. Encourage further development of trail systems through the region with links to resources within the region and Neversink Mountain, Antietam

Lake, City of Reading open space and recreation land, and the Antietam Creek outside the region.

- 5. Actions for Economic and Community Development
 - A. Enhance Routes 422, 562 and 662 through streetscape improvements in coordination with PaDCED and PennDOT. Prepare Streetscape Plans.
 - B. Support appropriate, in-scale commercial development in the Town Center and Rural Village areas.
 - D. Coordinate with BARTA and trail and circulator planning to facilitate access to employment opportunities, the circulation system, and any Schuylkill Valley Metro Station.
 - E. Continue cooperation and dialog between the Townships and the Borough and community entities such as the fire companies, authorities, and school districts on provision and sharing of services, equipment, facilities and programs; comprehensive planning; recreation planning; implementation of this plan; and emergency services planning.
 - F. Bring together citizens, the business community, and the school districts to plan and organize community-wide activities, events, and programs to foster community spirit, economic development, and community attractiveness.
 - G. Monitor the need to increase availability and sharing of parking facilities; facilitate pedestrian and bicycle circulation; and facilitate transit access in commercial areas in the region through cooperation with area businesses, PennDOT, and BARTA.
 - H. Work with potential land developers to achieve appropriate scale, signage, aesthetics, pedestrian amenities, and intensity and types of commercial development when development occurs in the commercial areas of the region, and provide for the commercial needs of the community. Address design and performance standards, access management, permitted uses, and area and bulk regulations in Zoning Ordinances.
 - I. Adopt, maintain and enforce adequate building, housing and property maintenance codes and zoning ordinance provisions to maintain the building stock and properties within the region.

- J. Continue to allow residential uses in the Town Center and Rural Village areas to provide for a mixed-use environment.
- K. Enhance the gateways to the region and the sense of identity of the communities.
- L. Work with residents of the region to identify programs that are available to help them maintain and enhance their properties, and meet housing expenses and retain their homes as owner-occupied single family residences.
- M. Involve the region's residents and business community in committees to address major issues of concern within the region.
- N. Investigate programs to address and provide for the housing needs of the elderly in the community.
- O. Jointly monitor availability of grants for planning and implementation and pursue such grants.
- P. Identify and support activities to promote the region, retain existing businesses, attract and recruit desired new businesses, and enhance existing businesses. Bring the business community and residents together in efforts to do this. 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.
- Q. Promote and support efforts of community organizations to provide recreational facilities and programs for area residents and services and programs for the elderly and children.
- R. Monitor policies on extensions of public sewer and water facilities to assure they are consistent with the Future Land Use Plan.
- S. Continue to zone land available for commercial, office and industrial development.
- T. Establish zoning policies for home employment and home occupations.
- U. Encourage appropriate adaptive re-use of historic and vacant buildings.

- V. Maintain and enhance the quality of life and business climate in the region through other listed actions for resource preservation, transportation enhancements, recreation and open space, and community development.
- W. Maintain web sites which will contain information on zoning, the community, and available buildings and land.
- 6. Actions for Transportation Enhancement
 - A. Work with PennDOT and Berks County in support of a bypass to the current Route 422.
 - B. Work with PennDOT and land developers to improve the safety and functioning of existing Route 422.
 - C. Utilize Transportation Impact Fee ordinances and require land developers to address needed transportation improvements in the region.
 - D. Institute traffic calming techniques along St. Lawrence Avenue and in Baumstown and Douglassville.
 - E. Prepare Sidewalk Improvement Program and Policies which will improve pedestrian access to the region through extension of the sidewalk system; enhance pedestrian circulation through amenities such as benches; complete gaps in the sidewalk system; extend the sidewalk system, provide for maintenance and improvement of existing sidewalks, and facilitate pedestrian crossings at street intersections.
 - F. Cooperate with BARTA 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 where appropriate.
 - G. Prepare multi-year programs for street maintenance.
 - H. Work with PennDOT to keep traffic signal timing current and implement a closed loop signalization system along Route 422.
 - I. Develop an access management plan in cooperation with PennDOT to address access to major roads and access design standards. Encourage cooperative efforts of landowners to manage and share access.
 - J. Require developer-financed street improvements.

- K. Continue to encourage the linking of developments.
- L. Work with PennDOT to widen and improve road shoulders and require developers to improve shoulders along their properties.
- M. Monitor the need for a Transportation Development District along Route 422.
- 7. Prepare Capital Improvements Programs.
- 8. Consider adoption/expansion of Official Maps.
- 9. Each year formulate a Work Program to implement this Comprehensive Plan.

PRIORITY ACTIONS

Upon adoption of this Comprehensive Plan, the highest priority is to execute an Intergovernmental Cooperative Agreement to implement the Plan. A Regional Planning Committee is established by that agreement.

The municipalities have two years from the adoption of the Plan to make sure that their zoning ordinances, subdivision and land development ordinances, Act 537 plans, capital improvement plans, and official maps are generally consistent with this Comprehensive Plan. The municipalities may act individually, or they could cooperate to draft consistent zoning and subdivision and land development ordinance language. Achieving this general consistency with the plan is the next priority after executing the Agreement.

Other actions to consider in the first two years after Plan adoption are the appointment of municipal historical commissions and municipal environmental advisory councils (EAC's), where they do not exist. These groups can help achieve implementation of the Action Plan.

CAPITAL IMPROVEMENTS PLANNING AND OFFICIAL MAP

Two major potential tools in implementing this Plan are capital improvements planning and adoption of an official map, as detailed below. The discussion of the official map is based upon the Pennsylvania Municipalities Planning Code.

Capital Improvements Planning

Capital improvements planning includes financial analysis of past trends in the community, present conditions, and a projection of the community's revenues and expenditures, debt limit and tax rates, to determine what the financial capabilities of the municipality are. It also includes a capital improvements program which establishes a system of priorities. The final element is a capital budget which lists the schedule of improvements over a 5-year period based on the community's financial capacity and availability of grant money.

In the capital improvements program, capital expenditures are separated from operational expenditures. Operational expenditures are those for administration, salaries, maintenance and similar functions, and are short term. Capital expenditures are for assets which have a substantial value compared to the total municipal budget and are expected to provide service for a number of years. The purchase of land or the construction of a building is an example of a capital expenditure.

The capital improvements program schedules the purchase of capital items in a systematic manner rather than allocating a large amount of money for all expenditures in

one year. Based on the assessment of future needs, future expenditures are planned so that the municipality can anticipate these major expenditures prior to the budget year. The program is based on identified capital needs, goals for capital acquisitions, and a priority list of all proposed capital expenditures.

A time frame is established for the capital improvements program. Five-year programs are typical. Every year the schedule for capital improvements must be revised and updated as necessary, based on the current municipal priorities. For each project included in the program, estimated costs must be established and a budget prepared.

Benefits of capital improvements programs include:

- It helps assure that projects will be based upon the ability to pay and upon a schedule of priorities determined in advance.
- It helps assure that capital improvements are viewed comprehensively and in the best public interest of the municipality as a whole.
- It promotes financial stability by scheduling projects at the proper intervals.
- It avoids sharp changes in the tax structure by the proper scheduling of projects.
- It facilitates the best allocation of community resources.

Official Maps

The governing body of each municipality has the power to make an official map of all or a portion of the municipality which may show elements of the Comprehensive Plan with regard to public lands and facilities, and which may include, but need not be limited to, the following elements:

- 1. Existing and proposed public streets, watercourses and public grounds, including widenings, narrowings, extensions, diminutions, openings or closings.
- 2. Existing and proposed public parks, playgrounds, and open space reservations.
- 3. Pedestrian ways and easements.
- 4. Railroad and transit rights-of-way and easements.
- 5. Flood control basins, floodways and floodplains, stormwater management areas and drainage easements.

6. Support facilities, easements and other properties held by public bodies undertaking the elements described in the Comprehensive Plan.

Each municipality should prepare an official map, but regional cooperation should occur on mapping of projects such as roadways, parks, and trails which will be located in more than one municipality.

The governing body may make surveys and maps to identify the location of property, trafficway alignment or utility easement by use of property records, aerial photography, photogrammetric mapping or other method sufficient for identification, description and publication of the map components. For acquisition of lands and easements, boundary descriptions by metes and bounds must be made and sealed by a licensed surveyor.

The adoption of any street lines or other public lands as part of the official map does not constitute the opening or establishment of any street nor the taking or acceptance of any land, nor does it obligate the municipality to improve or maintain any such street or land. The adoption of proposed watercourses or public grounds as part of the official map does not constitute a taking or acceptance of any land by the municipality.

For the purpose of maintaining the integrity of the official map of the municipality, no permit shall be issued for any building within the lines of any street, watercourse, or public ground shown or laid out on the official map. No person shall recover any damages for the taking for public use of any building or improvements constructed within the lines of any street, watercourse, or public ground after the same shall have been included in the official map; and, any such building or improvements shall be removed at the expense of the owner. However, when the property of which the reserved location forms a part, cannot yield a reasonable return to the owner unless a permit shall be granted, the owner may apply to the governing body for the grant of a special encroachment permit to build.

The governing body may fix the time for which streets, watercourses and public grounds on the official map shall be deemed reserved for future taking or acquisition for public use. However, the reservation for public grounds shall lapse and become void one year after an owner of such property has submitted a written notice to the governing body announcing his intentions to build, subdivide or otherwise develop the land covered by the reservation, or has made formal application for an official permit to build a structure for private use, unless the governing body shall have acquired the property or begun condemnation proceedings to acquire such property before the end of the year.

GOVERNMENTAL PROGRAMS FOR COMMUNITY AND ECONOMIC DEVELOPMENT

GOVERNMENTAL PROGRAMS

The following is a list of some of the County, state and federal programs for community and economic development. Programs can be modified or eliminated over time, so it is necessary to contact the responsible agency for availability and eligibility information.

BERKS COUNTY

- Joint Comprehensive Planning Program
- Joint Zoning Ordinance Program
- Agricultural Zoning Incentive Program
- Berks County Open Space and Recreation Grant Program

PENNSYLVANIA DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT (DCED)

- **Communities of Opportunity** This program is for state-funded grants for community revitalization and economic development and the development or rehabilitation of low-income housing.
- Infrastructure Development Program This program provides grants and low interest financing for the construction of public and private infrastructure needed for business to locate or expand to a specific site. It also provides financing for infrastructure costs to redevelop former industrial sites, including site clearance costs.
- Industrial Sites Reuse Program (Brownfields) This program provides grant and low interest loan financing for environmental site assessment and remediation work at former industrial sites.
- Community Revitalization Program This program is intended to fund infrastructure improvements, community revitalization, building rehabilitation, and demolition of blighted structures, in order to increase community tax base and promote community stability.
- **New Communities/Main Street Program** This program is intended to help a community's downtown economic development effort.
- **Elm Street Program** This program is intended to help revitalize residential neighborhoods near Main Street areas.

- **HOME Program** This program provides loan and technical assistance to municipalities for expanding the housing supply for low income persons.
- **Small Business Development Centers** Work with small firms to help them compete and grow.
- **Small Business First Program** This program provides low interest loans for projects such as site acquisition, building construction, machinery, and working capital for small businesses of less than 100 employees.
- Local Government Capital Projects Loan Program This program provides low interest loans for equipment and municipal facilities.
- Land Use Planning and Technical Assistance Program (LUPTAP) This program provides grant funds for the preparation of community comprehensive plans and the ordinances to implement them.
- **Regional Police Assistance Grant Program** This program provides grants for the start-up of consolidated police departments.
- Shared Municipal Services Program Code Enforcement Initiative Grants This program assists local governments in the initial administrative expenses of a shared or multi-municipal codes enforcement program.
- **Shared Municipal Services Program** This program provides matching grants for cooperative municipal efforts to increase the efficiency of public services.
- Local Economic Revitalization Tax Assistance Act (LERTA) Local municipalities, school districts, and counties can offer tax abatements on improvements to property for up to 10 years.
- **Pennsylvania Industrial Development Authority (PIDA)** Low-interest loan financing through industrial development corporations for land and building acquisition, construction and renovation resulting in the retention or the creation of jobs. Loans up to \$1.25 million (\$1.75 million for areas within Keystone Opportunity Zones, Act 47 Communities, Brownfield Sites, and Enterprise Zones).

- **Floodplain Land Use Assistance Program** Provides grants and technical assistance to encourage the proper use of floodplains. Local governments may apply for up to 50% of eligible costs.
- Weatherization Assistance Program Works to minimize the adverse effects of high energy costs on low-income, elderly, and handicapped citizens. Local governments and non-profit organizations are eligible.
- Enterprise Zone Grant Program Provides grants to financially disadvantaged communities for business development strategies within Municipal Enterprise Zones. Municipal and redevelopment authorities are eligible.
- Community Development Block Grants (CDBG) Provides grant and technical assistance to aid municipalities in community and economic development efforts.
- **Emergency Shelter Grants** Provides grants to local governments and non-profit organizations to create or rehabilitate shelter space for the homeless.
- Act 47 Municipalities Financial Recovery Act Provides loans and grant funds to financially distressed local governments and technical assistance to formulate financial recovery Plans

PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY

- Pennsylvania Conservation Corps (PCC) Project Grant Program Grants for projects related to recreation, conservation, and historic preservation. Municipalities and school districts must provide a 25% match.
- PENNSYLVANIA COMMISSION ON CRIME AND DELINQUENCY (PCCD)
 - Local Law Enforcement Block Grant Program Provides local governments with funds to hire and train additional law enforcement personnel; establish special task forces; and establish crime prevention programs.
- PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES The Community Conservation Partnerships Program (C2P2) includes the following elements:

- Community Recreation Grant Program This program provides grants for comprehensive recreation and park planning, greenways and master site development planning. Acquisition and Development Grants can be used for the rehabilitation and development of parks and recreation facilities and acquisition of land for park and conservation purposes.
- Rivers Conservation Grant Program This program provides grants for river conservation plans and non-acquisition, non-development implementation projects. Acquisition and Development Grants can be used for land acquisition and the development of river conservation projects.
- **Heritage Parks Grant Program** This program promotes public/private partnerships to preserve and enhance natural, cultural, historical and recreational resources to stimulate economic development through heritage tourism. Grants are awarded for purposes such as feasibility studies, development of management action plans, specialized studies, and implementation projects and management grants.
- Recreational Trail Program This program provides matching funding for the acquisition, development and maintenance of motorized and nonmotorized trails.
- **Rails to Trails, PA Program** This program provides matching grants for feasibility studies, plans, acquisition and improvement of former railroad lines for recreational trails.

■ PA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)

- **Stream Improvement Program** This program provides design and construction projects to eliminate imminent threats due to flooding and stream bank erosion.
- **Stormwater Management Program** This program provides grants for cooperative watershed level planning and municipal implementation programs.
- **Non-Point Source Pollution Control Program** This program provides funding for projects that implement innovative practices to control non-point source pollution for impaired waters.

- Pennsylvania Source Water Assessment and Protection Program (SWAP) This program provides grants for wellhead protection and watershed protection,
- Environmental Stewardship and Watershed Protection Grant Program
 This program makes funds available to protect and restore watersheds.
- **Pennsylvania Green Project Bank** This program is an interactive online marketplace where organizations seeking funding for environmental projects can be matched with organizations seeking to fund such projects.
- **Alternative Fuels Incentive Grant** Grants for municipalities for costs associated with implementing alternative fuel program.
- **New or Innovative Technology Grants** Funds to improve existing drinking water and sewage treatment facilities through new or innovative technology.
- Sewage Management Grants (Act 537) reimbursements for municipalities completing sewage facilities planning and enforcement.
- **Recycling** (Act 101) Municipalities are eligible for 90 percent reimbursement toward establishing a recycling program.
- Act 108 (HSCA) Host Municipality Siting Payments to municipalities serving as hosts for hazardous waste facilities.
- Act 198 Resource Recovery Development Fund Grants for municipalities and authorities to establish new and innovative resource recovery demonstration projects.
- Waste Tire Remediation and Market Development Grants Reimbursement for cleanup and / or reuse of waste tires.
- Formation of Water Authorities Grant Program Available to two or more municipalities or counties interested in forming a joint water authority.
- Small Water Systems Regionalization Grant Program Reimbursement for feasibility studies by small water systems to study regionalization.

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

- **Keystone Historic Preservation Grants** This program provides matching grants to local government and nonprofit organizations that are rehabilitating or restoring historic properties on or eligible for the National Register.
- **Certified Local Government Grants** This program provides matching grants and technical assistance to protect historic resources.
- **Historical Marker Program** Nominations for historical markers are reviewed. When approved, staff works with nominator to prepare text and arrange ceremonies. Limited matching grants are available for markers.

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES

- **Software Licensing Program** Program for local governments to save money on software purchases.
- Cooperative Purchasing Program (Act 57 of 1998) Permits local governments to jointly participate in contracts for supplies, services, or construction.

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

• Transportation Enhancements Program (TEA 21)

The program provides funding for programs such as provision of facilities for pedestrians and bicycles; acquisition of scenic easements or historic sites; landscaping or other scenic beautification; historic preservation; rehabilitation and operation of historic transportation buildings, structures or facilities.

- **Transit Assistance Programs** A variety of programs provide assistance for Public Transportation
- **Home Town Streets** This program includes a variety of streetscape improvements that are vital to reestablishing downtown and commercial centers. These projects include activities undertaken within a defined "downtown" area that collectively enhance that environment and promote positive interactions with people in the area. Projects may include sidewalk improvements, planters, benches, street lighting, pedestrian crossings,

transit bus shelters, traffic calming, bicycle amenities, kiosks, signage and other visual elements.

- Safe Routes to School This program is designed to work with both school districts and pedestrian and bicycle safety advocates to make physical improvements that promote safe walking and biking passages to schools. Collectively, these efforts would save on school busing costs and promote a healthy lifestyle for children. In addition, some funding may be used for pedestrian education efforts. Examples of these types of improvements include: sidewalks, crosswalks, bike lanes or trails, traffic diversion improvements, curb extensions, traffic circles and raised median islands.
- PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY PENNVEST provides financing for drinking water, stormwater, and wastewater projects.
- PENNSYLVANIA LEGISLATIVE INITIATIVE PROGRAM This program
 provides discretion to State legislators to award limited amounts of State funds for
 projects in their home district.

CHAPTER 12

EXISTING LAND USE

INTRODUCTION

Existing land use patterns have a significant impact on the future land use plan, but also affect circulation within the region and the demand for community facilities and services.

The base Existing Land Use Map for the area was supplied by the Berks County Planning Commission. The existing land use mapping for the Borough and the Townships was updated by the consultant through windshield survey performed in 2001.

The categories shown on the Existing Land Use Map include Residential Single-Family, Residential 2 to 4 Family, Residential Multi-Family, Mobile Home, Residential/Commercial Mixed Use, Commercial, Industrial, Institutional, Public, Farm, and Open.

The Existing Land Use Map can be used in conjunction with the Agricultural Security Areas, Conservation Easements, and Clean and Green Lands Map, which indicates farmed land. Wooded areas are delineated on the Natural Resources Map.

Overall Land Use Pattern

Even though the St. Lawrence, Exeter and Amity area has experienced significant population growth and development, much of the area still remains rural, including substantial portions of both Townships. St. Lawrence Borough is primarily developed, mostly for residential purposes, though there are a few commercial, mixed use, public and industrial areas, and a few undeveloped parcels which could be developed in the future.

LAND USE CATEGORIES

Residential Single-Family

Most of the residential parcels within the area are Residential Single-Family. These uses are found throughout the Borough of St. Lawrence. In the Townships, single-family homes are found north and south of Route 422 and in subdivisions along Butter Lane, Dautrich Road, Wegman Road, Oley Turnpike Road, Church Lane, Rugby Road, Walnut Road, Boyertown Pike, Schoffers Road, Fairview Chapel Road, Shelbourne Road, Stonetown Road, Daniel Boone Road, Pineland Road, Painted Sky Road, Lorane Road, Lincoln Road and South Baumstown Road in Exeter Township. In Amity Township,

single-family homes are located in Douglasville and in the subdivisions along Old Swede Road, Monocacy Hill Road, Monocacy Creek Road, Pine Lane, Pine Forge Road, Levengood Road, Valley Road, Geiger Road, Blacksmith Road, Route 562, Weavertown Road, Limekiln Road, Old Airport Road and Worman Road. There are also scattered farm houses and non-farm dwellings in the Townships.

Residential 2 to 4 Family

Residential 2 to 4 Family is mixed with residential single family uses and are not concentrated in one area. They are found primarily in St. Lawrence Borough. In Exeter Township, these uses are found primarily in the Village of Baumstown. In Amity, these uses are found in Douglasville. In the villages they are primarily located along Route 422.

Residential Multi-Family

Residential Multi-Family is found in the Borough of St. Lawrence in a garden apartment development. Multi-Family developments are found in the Townships along East Neversink Road, Gibraltar Road, Lorane Road and Wingspread Drive in Exeter Township and along Lake Drive and Route 662 in Amity Township. Conversions to apartments have occurred in the Borough and villages in the region, particularly in larger older homes. Mountain Park along Butter Lane is a townhouse development, but is classified as single family homes because of the fee simple units. A senior housing project is being constructed along Route 422 in Douglassville next to St. Gabriel's Church.

Residential Mobile Home

Residential Mobile Home uses are scattered through the Townships. These uses are usually considered single-family homes, but when placed in parks require services associated with higher density development. Mobile home parks are found near Butter Lane and Lincoln Road in Exeter Township and along Route 422 and Limekiln Road in Amity Township.

Commercial

Much of the non-recreational commercial development in the area is located along Route 422, Business Route 422, St. Lawrence Avenue, and Route 662. Commercial uses are also widely scattered in the region. Large commercial parcels include the cemetery off West Neversink Road, landfill near Baumstown, land adjacent to a mobile home park off Limekiln Road, and golf courses and gun clubs identified in Chapter 25.

Industrial

Limited industrial development has occurred within the Borough of St. Lawrence. The primary industry is Fleetwood Industries along St. Lawrence Avenue. In Exeter Township, industrial development has primarily occurred along Painted Sky Road, Lincoln Road and between the Schuylkill River and the railroad. In Amity Township, industrial development has occurred in the industrial park east of the Village of Baumstown, along Route 422, along Old Swede Road north of Douglasville, and along Pine Forge Road.

Farm

The Farm areas include lands that are cultivated, pasture and wooded. Farmed areas are specifically shown on the Agricultural Security Areas, Conservation Easements, and Clean and Green Lands Map in Chapter 14. Wooded areas are shown on the Natural Resources Map in Chapter 15. These areas encompass a large portion of the central portion of the region.

Public

Public uses are found throughout the region. They include public lands, such as the Daniel Boone Homestead and Monocacy Hill. This category also includes municipal buildings and uses, community parks, post offices and fire companies, the St. Lawrence watershed lands and public schools. These uses are scattered throughout the municipalities. Public and Institutional land uses are detailed on the Community Facilities Map in Chapter 25.

Institutional

Religious uses predominate in this category. Religious uses include St Catherine's Roman Catholic Church on Route 562, Schwarzwald Lutheran Church on Oley Turnpike Road, Schwarzwald United Church of Christ on Church Road, Reformation Lutheran Church on Business Route 422, Grace Baptist Church on Route 562, Exeter Friends Meeting House on Meeting House Road, Lorane Chapel on Lorane Road, Love Faith Chapel Christian Assembly on Budd Street, Exeter Bible Church on Philadelphia Avenue, Daniel Boone Bible Baptist Church on Route 422, First Baptist Church on Lincoln Road in Exeter Township. In Amity Township, St. Paul's United Church of Christ on Weaverstown Road, St. Paul's Lutheran Church on Old Swede Road and St. Gabriel's Episcopal Church and Chapel on Route 422 are included. Semi-public recreational uses are also included in this category.

Open

Open parcels are scattered throughout the region. There is no one area with a concentration of open lands. In some cases, these parcels are land included within subdivisions which had not yet been developed.

Trends

Several trends in land use are noticeable. The first is the continued development of residential housing within the Townships in the Region. Development has occurred in new subdivisions in rural areas utilizing on-site water supply and sewage disposal as well as in areas served by public sewer and water facilities near the Region's existing settlements.

Another trend is the continued development of commercial uses along the Route 422 corridor in the Townships. This development adds to the tax base, employment and convenience in the Townships; however, the impact of this commercial development can also be increased congestion in commercial corridors if access is not well managed.

Agriculture continues to remain a land use, particularly in Exeter Township, even with the amount of residential development which has occurred. Effective agricultural zoning in Exeter Township is intended to retain agriculture as a significant land use.

Recreational uses, detailed on the Community Facilities Map, are important in the Region, and will remain so given the continued development. The region contains municipal parks, sportsman clubs, golf courses, and a major recreational facility in the Daniel Boone Homestead.

Acreages in Each Existing Land Use Category

The following table presents the acres in each land use category and percentage of total land in the Region in that category.

Existing Land Use Categories	Acres	Percentage
Commercial	2179	8.3
Farm (includes Farmland & Woodland)	11135	42.4
Industrial	668	2.5
Institutional	279	1.1
Mobile Home	227	0.9
Public	2299	8.8
Residential 2 to 4 Family	52	0.2
Residential Multi Family	238	0.9
Residential Single Family	7692	29.3
Residential/Commercial Mixed Use	3	.01
Open	1474	5.6
Total (Not including roads & water)	26246	

Existing Generalized Zoning

The existing generalized zoning map presents a broad-brush picture of existing zoning in the Region, as maintained by the Berks County Planning Commission.

Proposed Development

The Proposed Development Map was prepared in 2001 to get a perspective of future planned development in the region. About 2850 dwelling units were "in the pipeline," likely resulting in approximately 8600 new residents. While a number of these units have been constructed, a number have not, and new residential developments continue to be proposed in the region. Population growth in the region from 2000 to 2003 was estimated as 3772. Substantial capacity for future residential development is contained in uncompleted and proposed subdivisions.

CHAPTER 13

PUBLIC SANITARY SEWER AND WATER FACILITIES

INTRODUCTION

Public sanitary sewer and water facilities are discussed in a separate chapter from community facilities because of the significant role sanitary sewer and water facilities play in the shaping of development patterns, including location and the density. One of the major efforts of any comprehensive plan is to coordinate land use and utility planning so that future land use patterns reflect the availability of public sewer and water facilities, while assuring that sewer and water planning in the area are not be at odds with the goals for future land use reflected in the Future Land Use Plan. For instance, if areas are proposed for agriculture, it is not desirable to extend the public sewer and water service to those areas.

Public Sanitary Sewer Facilities

A small portion of the Borough of St. Lawrence is served by the Antietam Valley Municipal Authority, with a sewage treatment plant located in the Borough. The Authority also serves Mt. Penn Borough and a small portion of Exeter Township. The majority of Exeter Township is served by the Exeter Township Authority. The Authority's wastewater treatment plant, located in the southern portion of the Township, was expanded in the 1990's to accommodate residential growth and anticipated commercial and industrial customers through the year 2010. Most of the Borough is served by the St. Lawrence Borough Authority collection system and the Exeter treatment plant.

Amity Township is served by the Amity Township Municipal Authority. The system was designed to serve the Douglasville area, the Route 422 corridor and along Route 662. The treatment plant is located at Douglassville.

Amity Township has updated its Act 537 Sewage Facilities Plan to expand the sewer service area throughout the southeastern portion of the Township, along the Route 422 corridor, and in portions of the north central portion of the Township. In addition, sewer lines could be extended to southwest portions of the Township to serve existing units with malfunctioning sewage disposal systems and cluster development in Rural Conservation areas with a low net density (two acres per unit). The Plan called for an expansion of the sewage treatment plant, increasing the treatment capacity by 37% to allow for serving more than 2,600 additional sewer units (EDU's).

Sewer service areas and areas with severe limitations to on-site sewage disposal are shown on the enclosed map.

Soil Suitability for On-Site Sewage Disposal

The availability of public sanitary sewer facilities is important, and the use of such facilities should be encouraged when consistent with the Future Land Use Plan, because of the general unsuitability of soils in the St. Lawrence, Exeter and Amity area for on-site sewage disposal. These soils are considered unsuitable for on-site sewage disposal based on the United States Department of Agriculture Natural Resources Conservation Service rating of limitations for septic tank absorption fields. It should be noted that limestone soils are considered as having a hazard for on-site sewage disposal because of the potential of ground water contamination.

Public Water Supply

The Mt. Penn Borough Municipal Authority serves the Borough of St. Lawrence as well as Mt. Penn Borough, Lower Alsace Township, and a small portion of Exeter Township. Community wells are located between Hill Road and Spook Lane and between Friedensburg Road and Butter Lane in Lower Alsace Township. The Mt. Penn Borough Municipal Authority also maintains water storage facilities. These facilities are located adjacent and in close proximity to the Authority's wells between Hill Road and Spook Lane.

Most of Exeter Township and Amity Township are served by Pennsylvania-American Water Company.

Sewer Capacities

There is capacity available from the Antietam Valley Municipal Authority and the Exeter Township Municipal Authority to serve infill development in the Borough and additional development in Exeter Township. Eventually, Exeter will have to determine the need for additional sewage capacity through updated Act 537 planning. As noted above, Amity Township is expanding its existing sewer treatment plant to serve future development in the Township. Studies have been proposed to identify ultimate capacity at the treatment plant and compare this to ultimate need in the Township.

Water Capacities

Pennsylvania-American intends to satisfy domestic demand from within its service area. The Mt. Penn Borough Municipal Authority has also taken the position it will serve additional areas within its service area requesting service. Pennsylvania American has studied groundwater availability in Amity Township (see Appendix 6), and is

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CHAPTER 14

AGRICULTURAL RESOURCES

Introduction

Agricultural resources within the study area of St. Lawrence Borough and Exeter and Amity Townships are shown on the Agricultural Security Areas, Conservation Easements, Clean and Green Lands Map.

Agricultural Resources in The Region

Prime Agricultural Soils

On the Agricultural Security Areas, Conservation Easements, Clean and Green Lands Map, areas containing prime agricultural soils, shown in the dotted pattern, 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 in the Townships are subject to development.

Agricultural Security Areas

Properties within the Region which are included within the Agricultural Security Areas are shown as yellow 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 are 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 Act 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 easement to be perpetual. Hazardous waste sites may not be located in any municipality that has an established Agricultural Security Area.

Conservation Easements

Agricultural Easements are displayed on this map in blue stripes (hatching pattern). 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. Both Townships have land that cannot be developed because the development rights have been sold through this program.

Clean and Green Lands

Clean and Green Lands are shown in green hatching. The Clean and Green program provides a tax break to farmers who enroll in this program by taxing land at its current use value rather than market value. Once a farmer enrolls, there is a certain amount of acceptable (per program regulations) land development or subdivision activity that can occur on the property. The program does allow minor subdivisions over a period of time, however; if any activity over the program's allowable acreage is disturbed, back taxes have to be paid for all the years enrolled in the program. This may encourage farmers to keep farming on their land(s) by providing a tax incentive to continue to do so, but does not prevent developers to come in and offer to buy up irreplaceable prime farmland for residential, commercial and/or industrial land developments/subdivisions. This is a voluntary program, and 10 acres is the minimum amount of contiguous acres allowed to receive the benefits of this program.

Farmed Areas

The northern and central portions of the region contain areas that are still actively farmed.

Questionnaire Responses

Thirty-four (34) out of 37 responses to the St. Lawrence, Exeter and Amity Region Planning Questionnaire strongly agreed that farmland should stay in agricultural use within the Townships. Two (2) disagreed and one (1) had no opinion. When the questionnaire asked why respondents felt agricultural land should be preserved for farming, ten (10) responded that it provides open space, seven (7) responded that it is part of the region's history and should be preserved for future generations, two (2) stated it supports the rural character in the area. Written-in responses were as follows: So we don't have to import food; need agricultural land for conservation purposes; when a farm is developed it's gone, Townships should limit development where not practical on agricultural land; and preserve agricultural industry as an important part of the economy.

Goal and Objectives for Farmland Preservation for the Region

A goal of this plan is to preserve farmland for future generations as generations in the Region have done for over two hundred years. Programs should be encouraged and continued so that preservation of farming, and not just the preservation of farmland, occurs in order to also preserve the quality of life and rural character deemed so valuable by residents in this area. Continuation of farming can help to slow upward pressure on taxes. Programs should preserve the best farmland and support efforts of farmers to see that these lands can be gainfully farmed and maintained. Agricultural lands can continue to be productive and benefit the area as a component of its economy and culture.

In the statement of Goals and Objectives in this Plan, the goal for the St. Lawrence, Exeter and Amity Region concerning agricultural resources is to preserve and encourage continuation of agricultural uses in the Region.

The objectives to reach this goal determined through the joint comprehensive planning effort are as follows:

- Promote the preservation of agricultural areas within the Townships through conservation development, agricultural security areas, purchase and donation of development rights, tax provisions and conservation easements.
- Continue and consider opportunities for expansion of effective agricultural zoning in the Townships.
- Assure policies regarding public sewer and water do not encourage development pressure on designated agricultural areas.
- Minimize impacts on agricultural uses around the perimeter of agricultural areas.

Importance of Agricultural Resources in the Area

Most Townships face increasing tax burdens, particularly school taxes. Land use policies within Townships can affect the taxes of Township residents because these policies influence land use patterns, the number of people moving into the Township, the number of school children, and thus, school taxes.

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 Township. Farmland and open land provide 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. Townships in the Region have 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 Berks County. 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 rural character and the beauty of the landscape.

Agricultural Zoning in the Municipalities

Successful effective Agricultural Zoning is now in place in Exeter Township in the north-central portion of the Township. The Agricultural zone constitutes a sizable zone in Exeter Township. 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 other municipalities in Berks County, including adjoining land in Oley Township. Amity Township does not have effective agricultural zoning.

One of the issues facing Amity Township is whether some of the land in the Township should be designated Agricultural Preservation in order to provide for coordinated land use along municipal boundaries, support the agricultural preservation activities in other Townships, encourage the viability of agriculture and support farm related businesses. This does not mean that Amity Township would have to institute effective agricultural preservation zoning. It could support agriculture through a number of administrative means. At some time in the future the Township could decide if it is appropriate to enact effective agricultural zoning when and where there is support for it.

Agricultural preservation activities 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. They can also assure a supply of agricultural land for 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

As noted above, 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 ensure participation in County's Purchase of Agricultural Conservation Easements Program
- Establish Township Purchase of Agricultural Conservation Easements Program.
- Establish Transfer of Development Program within a municipality or across municipal boundaries (development rights of properties in agricultural areas could be transferred to properties in those areas designated as residential growth areas).
- 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 nonfarm development to parcels least suited to farming.

- Allow conservation development (Growing Greener) as an option (typically 50 to 80% of the tract remains in open space and development occurs on the remaining land, allowing for the protection of some farmland)
- 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, and give disincentives to inefficient development techniques
- Support establishment and continuation of farm-related programs and organizations
- Discourage construction of roads through and within 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 on 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
- Contracting Organic Farm
- 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 Goats
- Hydroponics
- Ornamental Crops

NATURAL FEATURES

INTRODUCTION

Two maps showing natural resources have been prepared for this Plan. The first is a composite map showing natural resources including streams, wetlands, hydric soils (which are potential wetlands), 100-year floodplains; wooded areas; and areas of steep slope, including slopes of 15% - 25% and slopes greater than 25%. The second map shows water related features, including: streams, floodplains, wetlands, hydric soils, 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 occurs.

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 Schuylkill River, streams and in areas identified as hydric soils. 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.

In order 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 generally found in the vicinity of the watercourses within the Region. There also are several isolated areas of hydric soil displayed 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 due to watercourses that are generally 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. The primary areas of steep slope are Monocacy Hill, Neversink Mountain, northern Exeter Township, and the portion of Exeter Township near Fabers and Schoffers Roads.

WOODED AREAS

Wooded areas are concentrated in the northern portion of Exeter Township, Monocacy Hill, and Neversink Mountain. They are also scattered throughout the region and along the stream corridors within the region. The wooded areas should be protected as a valuable resource for the protection of steep slopes and to minimize the erosion that may occur if disturbed by clear cutting or extensive development.

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 close 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.

Wooded areas also have recreational potential, recognized when Amity established Monocacy Hill as a community resource in the Township.

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. As development continues to occur 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 provide a recreational resource.

The streams shown on the Water Related Features Map drain into the Schuylkill River, which drains into the Delaware River.

PA DEP has established designated water uses for waterways within the Commonwealth. Designated classifications for watersheds found in St. Lawrence, Exeter and Amity are as follows:

Stream	Zone	Water Uses <u>Protected</u>
Monocacy Creek	Basin	WWF
Manatawny Creek	Main Stem	CWF
Unnamed Tributaries Manatawny Creek	Basins	CWF
Ironstone Creek	Basin	TSF

The Water Use Protected symbols mean the following:

Special Protection

Symbol Protected Use

HQ High Quality Waters – A stream or watershed which has excellent quality waters and environmental or other features that require special water quality protection.

EV Exceptional Value Waters – 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.

Aquatic Life

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

A Stream Corridor Preservation Plan has been established to highlight the need to protect the watercourses within the Region.

Natural Areas of Special Interest

The following Natural Areas Inventory sites are found in the St. Lawrence Exeter and Amity Region, and shown on the Historic Resources Map in Chapter 22.

Neversink Mountain – This mountain provides open space in an urban setting and provides habitat for four rare species. Although there is a small residential development on the mountain, it does not appear to be influencing the species of special concern there. What is of concern is the use of herbicides and pesticides to control plants on the powerline right-of-way and for gypsy moth control in the surrounding woods. Herbicide use should be limited to control of tree saplings to ensure survival of the food plants used by two rare butterflies. The electric utility company and Berks County Conservancy have made progress toward this end. Aerial spray for gypsy moths should be avoided because the two butterflies are susceptible to the same chemicals.

It will be important to manage habitat on the mountain to limit the further spread of exotic plant species and maintain the small dry, rocky openings on the south slope that are important for the rare plant limited to this habitat. No logging has occurred recently but it should be completely discouraged in the future.

There is potential for Neversink to be a low-impact recreational asset to Reading and surrounding towns. The former trolley line offers opportunities for environmental education and nature observation, and walking and horseback riding.

The mountain is one of the four most important sites identified in Berks County.

Schuylkill River – Preserve as much open space as possible along river and all islands; excellent recreational resource. High County rank.

Amityville Floodplain Forest – Floodplain islands and north-facing slope; diverse flora and wildlife habitat; water quality protection; maintain in present condition. Low County rank.

SP528 – A species currently under review to determine its status in Pennsylvania, grows in Forest Hills Cemetery in Exeter Township. The very small C-ranked population occurs in a small limestone woodland on the cemetery property. The woodland harbors small patches of native vegetation despite rampant exotic species invasion. Careful control and removal of exotic species may ensure the continued existence of SP528 at the site.

SP557 – Marks a small population of a PA-Rare sedge growing on the dry gravel slope of an old coal siltation basin in Exeter Township with slender cottonweed (Froelichia gracillis), buttonweed (Diodia teres), large crabgrass (Digitaria sanguinalis), few-flowered burgrass (Cenchrus pauciflorus), and yellowish wild bean (Strophostyles helvola). Protecting a species in such a highly disturbed setting is problematic. At this time, it is recommended that a local botanist monitor the population.

SP514 – The Monocacy Creek site, currently being used as a cattle pasture, is a wet meadow located along Monocacy Creek, Exeter Township, Black willow, reed-canary grass, goldenrod, asters, jewelweed, boneset, monkey flower, and sedges and rushes are common species. A fair population of a plant species of concern was found here in 1992. This species requires open habitat and likely benefits from light grazing under its current land use. The owner is aware of the plant, and intends to keep the site as it is. Heavy grazing and succession are potential threats. No special management is recommended.

GEOLOGY AND AQUIFER YIELDS

INTRODUCTION

A Geology and Aquifer Yield by Formation Map of the Region depicts the boundaries of the geologic formations in the area as well as the average aquifer yield in gallons per minute (gpm) for each formation. The map provides aquifer yields in order to determine where, in general, the most productive aquifers in the area can be found.

In the description of each formation, porosity and permeability will be indicated. Below are the definitions of each term as it relates to groundwater supplies.

<u>Porosity</u> – the quality of being porous, full or abounding in pores. The porosity of rocks, i.e., the ratio or percentage of the total volume of the pore spaces (minute interstices through which liquids or gases can pass) in relation to the total volume of the rock. Sand, gravel, sandstones, with open textures and coarse grains, are typical porous rocks. Porosity is quite different from perviousness. Dry clay, for example, is highly porous and will hold much water in its pores, but when saturated the small spaces between the grains become blocked with water held by surface tension, preventing the passage of water. To be an aquifer or source of water a rock must be both porous and pervious. Porosity may be increased by leaching or decreased by compaction.

<u>Permeability</u> - is capable of being wholly penetrated by a fluid, of allowing the passage of a fluid, of being saturated. The opposite condition is termed "impermeable".

<u>Permeable Rock</u> – a rock that allows the free passage of water through it owing to its porosity, e.g., sandstone. Some geologists also include rock with joints, bedding plans, cracks, fissures, etc. that allow the free passage of water, defining the porous rock as being of primary permeability and the rock with joints, etc. of secondary permeability. Other geologists distinguish the secondary group as being pervious.

INFLUENCE OF GEOLOGY

For planning purposes, we are concerned about the way that geologic formations determine soils types and potential groundwater supplies. It is desirable to identify the areas with the most potential for groundwater yields to determine where a particular effort should be made to protect groundwater supplies. The following are the major geological formations found in the region and their groundwater yields.

Brunswick Formation

This formation is located throughout most of Exeter and Amity Townships. It is predominately found in the eastern cutoff, a line west of the Schuylkill River, and consists of fine red sandstone, siltstone, and shale; maximum thickness is about 500 feet. It is moderately well bedded; fissile to thin, sandstone units are mostly flaggy to thick. Only slightly resistant to weathering; highly weathered to moderate depth; irregularly shaped, very small fragments result; overlying mantle is thin. The topography is usually rolling hills of medium relief; natural slopes are fairly steep and stable. The surface drainage is good. Joint-, fault- and bedding-plane openings provide a secondary porosity of low to moderate magnitude; moderate permeability.

This formation has median yield of 60 gpm. It is also moderately easy to excavate with a relatively fast drilling rate. Because this formation is weathered relatively easily, the cut-slope stability is poor to fair. It is a good source of road material and fill; possible source of raw material for common brick.

<u>Limestone Fanoglomerate</u>

This sequence is located in the northern portion of Amity Township, just below the Township line. It consists of transported rocks; black to white, silty and siliceous in many places; crystalline and is well bedded. It is moderately resistant; moderately weathered to a shallow depth; small, flat, rectangular fragments result. It can be found at a depth of up to 500 feet and the topography is usually rolling valley of medium relief; natural slopes are moderate and stable. Surface drainage is good.

Joints and bedding plane openings provide a secondary porosity of moderate magnitude; locally solution openings in limestone produce a very high porosity and permeability.

Groundwater yields may yield in excess of 200 gpm; best location for high-yielding well is upland stream valley; water-bearing openings decrease in number and size with increased depth; most wells receive water from yielding zones less than 200 feet deep.

The ease of excavation is moderately to difficult with a fast drilling rate. The cut-slope stability is fair, due to disintegration when exposed to moisture for a relatively short amount of time. It is known to be a good source of road material and fill.

Diabase

This formation is located in the central portions of both Exeter and Amity Townships. It consists of light to dark gray, fine to very coarse-grained sandstone and conglomerate containing thin shale interbeds; crossbedded; tightly cemented. Includes four members, in descending order: Tammany Member – conglomerate and sandstone; Lizard Creek Member – sandstone and red and green shale; Minsi Member – sandstone and conglomerate; and Weiders Member – conglomerate. Maximum thickness is 1,000 feet.

It is highly resistant and can be slightly weathered to a shallow depth and weathers irregularly in medium to large blocks. In many places it can form large boulder fields downslope from outcrop. The overlying mantle is very thin. The topography is usually high mountains and ridges; very high relief in rough terrain; natural slopes are stable and steep. It has good surface drainage as well with intergranular porosity in conglomerate with joint openings, which provide a small to moderate secondary porosity; low permeability.

The median yield is 5 gpm and may be a poor aquifer because of topographic position; often of excellent quality. Excavation is difficult due to boulder fields on lower slopes beneath outcrop areas, which are special problems. The drilling rate is very slow; however the cut-slope stability is good and can stand in vertical cuts if bedding is not steeply dipping toward cut. It is usually a good source of road material, riprap, concrete aggregate, embankment facing, building stone, and silica for refractory brick.

Allentown Formation

A small area is found in northcentral Amity Township. Medium-gray dolomite and impure limestone; dark-gray chert stringers and nodules; laminated; some oolite and sharpstone. Joints have a blocky pattern; well developed; moderate to highly abundant; regularly spaced, having a moderate distance between fractures; open and steeply dipping. Moderately resistant to weathering, slightly weathered to a shallow depth; decomposition results in medium-sized, blocky fragments; overlying mantle is thin in most areas; interface between bedrock and mantle is characterized by pinnacles. Undulating valley of low relief; natural slopes are gentle and stable. Good subsurface drainage; little surface drainage. Solution channels produce a secondary porosity of moderate to high magnitude; low permeability.

Median groundwater 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.

Difficult excavation. Bedrock pinnacles are a special problem; moderate to slow drilling rate; numerous sandstone beds containing chert lenses slow the drilling rate. Good cut-slope stability, stable in vertical cuts where fractures are at a minimum. Good foundation stability, a thorough sinkhole investigation should be undertaken.

Beekmantown Group

Found in the vicinity of Oley Turnpike Road in Exeter Township and along the northernmost portion of Amity Township. Where these rocks have not been subdivided into separate formations, they are interbedded, finely laminated, light-gray limestone containing dark-gray dolomite beds; dolomite is fractured, and the fractures are recemented by white calcite; limestone weathers to a pale-gray surface contrasting with the yellowish-gray-weathering dolomite; maximum thickness is about 2,300 feet. Well bedded; thick. Joints have a blocky pattern; moderately to well developed; moderately abundant; regularly spaced, having a moderate distance between fractures; both a steeply dipping set and a gently dipping set are present; most are open, but some are filled with calcite. Moderately resistant to weathering, slightly weathered to a shallow depth; small to large, blocky fragments result; overlying mantle is variable in thickness, in most places greater than 5 feet; bedrock pinnacles are characteristic. Flat to rolling valleys of low relief; gentle and stable natural slopes. Good subsurface drainage; minor surface drainage. Joint and solution-channel openings provide a secondary porosity of low to moderate magnitude; low permeability.

High groundwater yields from fractures and solution cavities; median yield is 50 gal/min in southeastern Pennsylvania; industrial and public supplies are available in most areas.

Difficult excavation; bedrock pinnacles are a special problem; moderate drilling rate; chert beds, lenses, and quartz sand slow the drilling rate. Good cut-slope stability, intersection of joint and bedding surfaces may create a problem if the depth of cut is extreme. Good foundation stability, should be investigated thoroughly for solution openings.

Granitic Gneiss

Found in much of the northern portion of Exeter Township. 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. Banding is poorly developed; massive. Joints have an irregular pattern; moderately to poorly

formed; moderately abundant; widely to moderately spaced; irregular and steeply dipping to vertical; open.

Highly resistant to weathering; slight weathering to a shallow depth; loose material consists of large rectangular blocks; mantle is thin. Hills of medium to high relief; natural slopes are steep and stable. Good surface drainage. Joints provide a very low secondary porosity; low permeability.

Median groundwater yield is less than 20 gal./min.; yields of 35 gal./min. or more may be obtainable from wells properly sited and developed; wells should be at least 100 feet deep, but probably not over 200 feet for maximum yield.

Difficult excavation; slow drilling rate. Good cut-slope stability. Good foundation stability; should be excavated to sound rock.

Hardyston Formation

Found in the vicinity of the St. Lawrence watershed and Neversink Mountain, and in a portion of St. Lawrence. Light-gray quartzite; weathers yellow brown; porous and limonitic in many places; quartz-pebble conglomerate occurs at base; maximum thickness is 800 feet; moderately well bedded to well bedded; thick. Joint and cleavage planes display a blocky pattern; moderately well developed; moderately abundant; widely spaced and fairly regular; steeply dipping and open. Highly resistant to weathering; usually slightly to moderately weathered to a shallow depth; hackly, large, irregularly shaped fragments result from weathering; locally, may be highly weathered to loose sand; overlying mantle is thin. Rough mountains of medium to high relief; natural slopes are steep and stable. Good surface drainage. Joint- and cleavage-plane openings produce a secondary porosity of low magnitude; low permeability. Median groundwater yield of 20 gal/min.; water-yielding fractures are seldom found below 200 feet; water is usually soft and of good quality; iron may be a problem.

Difficult excavation; slow drilling rate, in part due to many quartz veins that exceed 12 inches in width; large boulders may be a special problem; locally highly fractured, highly weathered, and moderately easy to excavate. Good cut-slope stability, locally, where highly fractured, cut-slope stability is fair. Good foundation stability; should be excavated to sound material.

Hornblende Gneiss

A few small areas scattered in northern Exeter Township. 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. Banding is common; most bands are flaggy, but some are thick. Joints have a platy or blocky pattern; moderately to poorly formed; moderate to high in abundance; moderately to closely spaced; irregular; steeply dipping and open.

Moderately resistant to weathering; highly and deeply weathered in many places, resulting in a rubble that contains small- to medium-sized rectangular fragments; overlying mantle is thin. Undulating hills of medium relief; natural slopes are moderately steep and stable. Good surface drainage. Extremely low primary porosity; joint openings provide a low secondary porosity; highly weathered near-surface rock may have high porosity; low permeability.

Median groundwater yield of reported wells is 10 gal./min.; yields of 35 gal./min. or more may be obtained from wells properly sited and developed.

Highly weathered portion of rock mass has moderately easy excavation; unweathered rock is difficult; fast to moderate drilling rate. Poor cut-slope stability due to partial disintegration when exposed to moisture for a relatively short time; drainage maintenance is required. Good foundation stability; should be excavated to sound material.

Leithsville Formation

Found throughout St. Lawrence and surrounding areas of Exeter Township. Dark-gray to medium-gray dolomite; some calcareous shale and sandy dolomite; cherty; 1,500 feet thick; moderately well bedded; massive. Joints have a blocky pattern and are moderately to well developed; moderately abundant; irregularly spaced, having a wide distance between fractures; open and steeply dipping. Undulating valley of low to medium relief; natural slopes are gentle to moderately steep and stable. Good surface drainage; little subsurface drainage. Joint openings and solution channels provide a secondary porosity of high magnitude; moderate to high permeability.

Median groundwater 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.

Difficult excavation; bedrock pinnacles may be a special problem; fast drilling rate. Good cut-slope stability. Good foundation stability; solution openings and bedrock pinnacles should be thoroughly investigated.

Martinsburg Formation

A very small area is found along Route 562 in northern Amity Township. 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. Well bedded; sandstone is thick to massive; limestone and shale are thin to fissile. Cleavage is dominant and highly developed; joints are also present, and are irregularly spaced, open, and nearly vertical. Moderately weathered to a moderate depth; small to large platy fragments results; mantle is thick. Dissected valley of low relief; natural slopes along streams are steep and often unstable. Good surface drainage. Cleavage- and joint-plane openings provide a secondary porosity of generally low magnitude; low permeability.

A median sustained groundwater 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.

Moderately easy excavation in shale; moderately difficult in limestone; difficult in sandstone; fast drilling rate. Fair cut-slope stability in shale and limestone; good in sandstone. Good foundation stability; should be excavated to sound rock; limestone should be investigated for solution openings.

New Oxford Formation

Found in central Exeter Township. Light-colored sandstone, arkosic sandstone, and conglomeratic sandstone; includes red to purplish-red sandstone, shale, and mudstone; total thickness is approximately 4,000 feet and represents the upper half of the formation. Well bedded; thin to flaggy. Joints have a seamy to platy pattern; moderately developed; highly fractured; very close spacing; vertical and open. Only slightly resistant to weathering; exposures are quickly weathered to a moderate depth; very small, pencil-like, platy fragments result from rapid disintegration; overlying mantle is thin. Gently rolling plain; broad shallow valleys and low, flat-topped ridges; stable. Good surface drainage. Primary porosity occurs in weathered portion; joint- and bedding-plane openings provide a secondary porosity in unweathered rock; high to moderate total effective porosity; moderate permeability.

Median groundwater yield is 66 gal./min.; hardness and total dissolved solids are frequently high.

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	16-	0	

SCENIC RESOURCES

INTRODUCTION

The Scenic Resources Map indicates scenic roads in blue and scenic views with blue arrows.

Scenic Roads

The scenic roads are roads which are particularly pleasant to drive because of the views along the roads. Scenic roads include: Wegman Road, Oley Turnpike Road, Oley Line Road, Ritters Lane, Schoffers Road, Mill Road, Daniel Boone Road and Boyertown Pike in Exeter Township; Boyertown Pike, Tulpehocken Road, Browns Mill Road, Monocacy Hill Road, Mill Road, Blacksmith Road, Bieber Lane, Levengood Road, and Limekiln Road in Amity Township.

Scenic vistas are points within the area from which there are particularly attractive views. The views are typically of rural areas, farmland, open space, stream valleys, hills, and woodlands of the region.

Planning Implications

It will be necessary to determine to what extent preservation of scenic resources will be made a priority within the municipalities. 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.

EXISTING PEDESTRIAN CIRCULATION AND PARKING ISSUES

INTRODUCTION

A map has been prepared showing pedestrian circulation within St. Lawrence Borough, Exeter Township and Amity Township. The map indicates the location of areas with existing sidewalks, the Thun Trail, and a proposed regional trail system.

St. Lawrence Sidewalk System

The map shows the extent of the existing sidewalk system in the region. There are gaps in the existing system, and areas where sidewalk does not exist. It will be necessary for the Borough to determine whether a proactive policy to eliminate gaps in the system and serve additional areas should be followed, particularly when routes to community facilities are involved.

Pedestrian Circulation in the Townships

The map shows the existing sidewalk and trails in Exeter and Amity Townships. The sidewalk system is based on the existing development pattern which has occurred and is isolated in some cases. Trail systems exist in the Daniel Boone Homestead, on Monocacy Hill, and along portions of the Schuylkill River. Less defined and unmapped trails exist in the St. Lawrence Watershed.

The region has the opportunity to explore the possibility of a trail system that would link existing sidewalks and trails to a number of community facilities and natural areas. Residents have expressed interest in having more trails available to the public, including new trails, which would provide access to Neversink Mountain, the Thun Trail, the Daniel Boone Homestead, the St. Lawrence watershed, and Monocacy Hill.

St. Lawrence Avenue in St. Lawrence

Given the limited on-street parking along the north and south sides of the street in the center of the Borough, and limited space for private parking areas for businesses on small lots, parking can become an issue in the Borough. As businesses expand, are converted, or are started, it is important to assure that adequate, safely accessible off-street parking is available.

Pedestrian Enhancement in the Townships

There are also several areas within the Townships that should be made more pedestrian friendly to coordinate with existing or future transit service. BARTA provides service along portions of Route 422, and it is almost virtually impossible for transit users to access this service eastbound or westbound from the opposite side of the road. Areas which should be considered for pedestrian enhancements include the Villages of Baumstown, Douglasville, and Amityville, and Route 422 in the vicinity of Shelbourne and Lincoln Roads.

REGIONAL INFLUENCES

INTRODUCTION

St. Lawrence Borough, Exeter Township and Amity Township are located just east of the City of Reading, stretching east along the Schuylkill River to just west of Douglass Township in Berks County and the Borough of Pottstown in Montgomery County. Business U.S. Route 422 goes through the western portion of Exeter Township and St. Lawrence Borough, creating an accessible avenue to and from Mt. Penn and the City of Reading. Business 422 connects to the 422 bypass (West Shore Bypass) located in the western portion of Exeter Township, and the Pottstown Bypass in the eastern portion of Amity Township. It also links to U.S. Route 222 and Business 222 (North and South) to the west and further east to Route 100 and the PA Turnpike. Route 662 links with Route 222 North and Route 73 and eventually 61. These routes can link this area to places like Philadelphia, Harrisburg, Allentown and Hershey, Pennsylvania. These roads have accelerated the rate of growth in the areas adjacent to the throughways, especially due to the fact that these major arterial roads are not limited access roads. A majority of the working population of the region's municipalities commutes to outside the region to work.

LAND USE

St. Lawrence, Exeter and Amity is a transition area on the fringe of the developed urban core of Berks County comprised of Reading and the eastern surrounding municipalities such as Mt. Penn and Lower Alsace Township.

Abutting portions of Mt. Penn Borough, St. Lawrence Borough is highly developed with high-density residential neighborhoods, developed in the grid style pattern, as older communities in Pennsylvania were initially planned. There is vacant land available within the Borough, however it is minimal. There are some opportunities for infill development. There is no true commercial core in St. Lawrence Borough, mostly due to the close proximity to the City of Reading and commercial areas along Business Route 422 in Exeter Township.

The Townships have a mixture of agricultural, rural and suburban areas, and several major open space areas such as Neversink Mountain, the Daniel Boone Homestead and Monocacy Hill. Much of the development within the Townships has occurred along and near the major road corridors and roads that intersect Route 422, Route 562, Route 662 and Shelbourne Road. Population pressures from the Reading area and greater Philadelphia area continues.

Mt. Penn Borough and Lower Alsace Township Joint Comprehensive Plan

A Comprehensive Plan is being prepared for Mt. Penn Borough and Lower Alsace Township. The Future Land Use Plan within that plan is consistent with the land uses shown on the Future Land Use Plan for the St. Lawrence, Exeter, Amity Plan.

Route 422 and Schuylkill Valley Metro Issue

PennDOT has prepared a study of the Route 422 corridor. The study addressed a number of problem areas in the existing corridor. As development pressures mount and the amount of traffic utilizing the corridor increases, the development of a bypass to the existing corridor will need to be addressed. The County's Berks Vision 2020 identifies the need to address the corridor in its intermediate range (not scheduled with PennDOT but reasonably completed with the plan horizon. Until such a bypass can be completed, municipalities will need to address the functionality of the existing corridor to ensure that all issues related to safety and congestion are adequately addressed. Also, if and when a bypass becomes a reality, municipalities will need to address the function of the existing corridor to ensure that it is consistent with regional land use visions.

Concept plans prepared for improving Route 422, including improvements to the existing corridor and potential by-pass routes within Exeter Township, will have to be discussed by the region's municipalities and the Reading Area Transportation Study to prioritize projects for funding. Funding is not assured, as competing corridors include Route 222 and I-78.

Preliminary studies have been completed for the Schuylkill Valley Metro, a proposed rail line linking the Reading area to Philadelphia. The development of such a rail line, if constructed, will have a direct impact on the region. These impacts could include the number of potential riders accessing local streets and roads to access the proposed station, and the completion of the rail line could also spur additional residential, commercial, office and light industrial development in the area. Municipalities will need to continue to monitor current land use policies and zoning to ensure that potential impacts from the development of the rail line can be appropriately accommodated.

POPULATION AND HOUSING

INTRODUCTION

This chapter will look at population and housing trends for St. Lawrence Borough, Exeter and Amity Townships, Berks County as a whole, and surrounding municipalities. The focus will be on past population trends and projections and expected population increases.

The tables found in Appendix 2 include:

Gender

Land Area and Population Density per Square Mile

Racial Characteristics

Average Persons Per Occupied Housing Unit

Income, Poverty and Education Characteristics

Persons by Age

Employment by Industry

Employment by Occupation

Housing Occupancy, Tenure and Value

Housing Type

Households by Type

Tenure by Age of Householder

Place and Means of Transportation to Work

Population and Housing Trends

Table 1 gives total population for St. Lawrence Borough, Exeter and Amity Townships, and Berks County in 1980, 1990 and 2000.

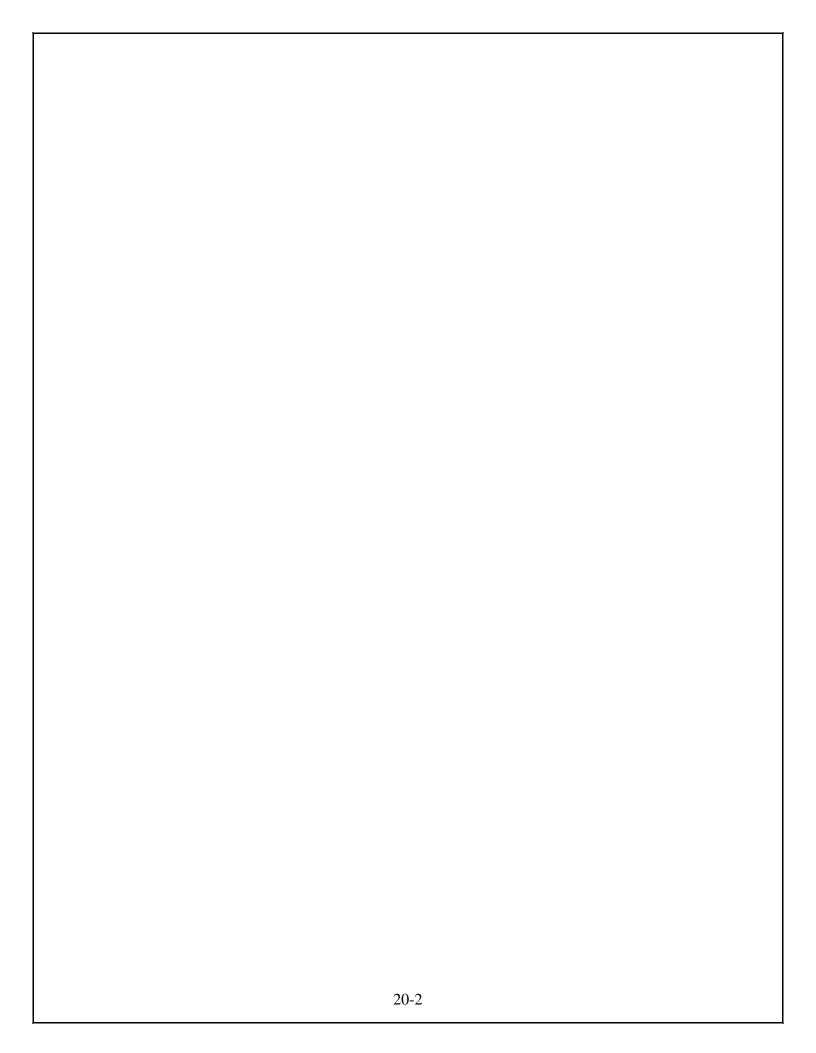


TABLE 1

TOTAL POPULATION

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP, AMITY TOWNSHIP, BERKS COUNTY

	St. La	wrence Bo	rough	Exc	eter Towns	hip	An	nity Towns	hip	Be	rks County	y
Year		Number	Percent		Number	Percent		Number	Percent		Number	Percent
	Persons	Change	Change	Persons	Change	Change	Persons	Change	Change	Persons	Change	Change
1980	1,376	-	-	14,419	-	-	5,883	-	-	312,497	-	-
1990	1,542	166	12.0	17,260	2,841	19.7	6,434	551	9.3	336,523	24,014	7.6
2000	1,812	270	17.5	21,161	3,901	22.6	8,867	2,433	37.8	373,638	37,115	11.0

Source: U.S. Census

The rates of growth in St. Lawrence Borough and Exeter and Amity Townships were greater than those of Berks County as a whole. From 1980 to 1990, the population of Exeter increased 19.7% and from 1990 to 2000, it increased 22.6%. Amity Township increased 9.3% from 1980 to 1990 and 37.8% from 1990 to 2000. The population also increased in St. Lawrence Borough between 1980 and 1990 and between 1990 and 2000, 12.0% and 17.5 respectively. The Berks County increases were 7.6% from 1980 to 1990 and 11.0% from 1990 to 2000.

Table 2 gives total population in 1980, 1990 and 2000 and the percentage of change from 1990 to 2000 for St. Lawrence Borough, Exeter and Amity Townships, Berks County and adjacent municipalities.

TABLE 2
TOTAL POPULATION

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP, AMITY TOWNSHIP, ADJACENT MUNICIPALITIES, AND BERKS COUNTY

1980-2000

Municipality	1980	1990	2000	% Change 1990-2000
Alsace Township	3,456	3,459	3,689	6.6
Amity Township	5,883	6,434	8,867	37.8
Cumru Township	11,474	13,142	13,816	5.1
Douglas Township	3,128	3,570	3,327	-6.8
Earl Township	2,607	3,016	3,050	1.1
Exeter Township	14,419	17,260	21,161	22.6
Lower Alsace	4,906	4,627	4,478	-3.2
Mt. Penn Borough	3,025	2,883	3,016	4.6
Oley Township	3,024	3,362	3,583	6.5
Reading City	78,686	78,380	81,207	3.6
Robeson Township	4,729	5,954	6,869	15.3
St. Lawrence Borough	1,376	1,542	1,812	17.5
Union Township	2,815	3,440	3,453	0.3
Berks County	312,497	336,523	373,638	11.0

Source: U.S. Census

There were no municipalities that grew at faster rates than St. Lawrence Borough and Exeter and Amity Townships from 1990 to 2000. Robeson Township had the closest growth rate at 15.3%.

Table 3 indicates Total Housing Units for St. Lawrence Borough, Exeter and Amity Townships and Berks County in 1990 and 2000 and the Percent Change from 1990 to 2000.

TABLE 3
TOTAL HOUSING UNITS

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP, AMITY TOWNSHIP, BERKS COUNTY

2000

	Total Hou	sing Units	Change 1990-2000		
	1990	2000	Number	Percent	
St. Lawrence Borough	622	781	159	25.6	
Exeter Township	6,780	8,208	1,428	21.1	
Amity Township	2,422	3,323	901	37.2	
Berks County	134,482	150,222	15,740	11.7	

Source: U.S. Census

The total number of housing units increased at a rate either almost equal to or greater than the population. For instance, from 1990 to 2000, the increase in housing units in St. Lawrence Borough was 25.6, while the population increased 17.5%. In Amity Township, the increase in housing units was 37.2%, while the population increase was 37.8%. In Exeter Township, the increase in housing units was 21.1%, while the population increase was 22.6%.

Table 4 provides population projections for St. Lawrence Borough and Exeter and Amity Townships for the years 2010, 2020 and 2030. Two projection techniques have been used to provide a range of possible population outcomes for the region. Due to a number of variables that can affect population projections, a single projection cannot be viewed as the sole source on which to base planning decisions. For this reason a range of population levels calculated to 2030 are

provided. The Low Range projections use the average rate of growth per decade for each municipality from 1980 to 2000. The High Range projections use the average rate of growth per decade for each municipality from 1990 to 2000.

TABLE 4

POPULATION PROJECTIONS 2000-2030 USING PAST POPULATION GROWTH RATES

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP, AMITY TOWNSHIP

	2000	2010	2020	2030
St. Lawrence Borough				
Low Range	1,812	2,030	2,250	2,470
High Range	1,812	2,078	2,344	2,610
Exeter Township				
Low Range	21,161	24,530	27,900	31,275
High Range	21,161	25,625	30,090	34,560
Amity Township				
Low Range	8,867	10,360	11,850	13,345
High Range	8,867	10,950	13,040	15,125

Source: U.S. Census, SSM 2001.

The range of projections calculated for municipalities indicate that population has the potential to increase by forty-seven to sixty-four (47-64%) by the year 2030. Exeter Township has a projected population of between 24,530 and 25,625 for 2010 and a projected population between 31,275 and 34,560 for the year 2030. Amity Township has a projected population between 10,360 and 10,950 for 2010 and a projected population for the year 2030 of between 13,345 and 15,125. St. Lawrence Borough is projected to grow to between 2,030 and 2,078 for 2010 and 2,470 and 2,610 by the year 2030.

Table 5 provides residential construction information for St. Lawrence Borough and Exeter and Amity Townships in 2001, 2002 and 2003, as published by the Berks County Data Book.

TABLE 5

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP, AMITY TOWNSHIP, BERKS COUNTY

RESIDENTIAL CONSTRUCTION SURVEY (Based on No. of Units Authorized by Permit) 2001 and 2002, from Assessment Office 2003

Municipality	No. of Single Family	No. of Semi- Detached	No. of Town Houses	No. of Apart- ment Units	No. of Manuf. Homes	No. of Conver	No. of Apts. Formed	No. of Units De- molished	Net Increase
St. Lawrence Borough 2001									
St. Lawrence Borough 2002									1
St. Lawrence Borough 2003									
Exeter Township 2001	366				14			3	377
Exeter Township 2002	154								154
Exeter Township 2003	143			24	14				181
Amity Township 2001	No Information								
Amity Township 2002	240				2			1	241
Amity Township 2003	214				2				216

Source: U.S. Census

From 2001 to 2003, St. Lawrence Borough saw no new residential development. However, Exeter and Amity Townships continued to experience substantial construction, with Exeter Township having 712 net units permitted/constructed and Amity Township having 457 net units permitted/constructed over 2 years.

U.S. Census Bureau Population Estimates

The U.S. Census Bureau estimates 2003 St. Lawrence population as 1791, a slight decrease from 2000. Amity is estimated as 10,371, a 17% increase from 2003. Exeter is estimated as 23,450, a 10.8% increase from 2000. These appear to be reasonable estimates based on permit/construction activity. It also indicates that population projections for the Borough based on past trends are high. A subdivision of about 30 dwelling units is currently before the Borough. Given limited open land available within the Borough, population growth is likely to be below the Low Range number. For Amity Township, the 2010 Low Range projection was already exceeded in 2003, and the High Range projection will be exceeded well before 2010. At the current growth rate, 2010 population would be approximately 13,900.

Exeter Township is also on pace to exceed the 2010 High Range projection, though not by as high a percentage as Amity Township. At the current growth rate, 2010 population would be approximately 28,800.

Additional Population and Housing Observations

No major population, income, or housing problems have been identified in the area.

PARKS, RECREATION AND OPEN SPACE

INTRODUCTION

Parks, recreation programs and open space areas support the improvement in the quality of life in an area by preserving natural and cultural amenities for the enjoyment of all residents and providing active and passive recreational opportunities. They also provide opportunities for community residents to interact and thereby strengthen the sense of community. Leisure activities and the facilities required to maintain these activities are important components of a sound community.

Open space is important to area residents, as are parks and recreation. Background open space, such as agricultural lands, woodlands and stream valleys, is visible to area residents and perceived as open space by them. It helps establish the character of the community. As development occurs in the area, if the rural character is to be sustained, it is necessary to preserve this perceived open space. Growth must be planned and directed so that the basic open space and rural character is not lost.

Recreational activities are often associated with and can be enhanced by the natural features of a community. Some leisure activities, such as hiking, fishing and boating are directly dependent upon resources such as Neversink Mountain, the Thun Trail, the region's creeks, the Schuylkill River, facilities at the Daniel Boone Homestead and Monocacy Hill.

The cultural features of a community can also enhance recreational activities. For instance, the cultural heritage of the St. Lawrence, Exeter and Amity area is evident in the farmsteads, mills, churches, and numerous other historic resources in the area, which will be discussed later. These natural and cultural features can play an educational role for residents of the area as well as be incorporated into hiking and bicycle trails.

Existing Parks, Recreation and Open Space System

A number of major recreational facilities are available to serve residents in the St. Lawrence, Exeter and Amity area, in Berks and nearby counties. Some of these recreational facilities include:

Blue Marsh Lake Recreational Area French Creek State Park Nolde Forest Environmental Education Center Tulpehocken Creek Park System Antietam Lake

Mount Penn Preserve

Daniel Boone Homestead

State Game lands

The Appalachian Trail

Kaercher Creek Park

Kernsville Recreation Area

Conrad Weiser Park

County Youth Recreation Facility

Allegheny Aqueduct

Horseshoe Trail

Hawk Mountain Sanctuary

Neversink Mountain Preserve

Middle Creek Wildlife Management Area

Recreation resources within the St. Lawrence, Exeter and Amity area include:

Exeter Community Park – St. Lawrence

Borough Playground – St. Lawrence

Lorraine Hollow – Exeter Township

Community Park – Exeter Township

Mountain Park – Exeter Township

Farming Ridge Park – Exeter Township

Stonersville Little League Fields – Exeter Township

Crestwood Park – Exeter Township

Amity Community Park – Amity Township

Old Farm Park – Exeter Township

Greenbriar Open Space – Amity Township

Shelbourne Park – Exeter Township

Amity AC/Pool and Recreation Area – Amity Township

Amity Gardens Pool – Amity Township

Hill Road Recreation Area – Amity Township

Schuylkill River Open Space – Exeter Township

Cedar Mill Open Space – Amity Township

Amity Park Road Recreation Area - Amity Township

Daniel Boone Homestead – Exeter Township

Pineland Park – Exeter Township

Woods Edge Open Space – Amity Township

Stony Creek Athletic Association – Exeter Township

Hunter's Run Park – Exeter Township

Schuylkill River Open Space – Amity Township

Trout Run Recreation Area – Exeter Township

River Bend Park – Exeter Township

Wheeler Recreation Area – Amity Township
Conservancy Land – Exeter Township
Antietam Valley Recreation and Community Center – Exeter Township
Crestwood Swim Club – Exeter Township
Lake Drive Park and Recreation Area – Amity Township
Locust Grove Recreation Area – Amity Township
Monocacy Hill Open Space Area – Amity Township
Amityville Recreation Area – Amity Township
Thun Trail – the Townships

In addition, recreation is available at the school facilities in the Region, including Exeter School District elementary schools and the High School – Junior High School complex and the Amity Primary and Intermediate Centers.

Golf courses include the Arrowhead Golf Course in Amity Township and Reading Country Club and Exeter Public Golf Course in Exeter Township. The Daniel Boone Rod and Gun Club, University Rifle Club, and South End Gun Club are located in Exeter Township.

Types of Recreation Facilities

The National Recreation and Park Association (NRPA) has prepared a classification scheme for use by municipalities in creating and evaluating a park and open space system. It is intended to serve as a planning guide and can be modified to address the recreational needs unique to each municipality. The NRPA classification scheme is divided into two categories: (1) park and open space areas that are considered to be "local" or "close-to-home" due to their smaller size and close proximity and (2) park and open space areas that are considered "regional" due to their larger size and broader service area. Within each category, there are various types of parks and open space areas that can be identified according to their specific characteristics, as described in Table R-1. Overall, the NRPA recommends that municipalities have between 6.25 and 10.5 acres of local parkland and open space per 1,000 residents. This land, considered the "core" of a municipal park and open space system, should be suitable for intense development and used primarily for active recreational purposes. In addition, municipalities should also have available between 15 and 20 acres per 1,000 residents of "regional" park and open space areas that can be used as open space, active or passive recreational areas. Sufficient regional park and open space is provided at the Daniel Boone Homestead and French Creek State Park, Blue Marsh Lake, Nolde Forest, Neversink Mountain-Mount Penn-Antietam Lake, and Tulpehocken Creek Park.

TABLE 1

NRPA PARK; RECREATION AND OPEN SPACE CLASSIFICATION SCHEME LOCAL/CLOSE-TO-HOME SPACE = TOTAL OF 6.25 TO 10.5 ACRES OF DEVELOPED OPEN SPACE PER 1,000 PERSONS

		Desirable Site	
Type of Park	Service Area	Size	Acres/1,000 Persons
Mini-Park			, , , , , , , , , , , , , , , , , , , ,
Specialized facilities that serve a	Less than ¼ -mile	1 acre or less	0.25 to 0.5 acres
concentrated or limited population			
or specific group such as tots or			
senior citizens.			
Neighborhood Park/Playground			
	17 9 . 17 9	1.5	10.20
Area for intense recreational	,	15+ acres	1.0 to 2.0 acres
activities such as field sports,			
court games, crafts, playground			
activities, skating, picnicking, swimming, etc.	persons (a neighborhood)		
Community Park	neighborhood)		
Community 1 ark			
Area of diverse environmental	Several neighborhoods.	25+ acres	5.0 to 8.0 acres
quality. May include areas suited	_	20	2.0 10 0.0 4012
for intense recreational facilities			
such as athletic complexes and			
large swimming pools. May be an			
area of natural quality for outdoor			
recreation such as walking,			
viewing, sitting, picnicking. May			
be any combination of the above,			
depending upon the site suitability			
and community needs.			

 $Source: \ National \ Recreation \ and \ Park \ Association \ - \ \underline{Recreation, Park \ and \ Open \ Space \ Standards} \\ \underline{and \ Guidelines}$

NRPA PARK, RECREATION AND OPEN SPACE CLASSIFICATION SCHEME

TABLE 1- Continued

REGIONAL SPACE = TOTAL OF 15.0 TO 20.0 ACRES FOR 1,000 PERSONS

		D 11 C1	
Type of Doule	Service Area	Desirable Site Size	A awag/1 000 Dawgang
Type of Park	Service Area	Size	Acres/1,000 Persons
Regional/Metropolitan Park Area of natural or ornamental quality for outdoor recreation (such as picnicking, boating, fishing, swimming, camping, and trail uses) which may include play areas.	Several communities. 1-hour driving time	200+ acres	5.0 to 10.0 acres
Regional Park Preserve			
Area of natural quality for nature-oriented outdoor recreation (such as viewing/studying nature, wildlife habitat, conservation, swimming, picnicking, hiking, fishing, boating, camping and trail uses) which may include active play areas. Generally, 80% of the land is reserved for conservation and natural resource management, with less than 20% used for recreation development.	Several communities. 1- hour driving time	1,000+ acres or sufficient area to encompass the resource to be preserved and managed.	Variable
Community Park			
Area of diverse environmental quality. May include areas suited for intense recreational facilities such as athletic complexes and/or large swimming pools. May be an area of natural quality for outdoor recreation such as walking, viewing, sitting, picnicking. May be any combination of the above, depending upon the site suitability and community needs.	Several neighborhoods. 1 to 2- mile radius.	25+ acres	5.0 to 8.0 acres

 $Source: \ National \ Recreation \ and \ Park \ Association \ - \ \underline{Recreation, Park \ and \ Open \ Space \ Standards} \\ \underline{and \ Guidelines}$

Parks, Recreation and Open Space System in the Region

St. Lawrence Borough

Currently, the Borough has one community park, a municipal playground and schools containing playing fields, a picnic area, tennis courts, basketball courts and a tot lot.

The Borough also has watershed lands in Exeter Township that contain un-improved trails that could be improved and linked to a regional trail network.

Exeter Township

The Township currently has a number of community parks, the Exeter High School – Junior High School Complex and the elementary schools. Activities available include picnic areas, playgrounds, basketball courts, tennis courts, shuffleboard court, tot lot, and playing fields.

Amity Township

The Township contains a number of community parks. The facilities provide areas for hiking, picnics, playgrounds, playfields, basketball court, hunting, nature study, and tot lots.

Recreation Acreage Needs Analysis

The following table presents recreation acreage needs analysis for the region.

ST. LAWRENCE, EXETER, AMITY

RECREATION ACREAGE NEEDS ANALYSIS

I and Danuation

	Projecte	ed Popula	tion	Requir NRP 6.25 to 1	al Recrea ements A A Standa 0.5 Acres Population	pplying rds of per 1000	Public Acreage 2000	Projected Public Acreage 2020	2000 Deficit in Acres	Projected 2020 Deficit in Acres
	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>				
St. Lawrence	1,812	2,078	2,344	11.3 to 19.0	12.9 to 21.8	14.6 to 24.6	53.71	53.7	0	0
Exeter	21,161	25,625	30,090	132.2 to 222.1	160.1 to 269.0	188.0 to 315.9	931.0 ²	931.0	0	0
Amity	8,867	10,950	13,040	55.4 to 93.1	68.4 to 114.9	81.5 to 136.9	667.9 ³	667.9	0	0

¹Includes Exeter Community Park, Municipal Playground, Borough Open Space, Lausch Elementary School.

²Includes Lorane Hollow Park, Community Park, Mt. Park, Daniel Boone Homestead, Farming Ridge Park, Pineland Park, Exeter Twp. Jr. & Sr. High School, Hunter's Run Park, Lorane Elementary School, Old Farm Park, Trout Run Recreation Area, River Bend Park, Little League Fields, Butter Lane Park, Exeter Library/Dunn Community Center.

³Includes Lake Drive Park & Recreation Area, Locust Grove Park, Monocacy Hill Open Space Area, Amityville Park Road Recreation Area, Amity Primary Center, Hill Road Recreation Area, Myron S. Wheeler Recreation Area, Old Airport Road Open Space, Locust Grove Open Space, Cider Mill Open Space, Greenbriar Open Space, Open Space Adjacent to Sewage Treatment Plant, Open Space Along Schuylkill River, Amity Community Park.

demand for additional of the demands Recreation Comm	onal recreation facili could be for addi ittees will continue	ities as the populational playing for to work to provide	the region will be the ation in the area increasields, specifically social recreation opportunities for recreation. A region	ses. Some cer fields. ties within
	x existing and future			

CHAPTER 22

HISTORIC RESOURCES

INTRODUCTION

The collection of resources used to compile information on the history of the region include: Amity Township 2001 Parks, Recreation and Open Space Plan; articles and photographs from the "Reading Weekly Eagle"; St. Lawrence 1965 Comprehensive Plan Part Two: Development Proposals; National Register Listed & Eligible Properties (Pennsylvania Historical Museum Commission, Bureau for Historic Preservation); Exeter Township Comprehensive Plan Part One: Development Patterns (1965); Amity Township 1990 Comprehensive Plan; Exeter...the forgotten corner 225th Anniversary (collection of historic articles and accounts); and Amity First in Berks 250th Anniversary 1719-1969 (collection of historic articles and accounts).

EXETER TOWNSHIP

One of the first European settlements in Berks County was made in the rich Oley Valley in the early 1700's because of the good soils, plentiful streams, and abundance of lumber. Most of these early settlers in the area were French Huguenots, Germans and English. In 1741, when the boundaries of Oley Township were established, it was discovered that over 50 families had been excluded. Many of these families grouped together and petitioned that they be able to establish their own Township. On December 7, 1741, this petition was approved, and the Township of Exeter was established.

Several famous people were born or had a homestead in the Township. There were several Boone families, however, the most well known Boone was Daniel Boone. Daniel Boone was born in the Township in 1734 and later became a famous pioneer. His homestead is now the property of the State.

Exeter is also the home of Abraham Lincoln's great-great-grandfather, Mordecai Lincoln. He had a homestead built in 1733, which is still standing on Heister's Creek.

The Manatawny section of Berks County, in which Exeter is located, was for many years active in iron production, but in the last half of the 19th century this industry died out almost completely. The change can be attributed to the trend in the late 1800's to localize iron industries at relatively few points near the source of raw materials.

Education and religion were closely connected in early Berks County history. A Quaker Meeting House was built in Exeter in 1725, but the denominations most prevalent were the Lutheran and Reformed churches, established by the Germans. The two German religions were very similar; in many cases a community built one church building which

both shared. These were called Union Churches. In Exeter, the Schwartzwald's Union Church was built 1747, and the Baumstown, Lorane, St. Lawrence and Stonersville Chapels were located in Stonetown, Neversink and Reiffton, respectively.

The German churches were supporters of education, which is why most of the original church schools were taught using the German language. They were semi-private schools; each pupil was required to pay a few cents per day tuition. This system continued long after the 1834 Common School Law was passed. However, because Exeter had a larger Friends population than many of the other Berks County communities, it was one of the first to establish English schools.

After 1900, Exeter's population has steadily increased. Between 1900 and 1960 the population increased from 2,503 to 8,488 persons. This growth can be attributed to suburban growth from Reading rather than local industries or agriculture. Reiffton, one of the first suburban communities, was developed shortly before and after the first World War. The town was named for the Reiff family, prominent in Berks County at the time. Suburban growth was at first limited to public transportation; however, the use of the automobile changed that trend. Its use for commuting purposes has led to further residential development. In 1927 the borough of St. Lawrence was incorporated from the western section of Exeter.

The village of Lorane was first established on land first purchased in 1835 by Isaac Kass from the Lincolns, who in those days owned a large portion of the Township. Seidel's Forge, a well-known landmark in the area, and was first owned and operated by H.C. Seidel, of Gibraltar, in 1870.

In the early days of the P. & R. Railway, patrons could board a train to go to Reading or Birdsboro, and in 1860 the railroad company built a station. The station was first known as Exeter Station. Petitions began to circulate proposing to change the name on account of a place in Luzerne County by the name of Exeter. Freight and mail were often sent to the wrong place. In 1900 both the post office and the railroad station was changed to Lorane, after Alsace-Lorraine in Europe, from which section a number of Exeter's early settlers came.

There were many successful industries that helped to shape the growth in the area. These included: Washington Kissinger's store, hotel in 1860, and first distillery; H.B. Levan opened a creamery in 1881, and a grove for a picnic area in 1892; James Toole operated a broom factory; in 1883 Henry Graeff built a dwelling and large poultry plant on Neversink street; in 1892, John H. Close and A.H. Kretz (operated by the name of Kretz & Close) built a distillery and a warehouse No. 1 having a capacity of 12,000 barrels, and in 1893, warehouse No. 2 having a capacity of 25,000 barrels (in 1894 the name was changed to Neversink Distilling Co., Ltd).

Pennsylvania Historic Museum Commission: Bureau for Historic Preservation National Register Listed Properties Exeter Township, Berks County

Historic Resou	rce Site	Listed	Status Date	Address	Historic Importance
	Daniel Boone Homestead Site & Bertolet Cabin	Listed	03/24/1972	2 mile North of Birdsboro	Famous pioneer and hunter Daniel Boone's homestead. Daniel Boone pioneered from Berks County to Missouri
	John Bishop House	Listed	06/27/1985	L.R. 06110 & T-434	Georgian Style single dwelling home; played a significant role in Commerce

Pennsylvania Historic Museum Commission: Bureau for Historic Preservation National Register Listed Properties Exeter Township, Berks County Continued...

Historic Resource Site	Listed	Status Date	Address	Historic Importance
Boonecroft	Listed	07/26/1982	Oley Line Road. On (T-465)	George Boone Log house site; Erected 1720; Father of Daniel Boone the-Kentucky Pioneer-this Colonial Stone house built 1733.
Mordacai Lincoln House	Listed	11/30/1988	Lincoln Rd.	This House is a rare example of a stone settler's cabin as a primitive stone dwelling of the settlement period. One of the oldest houses in Berks County (built in 1733).
Mill Tract Farm	Listed	09/22/1977	Mill Rd. T-461, South of Limekiln Rd., Northeast Corner of Stonerville	This is an excellent example of an 18 th cn. farm-mill complex. The great majority of the buildings date from the mid or late 18 th cn. with a gristmill built in 1728; the Georgian section of the farmhouse was built by his son James who was uncle of Daniel Boone and remained in the Boone family until 1790.
Snyder Mill	Listed	11/08/1990	Oley Line Rd. at Monocacy Circle.	This mill is significant for its association with the county grist milling industry as it is representative of eighteen century custom mills

Pennsylvania Historic Museum Commission: Bureau for Historic Preservation National Register Eligible Properties

vationat Register Eugible Propertie Exeter Township, Berks County

Historic Resource Site	Eligible	Status Date	Address/ Location
Bishop-Tyson House	Eligible	06/14/1989	Rte. 422, Opposite Reading Country Club
Oley Line Hotel	Eligible	07/07/2000	800 Limekiln Rd.
Exeter Friends Meetinghouse	Eligible	04/14/1982	Boone Rd. T-465

Historical Marker's PHMC Historical Marker Program

Marker Name: Daniel Boone

County: Berks

Date Dedicated: 1957

Marker Type: Roadside

Location: US 422, 2 miles SE of Baumstown

Category: Misc.

Marker Text: Greatest of American pioneers and wilderness scouts. Born on Nov. 2, 1734. Spent the first 16 years of his life on the Boone Homestead three miles to the north. This property is a State historical shrine and is dedicated to American youth.

Marker Name: Daniel Boone

County: Berks

Date Dedicated: 1947/4/1

Marker Type: Roadside

Location: US 422 westbound at SR 2041 just E of Baumstown; US 422

eastbound at Baumstown Union Sunday School

Category: Misc.

Marker Text: Greatest American pioneer and wilderness scout. Born Nov. 2, 1734. Spent the first 16 years of his life on the Boone Homestead a few miles north. Now a State historical shrine

dedicated to American youth.

Marker Name: Daniel Boone Homestead

County: Berks

Date Dedicated: 1948

Marker Type: Roadside

Location: SR 2041 N of Baumstown

Category: Misc.

Marker Text: Here on Nov. 2, 1734, Daniel Boone was born and

lived until 1750.

Marker Name: Exeter Friends Meeting

County: Berks
Date Dedicated: 19795/7
Marker Type: Roadside

Location: Meetinghouse Road, .5 mile S of PA 562 & 2 mile W of Yellow House

Category: Religious

Marker Text: Established 1725 as Oley; name changed to Exeter, 1742. Present stone meeting house built 1759 near site of two previous log structures. Buried here are members of the Boone, Ellis, Hughes, Lee, and Lincoln families. Meetings discontinued

1899; building reopened for worship in 1949.

Marker Name: Hopewell Village

County:BerksDate Dedicated:1947/3/29Marker Type:Roadside

Location: US 422 east & westbound at PA 82, Baumstown

Category: Business & Industry

Marker Text: Hopewell Forge, 1744, and Furnace, 1770, were seven miles south. The furnace and the remains of an ironmaking community of the era are administered by the National Park

Service, with recreation areas.

Marker Name: Lincoln Homestead

County:BerksDate Dedicated:1947/3/29Marker Type:Roadside

Location: US 422 at twp. Road E of Mount Penn

Category:

Marker Text: Abraham Lincoln once wrote, "My ancestors were Quakers from Berks County, Pennsylvania." The stone house built in 1733 by his great-great grandfather is just south of here. It is

still standing.

ST. LAWRENCE BOROUGH





Black Bear Inn, Rte. 42 2(Perkiomen Ave.) and Oley Turnpike Rd, in St. Lawrence/Exeter (established in the late 1700's); one of the best -known hotels in the county, rebuilt by F.P. Esterly in the late 1880's. This was made famous when the Thomas Edison film Company made a motion picture around "Black Bear Hill". The movie stars made the Inn their headquarters. In addition to a huge dance hall, it once had a picnic grove and a small zoo.. During the late 1930's, it was a night club that featured the liked of Jackie Gleason.

According to Mr. Elmer H. Adams's historical collections and accounts, written in August, 1994, St. Lawrence was a small village, first called "Esterly" (named after a predominant land owner), which straddles the 1870 Oley Turnpike Road.

Bordered by forest, field and stream, it was a self-sustaining village of tightly-knit families. Here stores like the Charles H. Adams' General Store, located next to the 1898 two-story, four room, brick schoolhouse, thrived because, prior to the automobile, the only available public transportation to the City of Reading was by the Reading to Birdsboro trolley line boarded at the Black Bear Inn, or by the Reading to Boyertown trolley of the Oley Valley Railway Company. The daily social life of the village revolved around the centrally located combination of schoolhouse and store.

St. Lawrence differed from neighboring villages because of the employment opportunities and the scope of personal services offered. St. Lawrence began around the location of the largest employers, which were the two woolen mills (the A.J. Brumbach Woolen Mill and the Esterly Woolen Mill), both established well before 1900. They were followed by the St. Lawrence Dairy, founded in 1888, which also employed many, the John F. Lutz Furniture and Undertaking business, founded 1884, and maintained a steady work force. The Behm Butcher Shop and the Adams Store employed local help as well, and all these companies had their employees located near their jobs. In the village, one could find the services of a family doctor, a veterinarian, a painter, a cabinetmaker, a plumber, and carpenters. A shoe repairman and a blacksmith were nearby at Jacksonwald.

From these beginnings followed the residential development of St. Lawrence. By the middle of 1890's, after the success of a popular brand of woolen goods manufactured at the mill, known as "St. Lawrence" woolens, villagers petitioned for a post office to be named "St. Lawrence." However, since there was an existing Post Office named "St. Lawrence" in Pennsylvania, the name "Esterly"



Charles H. Adams' General Merchandise store, 3550 Lawrence Ave. (Rte. 562), St. Lawrence Borough as it appeared in 1910. Erected in 1900 by William H. Adams

was assigned. St. Lawrence was incorporated as a borough in 1927, being separated from Exeter Township. In this manner, necessary improvements could be provided, including recreational facilities through acquisition of vacant land when the Oley Valley Railway Company discontinued service.

Pennsylvania Historic Museum Commission: Bureau for Historic Preservation National Register Listed Properties St. Lawrence Borough, Berks County

Historic Resource Site	Listed	Status Date	Address	Historic Importance
LeVan Farm	Listed	12/19/1978	Pa 562	The LeVan Family was an old French family who has owned this land for 246. The collection of farm structures helps to make the LeVan farm a good example of a working, self-sufficient farm; built 1837.
John F. Lutz Furniture Co. & Funerary	Listed	02/16/1996	3559 and 3561 St. Lawrence Ave.	This property contains three contributing 19 th century resources: a combination house/shop, a warehouse/showroom, and a carriage house. It contains three buildings tightly arranged on a T-shaped, hillside lot. Historic functions: Domestic, single family dwelling; Industry/Manufacturing; Commerce/Trade; Specialty Store; Funerary

AMITY TOWNSHIP

Amity Township is the oldest incorporated Township in Berks County. The oldest structure, the Mouns Jones House is located in the Township. St. Gabriel's Church was the first congregation to be organized in Berks County.

The location of the Township influenced its history and development in various respects. Its location along the Schuylkill River made access possible, by both water and roads, to the eastern portion of William Penn's new colony. The accessibility to a great extent explains the settling of various nationalities in Amity Township.

The Swedes were the first people to settle within the present boundaries of Amity Township. In 1701 William Penn granted land for the settlement, known as the "Swedes Tract". This settlement, at Douglassville, called Morlatton by the early inhabitants of the region, is unique in the history of the County. It was not an extension of the frontier, cabin by cabin, as was the case in much of the westward movement in our Country. This

settlement was made by a group of Swedish people who had formerly resided along the Delaware River. A young Swedish pastor, Reverend Andrew Rudman, was the leader of this band of settlers. William Penn offered this tract to the Reverend.

By 1719, the settlement had progressed to the point that a need for the establishment of a local government was felt. According to the application that was presented to the court in Philadelphia, a request to form a Township to be called "Amity," from the Swedes Tract, which had an area of 10,500 areas, was officially presented. There was an actively functioning government in Amity Township during the period between its incorporation in 1719 and the validation of this action by the Court of Philadelphia County. Furthermore, the new municipality of Amity was recognized by the inhabitants of surrounding areas and by the officials of Philadelphia County. In addition to the Swedes, the English, Irish and Germans migrated into Amity Township. The fertility of the soils made Amity an attractive place for settlement. The population of Amity Township increased steadily during the eighteenth century.

HISTORIC SITES

There are many visible reminders in Amity of the Township's rich history. Homes of historic vintage, Pennsylvania Dutch bank barns, old churches and other structures are living evidence of Amity's formative social, agricultural and commercial development. The National Register of Historic Places includes five structures located in Amity Township and six eligible properties. Below are the tables that identify these resources.

Pennsylvania Historic Museum Commission: Bureau for Historic Preservation National Register Listed Properties Amity Township, Berks County

Historic Resource Site	Listed	Status Date	Address	Historic Importance
Griesemer/Brown Mill Complex	Listed	11/08/1990	Browns Mill Rd. T-465, 2250ft. West of Limekiln Rd.	This complex is important for its association with the county gristmill industry, as it is representative of a pattern of mills that were part of family farms. Architecturally, this mill is a good representative of a country custom mill of the mid 19 th century.
Old Swede's/ Mouns Jones House	Listed	01/21/1974	Old Philadelphia Pike	Small 2-1/2 story, stone house built in 1716 by one of the early settlers and is the oldest surviving house in Berks County. Mouns Jones, who, in 1701, along with fourteen other Swedes, took up 10,000 acres in what is now Amity Township, built the house. Mouns Jones had an excellent rapport with the local Indians and would serve as an agent from them in their dealings with the provincial government.

Pennsylvania Historic Museum Commission: Bureau for Historic Preservation National Register Listed Properties Amity Township, Berks County Continued...

	Old Saint Gabriel's Episcopal Church	Listed	03/08/1978	Intersection of Rte. 422 & L.R. 06180	In 1801, Old St. Gabriel's was built to accommodate a parish that is believed to have been the first church in the county. The founding of St. Gabriel's was in 1720 in the first log church.
Whites Aill Bashics In Pa	Weidner Mill	Listed	11/08/1990	Blacksmith Rd. at Manatawny	Built in 1885, Two hundred years ago the waterpower at this site was first developed and as a result the resources on this property have been associated with milling in Berks County for Two centuries. Architecturally, this mill is a fine example of Berks County Victorian Style mill architecture.
	White Horse Tavern	Listed	04/21/1975	509 Old Philadelphia Pk.	2-1/2 story red sandstone structure in the Georgina style, originally constructed in 1765 located in present day Douglassville. This was the first permanent settlement within the bounds of what is now Berks County. It was a mustering and training site for Revolutionary War soldiers.

Pennsylvania Historic Museum Commission: Bureau for Historic Preservation National Eligible Listed Properties Amity Township, Berks County

Eligible Historic Resource Site	Status Date	Address
Ben Franklin Inn	05/26/1992	Rte. 422 at Monocacy Creek Rd.
George Douglass House	05/18/2000	Old Philadelphia Pk.
Irey Mansion	05/18/1998	Rte. 422 (North side), 1000ft. West of Old Swede Rd.
Moyer's School	05/08/1990	Monocracy Creek Rd. L.R. 06179 at Junction with Rte. 422.
T.B. Charles Property	05/18/1991	Junction Rte. 562 & Rte. 662, Southeast Corner
Perkiomen Turnpike Milestone	05/08/1990	North Side of Rte. 422

Marker Name: De Benneville House

County: Berks

Date Dedicated: 1948/12/4 **Marker Type:** Roadside

Location: PA 622, 1.5 miles N of Yellow House

Category: Religious

Marker Text:

Built 1745 by Dr. George de Benneville, preacher in this area 1743-55, and founder of Universalism in America. He died in Philadelphia in 1793. The house is 2.25 miles away on a side road. Marker Name: Fisher House

County: Berks

Date Dedicated: 1948/8/28 **Marker Type:** Roadside

Location: PA 622, 1.4 miles N of Yellow House

Category: Misc.

Marker Text:

This home, built 1801 by Henry Fisher, is a fine example of late Georgian architecture. Brought from the British Isles, this style is reflected in old homes of eastern and southern Pennsylvania.

Exeter, Amity, and St. Lawrence Joint Comprehensive Plan: Identification of Historic Resources

Exeter Township List of Historic Resources

Number

Historic Resource

- 1 Hill Mill; Wanner's Mill
- 2 Schofer Sawmill
- 3 Breiner Paper Mill; Rifle Boring
- 4 Moyer Tilt-Hammer; Seidel
- 5 Boyertown Trolley Bridge
- 6 Carsonia Park Area
- 7 Carsonia Inn
- 19 Trolley Bridge
- 23 Bechtel Grist Mill
- 24 Keim Clover Mill & Forge
- 25 Moyer & Yocum Forges; Althouse; Feed Mill; Police Home; Ice House
- 26 Exeter Tilt Hammer
- 27 Troxel Property
- 28 Dam & Race to Bishop Mill
- 29 Bishop Grist Mill; Wamsher's Mill
- 30 Bishop Mansion
- 31 Blacksmith Shop
- 32 Lincoln Sawmill
- 33 Seidel Steam Forge
- 34 #3 Furnace of E & G Brooke Iron Co.

Limekiln-Toll Gate #2, Oley Turnpike Road; Creamery; Eight-Cornered School;

- 35 P.O.S.. of A. Hall; Snyder General Store; Post Office; Oley Line Hotel
- 36 Gehr Fulling Mill
- 37 Snyder Grist Mill
- 38 George Boone, Sr. Log Cabin 1720
- 39 George Boone, Sr. Stone House and Tannery 1733
- 40 Judah Boone Tilt-Hammer Forge 1824
- 41 James Boone Mine
- 42 Moses Boone Wheelwright Shop
- 43 George Boone, Jr. Grist Mill; 1st Mill in Town
- 44 Judah Boone Grist Mill; Bechtel Mill
- 45 James Boone Sawmill
- 46 Friends Meeting House, School and Cemetery
- 47 Christian Link Pottery
- 48 Mahlon Guldin Pottery
- 49 Daniel Boone Homestead
- 50 Toll Gate #1, Oley Turnpike
- 51 Jacksonwald Hotel
- 52 Hans Martin Gerische House 1741
- 53 Schwarzwald Lutheran Church
- 54 Schwarzwald U.C.C. Church; Stone School; Cemetery
- 55 Ritter Tavern

Exeter Township List of Historic Resources Continued

Number Historic Resource

- 56 Capt. Gechter's Washington Hotel; Bertie's Inn
- 57 Stonersville Hotel; Post Office
- 58 Stonersville Sunday School
- 59 Pet Cemetery
- 60 Jung-Young Private Cemetery
- 61 Ritter Private Cemetery
- 62 Heckler-Esterly Private Cemetery
- 63 DeTurck Private Cemetery
- 64 Monocacy U.B. Church
- 65 Perkiomen Turnpike Milestone
- 66 Old Baumstown Store; Post Office
- 67 Perkiomen Turnpike Toll House
- 68 Baumstown Sunday School; Former Cemetery
- 69 Dr. Baum's Hospital; "Strawberry Mansion"
- 70 Perkiomen Turnpike Milestone
- 71 King George Inn; Red Lion Inn
- 72 Exeter Bible Church
- 73 First Baptist Church
- 74 Greater First Baptist Church
- 75 Birdsboro Depot; Covered Bridge
- 76 Mordecai Lincoln House 1733
- 77 Yeich Family Cemetery
- 78 Perkiomen Turnpike Milestone
- 79 Lorane Distillery
- 80 Exeter Station' Lorane Station; Store; Post Office; Hotel
- 81 Lorane Chapel
- 82 Forest Hills memorial Park
- 83 Klapperthal Pavilion; Neversink mountain Gravity Railroad; Klapperthal Station
- 84 Perkiomen Turnpike 1/50 Milestone
- 85 Reformation Lutheran Church
- 90 Fairview Chapel Sunday School
- 92 Jacksonwald Building
- 93 Messerschmidt Private Cemetery
- 100 Baumstown One-Room Brick School
- 101 Fairview One-Room Brick School
- 102 2nd Fairview Brick School
- 103 Baumstown School; Flag Factory
- 104 Jacksonwald Stone School
- 105 Jacksonwald One-Room Brick School
- 106 Friends One-Room Brick School
- 107 Stonersville One-Room Brick School
- 108 Snydersville Stone School
- 109 Snydersville One-Room Brick School
- 110 Hill One-Room Brick School
- 111 Antietam One-Room Brick School
- 113 Allsort or Neversink One-Room Brick School; Neversink Sunday School

Exeter Township List of Historic Resources Continued

Number Historic Resource

- 114 Neversink 2-Room School; Bully Lyons Restaurant
- 115 Greentree or Suckertown One-Room Brick School
- 116 Centre or Stonetown One-Room Brick School; Stonetown Sunday School
- 117 Buttertown or Woodville One-Room Brick School
- 118 Lorane One-Room Brick School
- 119 Lorane Elementary School
- 120 Reiffton Elementary School' School Administration Building
- 122 Jacksonwald Elementary School
- 123 Exeter Junior High School
- 124 Exeter Senior High School
- 125 Exeter Township Building
- 126 Exeter Ambulance Association
- 127 Reiffton Fire Company
- 129 Stonersville Fire Company

St. Lawrence Borough List of Historic Resources

Number

Historic Resource

- 8 Ideal Camp
 - 9 Custer Fulling Mill
 - 10 Brumbach Woolen Mill
 - 11 Keller Paper Mill
 - 12 Brumbach Oil Mill
 - 13 DeHart Hat Factory
 - 14 Breiner Oil Mill
 - 15 Johnson Foundry; Griesemer Grist
 - 16 Guldin Carding Mill; Hat Factory
 - 17 LeVan Glue Factory, Ahrens Fertilizer Factory
 - 18 Brumbach Woolen Mill; Esterly Woolen Mill
 - 20 A.J. Brumbach St. Lawrence Woolen Mill 21 P.O.S. of A. Hall & Boarding House
 - 22 LeVan Sawmill & Homestead
 - 86 Black Bear Inn
 - 87 Lutz Furniture Store
 - 88 St. Lawrence Chapel; Community Hall
 - 89 St. Lawrence Community U.C.C. Church
 - 91 Esterly Post Office
- 112 Brumbach Stone School and St. Lawrence Brick School
- 121 St. Lawrence Elementary School
- 128 Lausch Elementary School

Amity Township Historic Resources

Number

Historic Resource

- 130 Weidner Gristmill
- 131 Griesmer-Brown Mill Complex
- 132 St. Gabriel's Church & Chapel
- 133 White Horse Inn
- 134 George Douglass Mansion
- 135 Mouns Jones House
- 136 Covered-Bridge Keeper's House

CHAPTER 23

MAJOR ISSUES FACING THE REGION

INTRODUCTION

The following issues to be addressed in the Comprehensive Planning process were identified from responses to the planning questionnaire, interviews with community leaders identified by the Joint Municipal Planning Committee members, analysis of background maps and data, and discussion at Joint Municipal Planning Committee meetings.

ISSUES

Agricultural Preservation

- Exeter Township has an effective agricultural preservation program in place. Should preservation efforts be implemented in Amity Township?
- In the phone interviews conducted as part of the comprehensive planning process, many of the people surveyed like the rural character of the Region. The presence of agriculture and rural settings were mentioned frequently. Most of the people were in favor of preserving agriculture. Also, most of the people were in favor of saving remaining rural character of the area.

River and Watershed Conservation

• The floodplain areas of the Schuylkill River and its tributaries should be protected as important natural resources and are important recreational resources.

Preserving Rural Character

• The Region still contains areas with significant rural character that is valued by its residents. Many people believe that the rural character should be preserved.

Bikeways, Trails, and Recreation Areas

- The Region contains a number of recreational opportunities, but additional trails could facilitate access to those opportunities.
- There are many options to link community facilities to each other through establishing a Region-wide biking/hiking trail system to provide travel alternatives for residents and visitors. These trails can be used to link residents to parks, work, home and other destinations instead of traveling via automobile. These trails would provide links to existing resources within the Region such as parks, historic sites, and provide recreation opportunities.

Implications of the Route 422 Corridor

- The corridor provides economic opportunities to both Exeter and Amity Townships. Commercial and industrial development will create more jobs for local residents and residents in nearby areas. However, with more commercial and industrial development, there will be more commuter, delivery, and visitor traffic into an already strained road system.
- Commercial corridors can have many problems associated with them if not properly planned and if appearance, signage, access management, traffic calming, and design to ensure a proper flow of traffic are not addressed.

Revitalization in St. Lawrence Borough

- People interviewed felt that the Borough of St. Lawrence was an important urban center and the need to enhance and maintain the Borough was of high importance. Finding a use for vacant buildings was also very important. The need to rejuvenate a hometown feeling was also an issue raised by people.
- Main Street Programs improve downtown streetscapes, attract, retain and support businesses, attract customers, and create a momentum for business owners to participate in the revitalization process by adding such amenities as shade trees, pedestrian circulation enhancements, sidewalk improvements, increased parking opportunities, benches, decorative lighting, and building façade appearance.

Future Employment Opportunities

• The Region's municipalities will need to determine what types of commercial and industrial uses should be accommodated in the Region, and where. Allowing for the appropriate types of development, and planning land use and infrastructure,

can aid in economic development which is a plus to the Region, rather than a negative.

- Within the region, there are a number of vacant industrial buildings, which have had an economic impact on the area. When asked, "Where new industry should locate?" respondents to the Planning Questionnaire had the following recommendations: In areas where industry currently exists and within industrial parks.
- Communities should work with the County and Economic Development Organizations to identify a strategy for marketing available industrial sites and land within the region.

Sewer and Water Availability

- Extensions into areas designated for preservation would work at cross-purposes to this Plan.
- Infill and development where public sewer and water capacity are available can reduce sprawl and inefficient development patterns, but other infrastructure should be in place to support such development. Service areas should be those determined by the municipalities and consistent with the future land use plan.

TRANSPORTATION

Public Transportation Needs

- Public transportation can relieve some of the traffic issues development may pose
 on the Region. A circulator shuttle to link a multi-modal transit station and
 expanded BARTA routes have been discussed. Other discussion includes the
 development of a trail system as an alternative to convention transportation to
 connect people to and from possible employment centers and public transit.
- Additional opportunities within the Region should be addressed, including connections within the Region and to destinations outside the Region.

Residential Growth Patterns

• As residential development occurs in the Region, it impacts the Region's roads. There are already access management and traffic flow concerns on roads in the study area. If more people move into this area, there will be additional traffic concerns, which must be managed.

 Population growth has resulted in the building, expansion, and planning of new school facilities. As growth continues, there will be continued demand for additional school facilities.

Access Management and Circulation Issues on State Routes (Route 422 and Route 662)

- Traffic volumes have increased on roads not intended for the volumes experienced or the function performed. Substantial through traffic moves through the area on Route 422 and Route 662.
- Areas along Route 422 and Route 662 will require corridor management, especially as additional commercial and industrial development occurs.

Historic Resources

- There are a number of historic resources in the Region. It must be determined whether land that is developed near historic resources must be developed in such a way to mitigate the impacts on historic resources. Prior to development of land on which historic resources remain, should developers be required to prepare a plan for the preservation of historic resources and their context?
- Should trail systems link historic sites and should informative displays be erected near the historic sites in the Region?

CHAPTER 24

TRAFFIC CIRCULATION

INTRODUCTION

Land use and traffic circulation are ultimately linked. The efficient use of land as well as the local quality of life is highly dependent on an effective circulation network. In order for the network to adequately serve the land uses, it must be continually reevaluated as new development occurs. Different types of land uses require different road characteristics, and meeting future transportation needs is dependent on understanding the current network.

When programming road improvements, existing and proposed development areas should be considered. In turn, future development should not result in patterns which will 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 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 a community by influencing land uses, the character of a community is influenced by the circulation system itself. A municipality with relatively narrow winding roads abutting agricultural and wooded areas will often be perceived has having a rural character. However, a municipality with a circulation system of three and four lane highways abutting intensive development will be perceived as having an urban or suburban character. 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.

In the chapter on Regional Influences, some of the factors affecting circulation in the area were discussed, including improvements to the Route 422 Corridor, which could result in increased land use pressure and traffic volumes in both Exeter and Amity Townships; the improvement of the Route 724 and I-176 interchange project in Cumru, which will affect traffic volumes in western Exeter Township; and the use of side roads within the area to carry thru traffic trying to avoid Route 422.

Traffic has increased in the area because of a number of developments locating within the three municipalities and will further increase as additional developments in Exeter and Amity Townships are built. Exeter Township has planned for intersection improvements at 36th Street and Perkiomen Avenue, Perkiomen Avenue and 37th Street, US 422 and West 47th Street, US 422 and Gibraltar Road, US 422 and Lorane Road, US 422 and Shelbourne Road, US 422 and Lincoln Road, East Neversink Road and Circle Avenue, Shelbourne and Gibraltar Roads, Shelbourne and Route 562 and Schoffers Road and Route 562. Amity Township has prepared a Land Use Assumptions Report, Roadway Sufficiency Analysis and Transportation Capital Improvements Plan to enable it to receive traffic impact fees from developers. The Transportation Capital Improvements Plan proposed improvements along Limekiln Road and Route 562, Amity Park Road and Weavertown Road, Weavertown Lane and 662, Geiger Road at Weavertown, Monocacy Hill and Hill Roads, Old Airport Road at Route 562, Route 662, Weavertown, Hill and Moraltton Roads, Blacksmith Road and Routes 562 and 662, Route 662 and Pine Forge and Morlatton Roads, and Nicholson Avenue and Toll Gate Road. Some of those improvements have been completed.

Composition of the Circulation Network

Exeter Township has the highest total of road mileage in Berks County. Amity Township also had one of the higher totals of road mileage in the County and was tenth overall. St. Lawrence Borough had a total of 7.8 miles of roads. In Berks County, roads are owned and maintained by the State or by the municipality. The circulation system in the St. Lawrence, Exeter and Amity area consists of a variety of roads, from the high volume Route 422, to minor arterials such as Routes 82, 562 and 662, to residential streets in the Borough and Township subdivisions, to township roads that tend to be narrow and winding. Because each municipality's needs have been different over time, major improvements have been varied in the past. All of the roads, with the exception of Route 422 which transverses the central portion of the region, are two-lane, serving mainly local traffic. Road mileage is indicated below.

TABLE 1

HIGHEST NUMBER OF ROAD MILES

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP, AMITY TOWNSHIP, BERKS COUNTY

Municipality	State Miles	Municipal Miles	Total
Exeter Township	37.35	94.83	132.18
Greenwich Township	34.09	79.63	113.72
Muhlenberg Township	31.17	72.09	103.26
Spring Township	17.70	82.93	100.81
Bethel Township	48.15	50.86	99.01
Cumru Township	33.76	60.82	94.58
Robeson Township	35.13	57.09	92.24
Maxatawny Township	26.91	48.74	75.65
Richmond Township	28.20	44.10	72.30
Amity Township	32.16	40.13	72.29

Source: Pennsylvania Department of Transportation, Roadway Inventory Summary, 2000.

East-West Transportation Corridors

The highest volume road passing through the area is of course US 422. This four lane semi-divided highway is part of a system that traverses the entire County and is the primary east-west transportation corridor in the region. Since the completion of the West Shore and Pottstown Bypasses, US 422 functions as a limited access highway in many areas, providing uninterrupted travel from Lebanon in the west to the outskirts of Philadelphia in the east. Since this road bisects the area, its influence is quite significant because it allows easy access to employment centers, which will likely influence new housing construction in the area.

Although US 422 has a major effect on the area, another important road in terms of travel in the area is Route 562. It links local residents with Route 662 in the east and US 422 in the west, traversing the area in a slight southeasterly-northwesterly fashion and running roughly parallel to US 422.

Other roads carrying east-west traffic include: Jacksonwald Avenue, Parkview Road, Oley Turnpike Road, Painted Sky Road, Lincoln Drive, Weavertown Road, Monocacy Hill Road and Pine Forge Road.

North-South Transportation Corridors

Because most of the travel through Berks County has been historically east-west oriented, the number of north-south routes is more limited. This phenomenon is particularly evident within the St. Lawrence, Exeter and Amity region. Routes 82 and 662 are major north-south routes in this part of the County. Route 662, which transverses eastern Amity Township facilitates inter-county travel linking Route 78 to the north with US 422 to the South. Route 662 intersects with Route 562 in the Village of Yellow House near the Amity and Oley Township line.

Church Lane/Wegman Road, Ritters Lane/Wegman Road, Oley Line/Old Tulpehocken Road, Limekiln Road, Gibraltar Road, Old Airport Road and Blacksmith Road extend through the area and are locally-oriented north-south routes. The primarily serve intramunicipal travel.

Existing Roadway Classification

The definitions of the road classifications are as follows, developed from the classification in the Berks County Comprehensive Plan Revision:

<u>Arterial Street</u> – Arterials provide for the movement of large volumes of traffic over longer distances; however, these highways generally operate at lower speeds than arterial expressways due to the presence of traffic control devices and access points.

<u>Collector Street</u> – Collector streets 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.

<u>Local Street</u> – Local streets 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.

The Berks County Comprehensive Plan Revision also contains the following recommended design features for the various highway functional classifications:

HIGHWAY FUNCTIONAL CLASSIFICATIONS AND RECOMMENDED DESIGN FEATURES

Classification	General Provisions	Right-of-Way Width (ft.)	Cartway Width
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	35-55 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	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 existing Traffic Circulation Conditions map. The following is the list of each type of functional road:

Expressway/Principal Arterials include: U.S. Route 422

Minor Arterials include: Route 82, Gibraltar Road (from Route 422 to the southern boundary of Exeter Township), East Neversink Road (from the West Shore Bypass to Route 422), Old Swede Road (Route 662), Boyertown Road (Route 562), and Shelbourne Road.

Major Collectors include: Butter Lane, Bingaman Street, Five Points Road, Limekiln Road, Oley Turnpike Road, Shelborne Road, Gibraltar Road (from Shelbourne Road to Route 422), East Neversink Road (from the West Shore Bypass to Painted Sky Road, Painted Sky Road, Lorane Road, Lincoln Road, West Neversink Road (from Route 422 to East Neversink Road), River Bridge Road, Main Street (Amity Township), Old Airport Road, Monocacy Creek Road, Blacksmith Road, Weavertown Road and Pine Forge Road.

Minor Collectors include: Wegman Road, Dautrich Road, Church Lane, Schoffers Road, Rugby Road, Stonetown Road, Pineland Road, Daniel Boone Road, Old Tulpehocken Road, Red Lane, Fairview Chapel Road, Weavertown Lane, Monocacy Road, Tollgate Road, Monocacy Hill Road, Valley Road, Hill Road, Amity Park Road, Russel Avenue and Morlatton Road.

Local Access Roads include: all other roads.

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.

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 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 are reduced and traffic is funneled from a roadway with a higher number of lanes to one with a lower number of lanes.

Although, the St. Lawrence, Exeter and Amity area is highly populated, capacity on the area roads is influenced by traffic originating outside the area. Roads most likely to experience capacity problems are US 422, Routes 562, 662 and 82, Shelbourne Road and East Neversink Road. All of these roads are carrying local as well as regional traffic, and

increasingly higher volumes. Traffic volumes are beginning to increase on other roads as well.

Road Corridor Concerns

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 Route 422. 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 area 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. Because of a number of access and safety problems, US 422, Route 562, Route 662, and Shelbourne Road are key corridors requiring attention.

Route 422 Issues

Route 422 has had a major influence on the development of eastern Berks County since the 18th Century. It has always been the major traffic route in the area, and the route along which most of the commercial development and much residential development has taken place. As the Route 422 Corridor continues to develop, it becomes more congested and more difficult to travel. As drivers seek alternative routes to 422, and development occurs outside the 422 Corridor, other roads in the area receive increasing traffic volumes. Roads, which once wound through agricultural areas, woodlands, and areas of open space, have become lined with residential subdivisions and experience increased traffic volumes from those subdivisions. It will be necessary to balance maintaining the rural nature of portions of the circulation system where possible with the need to insure that a circulation system evolves which is safe, well maintained and capable of meeting the demands placed on it.

Discussion has occurred regarding a bypass to the current Route 422 through both Exeter and Amity Townships. All municipalities involved in this joint comprehensive planning effort support the eventual construction of a bypass to the existing Route 422 corridor.

However, the exact location and design of such a bypass is outside the purview of this Plan. The Berks County Planning Commission has stressed general improvements to the corridor as an means by which immediate and short-term issues involving safety and congestion can be addressed.

Alternative Forms of Transportation

A separate chapter has been provided on pedestrian circulation, and the focus of this background chapter will be on vehicular traffic. In the plan for circulation, though, it will be necessary to address multi-modal facilities such as bicycle-pedestrian, transit-pedestrian, and bicycle-transit.

Bus Service

Barta provides bus service to St. Lawrence Borough and Exeter Township via St. Lawrence Avenue (Route 562) Butter Lane, Perkiomen Avenue and Route 422. Stops include Boscov's East/Reading Mall, Shelbourne Square, Wal Mart and Weis Markets. Capitol Trailways provides daily and weekend service between Reading, Lebanon and Harrisburg. Capitol Trailways utilizes the inter-city bus terminal at 3rd and Penn Streets in Reading.

Rail Service

Freight service is provided on the Norfolk-Southern line, paralleling Route 422. This line frequently experiences freight travel on a daily basis. A study is also underway to explore the development of a 62-mile passenger rail service between Reading and Philadelphia. Schuylkill Valley Metro stops have been initially planned for Exeter and Amity Townships. With the potential for future development of passenger rail service in the St. Lawrence, Exeter and Amity area, planning for land uses that are conducive and supportive of this type of transportation is important.

CHAPTER 25

COMMUNITY FACILITIES

INTRODUCTION

Community facilities are considered to be public buildings and structures that house programs and activities essential to municipal government operations and provide necessary services to residents of the area. Public services include activities ranging from police and fire protection to libraries and recreation programs. The extent to which facilities and services are available in any one municipality is dependent on many factors including population, tax base, the circulation system and regional location.

Facilities and public services can be provided in any number of ways depending on the needs of the population, the philosophy of municipal officials, financial resources available, and whether these are offered regionally. Financing for such facilities and services can be provided through available funding or through contracts with private or quasi-public entities, thereby tailoring activities and expenditures for specific needs. Ultimately, a joint approach to providing such facilities and services allows for several municipalities to share in the cost of these facilities and services.

The community facilities which have been mapped include, among others, the St. Lawrence Borough Building on St. Lawrence Avenue, the Exeter Township Building just off Route 422 and the Amity Township Building on Weavertown Road. The Exeter Community Library is located on Prestwick Drive in the Township. Post offices are located along Old Swede Road (Route 662) in Douglasville and St. Lawrence Avenue in St. Lawrence.

M. Luther Lausch Elementary Center is located on Elm Street in St. Lawrence Borough. Lorane and Jacksonwald Elementary Schools are located in Exeter Township along Rittenhouse Drive and Church Lane, respectively. The Exeter Senior and Junior High School educational complex is located between 37th and 39th Streets in Exeter Township. Reiffton Elementary School has been built east of those schools. The Amity Primary Center and Amity Intermediate Center are located off Weavertown and Old Airport Roads in Amity. The Monocacy Kindergarten Center is located on East Main Street in Douglasville.

The Exeter Township garage is located adjacent to the Township building in the central portion of the Township. Amity Township also maintains a garage adjacent to its municipal building in Weavertown.

The Reiffton Fire Company is located on Business Route 422 in Exeter Township. The Stonersville Fire Company is located in Stonersville in Exeter Township and the Amity Fire Company is located on Pine Forge Road in Amity Township. The Monarch Fire Company is located on Route 422 in Amity Township. The Mt. Penn Fire Company is located at the St. Lawrence/Mt. Penn boundary on Butter Lane.

Religious resources available in the municipalities include the St Catherine's Roman Catholic Church, Schwarzwald Lutheran Church, Schwarzwald United Church of Christ, Reformation Lutheran Church, Grace Baptist Church, Exeter Friends Meeting House, Lorane Chapel, Love Faith Chapel Christian Assembly, Exeter Bible Church, Daniel Boone Bible Baptist Church, and First Baptist Church in Exeter Township. The St. Paul's United Church of Christ, St. Paul's Lutheran Church, Hope Church, and St. Gabriel's Episcopal Church and Chapel are located in Amity Township. The Community UCC is located in St. Lawrence.

School Districts

St. Lawrence Borough and Exeter Township comprise the Exeter School District, while Amity Township is part of the Daniel Boone School District. The Exeter School District has four elementary schools and two secondary schools, a Senior and Junior High School. 2003-04 enrollment in the school district was 4,076, compared to 1999-00 enrollment of 3,751.

The Daniel Boone School District is comprised of Amity and Union Townships and the Borough of Birdsboro. The school district has a kindergarten center, two elementary schools, and intermediate center. The High School and Middle School are both located near Birdsboro. 2003-04 enrollment in the school district was 3,503, compared to 2,842 in 1999-00.

Some concerns facing the school districts include a lack of classroom space, increased enrollment at the elementary level, and projected building maintenance and improvement projects. The need for additional facilities will be directly related to the rate of growth in the Borough and the Townships. Consideration is being given to feasibility of construction of additional school facilities at the Laush site in St. Lawrence. The Exeter Senior High School is undergoing additions and renovations. A new middle school is being constructed along Weavertown Road in Amity Township. A new elementary school is proposed to be constructed along Monocacy Creek Road in Amity Township because of the continued population growth in the school district.

Police Protection

Exeter Township and Amity Township both have their own police forces, headquartered in their respective municipal buildings. Exeter Township provides police service to the Borough of St. Lawrence.

Ambulance Service

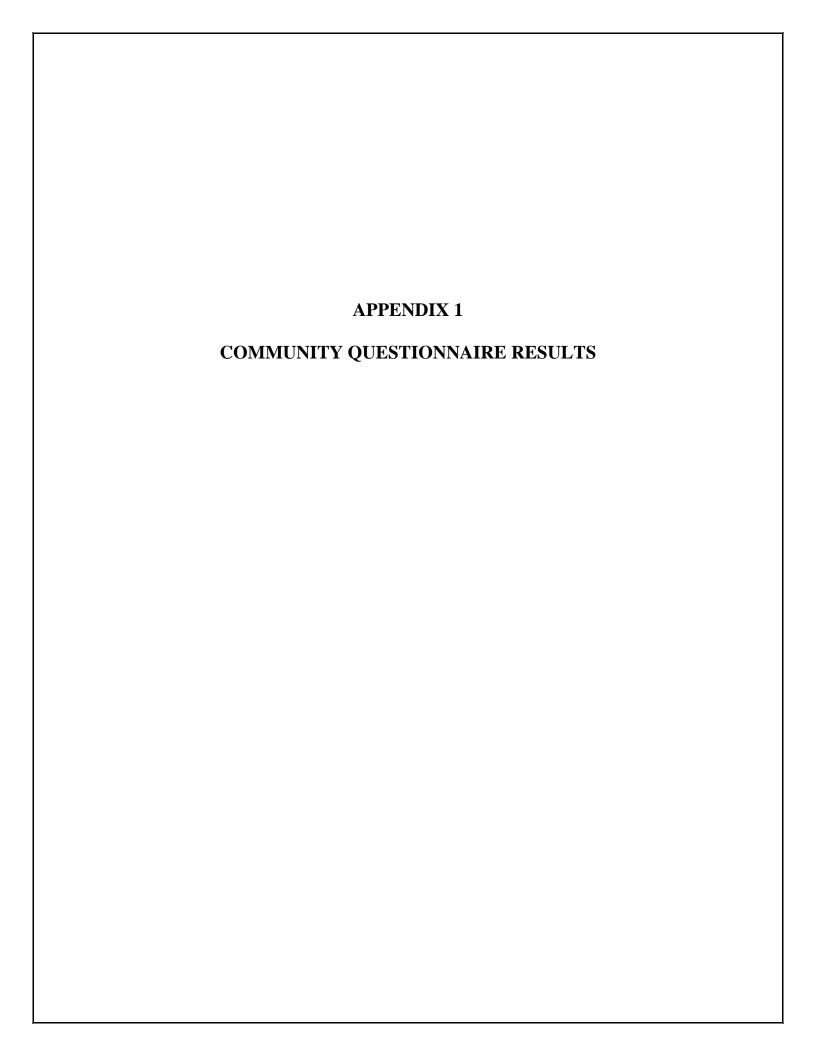
Ambulance service to the Townships and the Borough is provided by Exeter Township Ambulance Association, which has a station adjacent to the Exeter Township Building. Birdsboro, Pottstown and Oley Ambulance Associations also provide additional ambulance coverage to areas in Amity Township based on location.

Library Service

The only library in St. Lawrence, Exeter and Amity Area is the Exeter Community Library, which is open to people with a Berks County library card. However, libraries are available in nearby Birdsboro and on Perkiomen Avenue in Reading.

Fire Protection

Two fire companies are located in each Township, the Reiffton and Stonersville Volunteer Fire Companies in Exeter Township and the Amity and Monarch Volunteer Fire Companies in Amity Township. The Mt. Penn Fire Company is located in the Borough. These fire companies are volunteer companies, and a continuing concern of volunteer companies is sufficient number of volunteers to allow them to provide adequate fire protection. Fire companies provide mutual assistance to each other in fire emergencies, but it may be necessary for the fire companies and municipalities to work more closely together in the future to assure continued adequate fire protection.



AMITY – 13 RETURNS ST. LAWRENCE-EXETER-AMITY REGION PLANNING QUESTIONNAIRE

Rural setting/open space – 6	Good schools
Born/grew up here – 6	Low tax area
Central to Reading & King of Prussia	Low crime area/low populated area
Quiet, peaceful small community in a count	
Convenient to main roads	•
We wanted large piece of property in a rural	I farming area
Away from city but close to nearly all other	needs
What do you like most about the St. Lav	vrence-Exeter-Amity Region?
Open space/country atmosphere – 4	
Was rural – 2	Amity region
Close proximity to malls, outlets, theater, et	
	ts Low populated area, low crime site
Close enough to shopping, hospitals, enterta	inment, but still maintains enough of a rural
flavor	
(See attached)	
What kind of community do you want th	ne St. Lawrence-Exeter-Amity Region to
What kind of community do you want th	ne St. Lawrence-Exeter-Amity Region to
What kind of community do you want the future? Quiet rural community	ne St. Lawrence-Exeter-Amity Region to Safe
What kind of community do you want the future? Quiet rural community Rural with open space	Safe
What kind of community do you want the future? Quiet rural community Rural with open space More balance between commercial, light inc	Safe
What kind of community do you want the future? Quiet rural community Rural with open space More balance between commercial, light income of the community of the commercial of the community of	Safe dustry and residential
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What kind of community do you want the future? Quiet rural community Rural with open space More balance between commercial, light incommended in the community of the commercial of the commence of the community of the commence of the community	Safe dustry and residential ver population, sewers
What kind of community do you want the future? Quiet rural community Rural with open space More balance between commercial, light incommunity Great place to live with lots of open space Less development, smaller government, low Less development on the housing side Family friendly with special consideration f	Safe dustry and residential ver population, sewers for seniors
What kind of community do you want the future? Quiet rural community Rural with open space More balance between commercial, light incommendate of the comment of the comment of the comment, lowed by the comment of the community of the commun	Safe dustry and residential ver population, sewers for seniors
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What kind of community do you want the future? Quiet rural community Rural with open space More balance between commercial, light incommunity and provided the space of the s	Safe dustry and residential ver population, sewers for seniors growth on areas, less large scale housing development
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6.	From 1990 to 2000, the population of the St. Lawrence-Exeter-An 6604 from 25,236 to 31,840, a 26% increase. In the future, would of growth:		•
	Stay the same 3 Increase 1 Decrease 9		
7.	If further residential development occurs, are you in favor of it hap	opening as:	
		Yes	No
	Large individual lots scattered throughout the Townships along existing roads	9_	3
	Cluster developments in which higher density single family housing is offset by open space and recreation areas	4	9
	Conservation single family home developments in which conservation areas containing the special features of a tract are identified first (typically 50 to 80% of the tract remains in open space), houses are located to maximize views of the open space, and road systems and lot lines are established to conform to open space and house locations.	12	1
	Large scale developments involving a mixture of single family homes, townhouses and apartments	3	9
	Single family and two family homes on 1/4 acre lots		13
	Retirement communities	10	3
	Single family homes on one acre lots along new streets built by subdividers	3	10
	A village pattern, with a mix of uses and emphasis on human scale and walkability	7	2
	Mobile Home Parks	1_	12
	Apartment and Townhouse Developments	2	11
	Assisted Living Facilities	10	3

8.	How should the economic base	e of this	region ch	nange by the	ne year 2	020?		
	Agriculture	Grow	4	Stay the	same	8	Decline	
	Tourism	Grow			same			2
	Heavy Industry		2	Stay the	same	5	Decline	5
	Light Industry		10	Stay the	same	1	Decline	2
	Office Development		10		same			1
	Warehousing		4	•	same			2
	Technology		11	•	same			1
	Commercial Development			Stay the	same	3	Decline	3
	Research Labs		5		same			3
9.	If additional industrial develop development should take place Planned industrial park	?	curs in th	ne region,	what patt	ern of	findustrial	
	Strips along roads							
	Individual sites near ex Other (Please specify)		dustries		6	_		
10.	If you think the community ne		tional co	mmercial	establish	ments	what types	s of
10.	businesses do you feel are need						, what types	, 01
	Grocery Stores Supermarkets Video Stores Drug Stores				$ \begin{array}{r} 2\\ 3\\ 1\\ 4 \end{array} $	- - -		
	Drug Stores Department Stores				4			
	Discount Stores				1	_		
	Clothing Stores				2			
	Mini Storage Facilities				1	_		
	Restaurants				11	_		
	Motels				2	_		
	Appliance/home furnish	hing/har	dware sto	ores	3	_		
	Day Care (Children)		5 ,, 612 5	3145	3	_		
	Day Care (Adult)				8			
	Service Stations				2	_		
	Doctor and Other Profe	essional	Offices		7			
	Convenience Stores				1			
	Fast Food Restaurants				4			
	Agriculture				5	_		
	Entertainment Establish	nments			4	_		
	Trade Schools				2	_		
	Nursing Homes				5			
	rearising fromes					_		

development should take place?	curs in the region, what pattern of commer
Shopping Centers	6
Strips along roads	$\begin{array}{c} -\frac{0}{2} \\ -\frac{3}{2} \end{array}$
In St. Lawrence Borough	
In the Villages in the Townships	
In or next to residential developme	ents2
Other (Please specify)	Enlarge existing malls
Do you feel that the agricultural land in the land?	e Townships should remain as agricultura
Strongly agree 9 Agree 1 Disagree 1 Strongly disagree	<u></u>
Agree <u>1</u>	
Disagree <u>1</u>	
Strongly disagree	
No Oninian	
No Opinion 1 If you feel agricultural land should be pres	served for farming, why do you think that
If you feel agricultural land should be pres	served for farming, why do you think that
If you feel agricultural land should be pres	
If you feel agricultural land should be pres	
If you feel agricultural land should be pres (See attached)	
If you feel agricultural land should be pres (See attached) What do you feel will be the most importa	
(See attached) What do you feel will be the most importathe region over the next ten years? Traffic – 2 Crime	ant environmental challenges or issues faci Landfill Trash – 1
What do you feel will be the most importathe region over the next ten years? Traffic – 2 Crime Overcrowded schools	ant environmental challenges or issues factorial Landfill Trash – 1 Sewage removal – 1
If you feel agricultural land should be pressed (See attached) What do you feel will be the most importation the region over the next ten years? Traffic – 2 Crime Overcrowded schools Global warming	Ant environmental challenges or issues factorial Landfill Trash – 1 Sewage removal – 1 Water supply
What do you feel will be the most importathe region over the next ten years? Traffic – 2 Crime Overcrowded schools Global warming Water- clean, ample	Landfill Trash – 1 Sewage removal – 1 Water supply Development pressures – 2
What do you feel will be the most importathe region over the next ten years? Traffic – 2 Crime Overcrowded schools Global warming Water- clean, ample Pollution	Landfill Trash – 1 Sewage removal – 1 Water supply Development pressures – 2 Clean air
What do you feel will be the most importathe region over the next ten years? Traffic – 2 Crime Overcrowded schools Global warming Water- clean, ample	Landfill Trash – 1 Sewage removal – 1 Water supply Development pressures – 2 Clean air er and open space

15.	What natural resources or areas in future?	the region are in particular need of protection in the
	Wetlands – 2	Monocacy Hill
	Open space – 2	
	Water supply – 2	
	Farmland	Manatawny Creek
	Clean air	Get rid of landfills
	Daniel Boone Homestead	
	Water basins	Lakes and ponds
	Wooded areas – 5	Water - 2
16.	What are the greatest open space n	needs for this region?
	Maintain farmland – 2	Walking path
	Maintain woodland – 3	Bike path
	Recreation – 4	
		Playground - 2
	Maintain open space – 2	Protect places such as Monocacy Hill
	Streams	
17.18.	 Valley Metro a. Would you use the rail served Daily Occasion b. Do you think the rail service asset to the region? Are you in favor of programs to in 	onally 13 Not at all
	in the Townships such as Jacksonv Yes 11 No 1	
19.	Are there intersections or road des Yes 12	igns in the area you would like to see improved?
	No <u>12</u>	
20.	If Yes, which intersections or road	designs need improvements?
	Rt. 662 and 422 - 5	Rt. 422 through Amity Twp. 2
	Daniel Boone Road	Swede Rd. & East 422
	All intersections along 662	Church Lane & 422 East
	_	er Bridge Road needs light – 3
		to beginning of 422 Bypass
	Weavertown Rd. and Limekil	
	Route 662 – Weavertown Ro	ad to 562 curves

•	Check any of the following which you this	nk are transportation problems in the area:
	Intersections with Route 422 West Shore By-pass exits Intersections with Route 562 Intersections with Route 662 Inadequate parking Inadequate public transit Inadequate road maintenance Lack of walking trails Lack of bikeways Through traffic on local roads Lack of sidewalks Congestion along Route 422 Other (Please specify)	
		Holli 602 to curve at 400 block
•	If you believe Route 422 is an area of contaken to improve the road corridor?	cern, what measures would you like to see
	taken to improve the road corridor.	
	(See attached)	
	If additional walkways or hiking and bicywould you use those walkways or trails?	cling trails were available in the community,
	Yes 11	
	No $\frac{11}{2}$	
	If yes, from where to where would you lik	te to see walkways or trails?
	<u>Origin</u> t	o <u>Destination</u>
	1. (See attached)	
	2.	
	3.	
	<i>J.</i>	
	Do you feel that additional public recreation	on facilities should be provided in the region?
	Yes 9	
	105 <u>/</u>	

26. If yes, what new recreational facilities would you use?

Public parks	Playground - 1
Walking trails – 4	Track – 2
Tennis	Picnic areas
Football/baseball/soccer fields – 2	Camping grounds
Community pool – 2	Meeting places for old people
Gym/workout facility	
Rec center/YMCA with indoor pool, a	gym, & classes/activities for all ages

27. If yes, where should they be located?

Amityville – 2	Center of Township
Anywhere	Monocacy Hills
Areas designated for housing developm	nent
Centrally between the 3 districts	
Between Douglassville & Exeter, not fa	ar from 422

28. Do you feel that the level of commercial development along Route 562, Route 662, Route 422 or other roads should...

	<u>Route 562</u>	<u>Route 662</u>	<u>Route 422</u>	Other (Specify)
Remain the same		<u>6</u>	<u>7</u>	
Increase	4	5	5	
Decrease	2	2	1	

29. Do you feel that the level of industrial and office development along Route 562, Route 662, Route 422 or other roads should...

	<u>Route 562</u>	<u>Route 662</u>	<u>Route 422</u>	Other (Specify)
Remain the same	5	6	3	
Increase	5	4	8	
Decrease	3	3	2	

30. How long have you lived in your municipality?

5 years or less	
6-10 years	3
11-20 years	3
more than 20 years	7

31. What is your age?

18-24		45-64	8
25-44	3	65 and older	2

•	In what municipality do you live?				
	Amity Township Exeter Township St. Lawrence Borough				
	Would you be willing to have your taxes increased for one	or mor	e of the	follow	ing?
	Farmland preservation/development right purchase Preservation and upkeep of more open space Greater recreational space and activities	Yes_ Yes_ Yes_		No_ No_ No_	4 4 5
	Should the Region proactively encourage environment-frientech firms, to locate in the Region?	ndly bu	ısinesses	s, such	as high
	Yes <u>12</u> No <u>1</u>				
	If you favor "growing" this region's tourism, what steps she	ould be	taken to	anciir	e this
	result?		taken te	J Clisui	
			Yes	o chisul	No
				- - -	
	Promote the historical significance of the region Promote parks and recreational opportunities Develop the "village" concept of stores (such as New Hope) Develop an upscale "outlet" mall Other (Please specify) Daniel Boone Homestead		Yes	- - -	No 2 2
	Promote the historical significance of the region Promote parks and recreational opportunities Develop the "village" concept of stores (such as New Hope) Develop an upscale "outlet" mall Other (Please specify) Daniel Boone Homestead Walking and bike trails		Yes	- - -	No 2 2
	Promote the historical significance of the region Promote parks and recreational opportunities Develop the "village" concept of stores (such as New Hope) Develop an upscale "outlet" mall Other (Please specify) Daniel Boone Homestead Walking and bike trails Please list any additional comments:		Yes	- - -	No 2 2
	Promote the historical significance of the region Promote parks and recreational opportunities Develop the "village" concept of stores (such as New Hope) Develop an upscale "outlet" mall Other (Please specify) Daniel Boone Homestead Walking and bike trails Please list any additional comments:		Yes	- - -	No 2

3. What are the most important issues facing the St. Lawrence-Exeter-Amity Region today?

Over development – 10	Property taxes – 4
No ordinances to control developers	Congested roads – 2
Lack of schools/schools too small – 2	Landfills
Loss of open space and landscape	More schools/more protection
Roads and transportation – 3	Roads and transportation – 3
Preserve existing farmlands and woods	Antiquated school system
Water	Continual traffic lights
Provide current residents with better parks, sch	nools and water treatment/sewage facilities
422 corridor extremely busy	
Exeter Township has too many businesses with	direct access onto Rt. 422
Lack of adequate roads to accommodate new ho	ousing development
Uncontrolled, mismanaged housing development	nts
Amity Township is too restrictive – we need mo	ore clean industries to help with tax base
Fewer business entrances onto 422	
Political games to achieve financial gains	

5. What are you most dissatisfied with in the St. Lawrence-Exeter-Amity Region?

Small lot sizes – 2
Supervisors/Planning Commission
Growth/overdevelopment – 5
New residents/do gooders want to stop growth
Congested roads
High taxes – 2
Traffic
St. Lawrence has a beautiful park, but the other areas do not
We need a large public library and a swimming pool
Traffic congestion in Exeter Township
Attitude of some Supervisors
Political games
Cookie cutter housing development
Loss of farmland – 2

13. If you feel agricultural land should be preserved for farming, why do you think that way?

When farmland is gone, it is gone – 2
Part of our history – 2
Need to find a way to help family farms
We will pay later for cheap food today
Conserve natural resources
Keep rural atmosphere – 2
Allow a way of life to continue
Preserve wildlife
Beautiful to observe
Preserve the natural land
Need the agriculture
Less crime, accidents, and traffic
Take up land that otherwise would be developed
Need for crops, milk, meat, food

22. If you believe Route 422 is an area of concern, what measures would you like to see taken to improve the road corridor?

Bypass from Douglassville to 176 south of the river along Rt. 724

Too many traffic lights choke traffic

Extend/connect 422 Bypass from Douglassville to Exeter – 2

Bypass

Alternate route

Build four lane highways on west lanes Douglassville & Baumstown – look into limited access

Decrease housing developments to decrease traffic

More time for people to turn off of 422 onto side roads

No billboards

24. If yes, from where to where would you like to see walkways or trails?

	<u>Origin</u>	to	<u>Destination</u>
1.	Yellow House to Dou	ıglassville	
2.	Amity to St. Lawrence		·
3.	Monocacy Hill to all		
4.	Any place you won't		raffic
5.	Amity to Exeter		
6.	Douglassville to Ami	ty	
7.	Amityville to French	Creek	
8.	Yellow House to Dan	iel Boone Home	stead
9.	Along 724 corridor		
10.	No real destination –	i.e., walking aro	und the Daniel Boone
	Homestead		
11.	Nature trails		
12.	Amity to Amity		
13.	Along River to Mono	cacy Hill	
14.	Daniel Boone Homes	tead to St. Lawre	ence area

36. Please list any additional comments:

I hope this effort is not too late – most land has been purchased for development

Let's be satisfied with a bedroom community on the quiet side with good transportation,
good restaurants, good roads. Forget farmland preservation. Most farmers are losing
money. Who wants a 1000 cow dairy or 5000 head hog feed lot farm next to you.

After 4/15/02 I would be happy to serve on any board (Donald Del Padre)

I feel we have adequate malls and grocery stores in this area.

Slow down the building of housing developments.

Require developers to give more back to the community – parks, usable open space,
walking trails, etc.

It bothers us that trees are all cut down by developers – so many developments could have
mature trees growing in them if more restrictions were faced by the developer.

I grew up on dirt road with miles of fields, woods and wildlife. Now it is house upon
house without horses, deer, pheasants, etc.

I used to like the close knit, hometown atmosphere – now it's a hard ball political
filled with wall to wall homes.

This area is growing too fast and the rural atmosphere is fast going to be a part of the past.

There are all walks of life coming in which cause drastic increases in all of our pockets.

More taxes, more police force, more resources being used, etc. – Oley and Lancaster Co.

are looking better and better.

Regional planning is desperately needed.

What I liked most is disappearing.

EXETER TOWNSHIP – 14 RETURNS ST. LAWRENCE-EXETER-AMITY REGION PLANNING QUESTIONNAIRE

Rural farm community Nice neighborhood
Nice neighborhood
Location
Moved in after service with in-laws
ence-Exeter-Amity Region?
Urban
Country atmosphere – 2
Friendly people
Not over populated
Feels like home
Pending landfill expansion - 3 Exeter Supervisors Ethics Charges
Taxes
Sprawl – 4
Rt. 422 congestion
Lack of cultural attractions
Poor planning - 2
Rt. 422 congestion Lack of cultural attractions
St. Lawrence-Exeter-Amity Region to
St. Lawrence-Exeter-Amity Region to
St. Lawrence-Exeter-Amity Region to St. Lawrence-Exeter-Amity Region?

6.	From 1990 to 2000, the population of the St. Lawrence-Exeter-An 6604 from 25,236 to 31,840, a 26% increase. In the future, would of growth:		•
	Stay the same 6 Increase 9		
7.	If further residential development occurs, are you in favor of it hap	opening as:	
		Yes	No
	Large individual lots scattered throughout the Townships along existing roads	9_	2
	Cluster developments in which higher density single family housing is offset by open space and recreation areas	4	8
	Conservation single family home developments in which conservation areas containing the special features of a tract are identified first (typically 50 to 80% of the tract remains in open space), houses are located to maximize views of the open space, and road systems and lot lines are established to conform to open space and house locations.	9	5
	Large scale developments involving a mixture of single family homes, townhouses and apartments		12
	Single family and two family homes on ¼ acre lots		11
	Retirement communities	5	5
	Single family homes on one acre lots along new streets built by subdividers	4	8
	A village pattern, with a mix of uses and emphasis on human scale and walkability	5	7
	Mobile Home Parks		12
	Apartment and Townhouse Developments		12
	Assisted Living Facilities	6	5

Agriculture	Grow	7	Stay the sa	ame	5	Decline	1
Tourism	Grow	6	Stay the sa	ame	7	Decline	
Heavy Industry	Grow	1	Stay the sa	ame	9	Decline	4
Light Industry	Grow	7	Stay the sa	ame	6	Decline	
<u> </u>	Grow	4	-		8	Decline	1
-		1			7		5
<u>e</u>		9	-		4		
<u> </u>			-				6
Research Labs	Grow _	3	•		9	Decline_	1
<u>-</u>		urs in the	e region, wl	nat patt	ern of	industrial	
Planned industrial park	S			7	_		
Strips along roads					_		
Individual sites near ex	isting ind	lustries		8	_		
Other (Please specify)	1						
businesses do you feel are need Grocery Stores Supermarkets Video Stores Drug Stores Department Stores Discount Stores Clothing Stores Mini Storage Facilities Restaurants Motels Appliance/home furnish Day Care (Children) Day Care (Adult) Service Stations Doctor and Other Profe Convenience Stores Fast Food Restaurants Agriculture	hing/hard	ware sto	nity?	1 2 1 1 2 1 7 1 4 4 4	- - - - - - -		
	Tourism Heavy Industry Light Industry Office Development Warehousing Technology Commercial Development Research Labs If additional industrial develop development should take place Planned industrial park Strips along roads Individual sites near ex Other (Please specify) If you think the community ne businesses do you feel are need Grocery Stores Supermarkets Video Stores Drug Stores Drug Stores Department Stores Discount Stores Clothing Stores Mini Storage Facilities Restaurants Motels Appliance/home furnis Day Care (Children) Day Care (Adult) Service Stations Doctor and Other Profe Convenience Stores Fast Food Restaurants Agriculture	Tourism Heavy Industry Light Industry Office Development Warehousing Technology Commercial Development Research Labs Grow Planned industrial development occ development should take place? Planned industrial parks Strips along roads Individual sites near existing ind Other (Please specify) If you think the community needs additi businesses do you feel are needed in the Grocery Stores Supermarkets Video Stores Drug Stores Drug Stores Department Stores Discount Stores Clothing Stores Mini Storage Facilities Restaurants Motels Appliance/home furnishing/hard Day Care (Children) Day Care (Adult) Service Stations Doctor and Other Professional Convenience Stores Fast Food Restaurants	Tourism Grow 6 Heavy Industry Grow 1 Light Industry Grow 7 Office Development Grow 4 Warehousing Grow 1 Technology Grow 9 Commercial Development Grow 2 Research Labs Grow 3 If additional industrial development occurs in the development should take place? Planned industrial parks Strips along roads Individual sites near existing industries Other (Please specify) If you think the community needs additional conbusinesses do you feel are needed in the community Grocery Stores Supermarkets Video Stores Drug Stores Department Stores Discount Stores Clothing Stores Mini Storage Facilities Restaurants Motels Appliance/home furnishing/hardware sto Day Care (Children) Day Care (Adult) Service Stations Doctor and Other Professional Offices Convenience Stores Fast Food Restaurants Agriculture	Tourism Heavy Industry Grow Grow Grow Tourism Heavy Industry Grow Tourism Heavy Industry Grow Tourism Grow Tourism Heavy Industry Grow Tourism Grow Tourism Grow Tourism Grow Tourism Warehousing Grow Tourism Technology Grow Tourism Tourism Tourism Tourism Tourism Tourism Tourism Grow Tourism To	Tourism Grow 6 Stay the same Heavy Industry Grow 1 Stay the same Light Industry Grow 7 Stay the same Office Development Grow 4 Stay the same Warehousing Grow 1 Stay the same Technology Grow 9 Stay the same Research Labs Grow 9 Stay the same Research Labs Grow 3 Stay the same Research Labs Grow 9	Tourism Grow 6 Stay the same 7 Heavy Industry Grow 1 Stay the same 9 Light Industry Grow 7 Stay the same 6 Office Development Grow 4 Stay the same 8 Warehousing Grow 1 Stay the same 7 Technology Grow 9 Stay the same 4 Commercial Development Grow 2 Stay the same 5 Research Labs Grow 3 Stay the same 9 Stay the same 5 Research Labs Grow 3 Stay the same 9 Stay the same 10 Stay the	Tourism Grow 6 Stay the same 7 Decline Heavy Industry Grow 1 Stay the same 9 Decline Light Industry Grow 7 Stay the same 9 Decline United Stay the same 8 Decline Office Development Grow 4 Stay the same 8 Decline Warehousing Grow 1 Stay the same 7 Decline Commercial Development Grow 9 Stay the same 4 Decline Commercial Development Grow 2 Stay the same 5 Decline Research Labs Grow 3 Stay the same 9 Decline Research Labs Grow 3 Stay the same 9 Decline Maditional industrial development occurs in the region, what pattern of industrial development should take place? Planned industrial parks 7 Strips along roads Individual sites near existing industries 8 Other (Please specify) If you think the community needs additional commercial establishments, what types businesses do you feel are needed in the community? Grocery Stores 1 Supermarkets 2 Video Stores 1 Department Stores 1 Department Stores Discount Stores 1 Department Stores 1 Day Care (Children) 4 Appliance/home furnishing/hardware stores 4 Day Care (Adult) 4 Service Stations Doctor and Other Professional Offices 6 Convenience Stores Fast Food Restaurants Agriculture 8

How should the economic base of this region change by the year 2020?

11.	If additional commercial development occudevelopment should take place?	ars in the region, what pattern of commercial
	Shopping Centers Strips along roads In St. Lawrence Borough In the Villages in the Townships	<u>4</u> <u>2</u> <u>5</u>
	In or next to residential development Other (Please specify)	along 422 near Birdsboro - 1
12.	Do you feel that the agricultural land in the land?	Townships should remain as agricultural
	Strongly agree 10 Agree 3 Disagree 1 Strongly disagree No Opinion	
13.	If you feel agricultural land should be prese	erved for farming, why do you think that way?
	Keep open spaces – 5	Can't get too much of it
	Loss impacts the biosphere	Little impact on the community
	Reserve for future use	Growing interest in horses & animal farms
	Need farmland and farms - 2	Large part of history of Exeter/Amity
	Our most important industry	Variety – 2
	Integral to economy/history/flavor of Berks Co	
	Need to limit development and preserve ag land	<u>d</u>
14.	What do you feel will be the most important the region over the next ten years?	nt environmental challenges or issues facing
	Flooding	Runoff
	Air pollution – 4	Preserving woodland
	Cheap houses being built will decay	Traffic – 3
	Water pollution – 3	Sprawl – 2
	Land pollution	Building of roads, communities & schools
	<u>Landfill expansion – 5</u>	Enough drinkable groundwater – 2
	Preserve natural areas for wildlife – 3 Preserve farming – 2	Overpopulation Keep open space – 2
15.	What natural resources or areas in the region future?	* * *
	(See attached)	

<u>Fa</u>	rmland – 4	Parks - 2
Pla	aying fields	Recreation areas - 2
<u>Pla</u>	ayground	Keep country atmosphere - 2
	light rail passenger service became a	vailable in the Region with the Schuylkill
a.	Would you use the rail service? Daily Occasionally	y 12 Not at all 2
b.	Do you think the rail service we asset to the region?	ould be an Yes 13 No 1
bu		se landscaping, decorative lighting, benches, amenities in St. Lawrence Borough and villagand Douglassville?
	Yes <u>10</u> No <u>4</u>	
Ar	re there intersections or road designs	in the area you would like to see improved?
	Yes <u>12</u> No <u>1</u>	
If	Yes, which intersections or road desi	gns need improvements?
	Need bypass	562 & Shelbourne Rd 2
	Gibraltar Rd. & 422 - 3	562 & Church Lane
	Gibraltar Rd. Toward Shelbourne	Light at National Penn Bank
	Gibraltar Rd. & Shelbourne Rd.	562 & Oley Turnpike Road
	Shelbourne Rd. & Scotland Drive	Need Elm St. extension
	Bypass & Rt. 422 - 2	Many 422 intersections
	Shelbourne Rd. – 2	Rt. 662 & Rt. 422
	422 from 47 th Street to Lincoln Rd	. 422 & Lincoln Road
Ch	neck any of the following which you	think are transportation problems in the area:
	Intersections with Route 422	9
	West Shore By-pass exits	8
	Intersections with Route 562	9
	Intersections with Route 662	3
	Inadequate parking	3
	Inadequate public transit	7

	quate road maintenance	3
	of walking trails	8
	of bikeways	6
	gh traffic on local roads	7
	of sidewalks	4
_	estion along Route 422	12
Other	(Please specify)	Better route between 422 and Oley
		Need cross-town connector
•	Route 422 is an area of concerve the road corridor?	ern, what measures would you like to see
Extend bypass		4 lane from Reading to Pottstown − 2
Slow traffic do		Reduce turnoffs into driveways
	into driveways	
		on't have to access 422
		ast at Gibraltar Road - 2
Redesign end o	of 422 Bypass where it merges w	ith 422
would you use Yes No	e those walkways or trails? $\frac{8}{5}$	to see well-ways or trails?
II yes, from w	here to where would you like	to see warkways or trains?
	<u>Origin</u> to	<u>Destination</u>
1. 2. 3. 4. 5. 6. 7.	724 (by Monocacy) to French (Neighborhoods to school comp Linking developments 3 to 4 safe passages crossing 42 Pedestrian/bike lane along 422 Exeter Community Park betwe Lorane to Monocacy	lex
Do you fool th	nat additional public recreation	a facilities should be provided in the region?
Do you feel the	nat additional public recreation	n facilities should be provided in the region?

23.

24.

26. If yes, what new recreational facilities would you use?

Parks	Walking Trails
YMCA	Municipal golf course
Swimming pool	Pedestrian/bike trails
6 to 12 yr. old facilities for sma	ll motorized vehicles

27. If yes, where should they be located?

Exeter
Landfill area
Along Schuylkill River
Open space in Exeter

28. Do you feel that the level of commercial development along Route 562, Route 662, Route 422 or other roads should...

	<u>Route 562</u>	<u>Route 662</u>	<u>Route 422</u>	Other (Specify)
Remain the same Increase	<u>10</u>	9 2	<u>6</u> 3	
Decrease	3	2	5	

29. Do you feel that the level of industrial and office development along Route 562, Route 662, Route 422 or other roads should...

	<u>Route 562</u>	Route 662	Route 422	Other (Specify)
Remain the same Increase	<u>8</u> 3	<u>8</u> 2	<u>5</u>	
Decrease	2	2	3	

30. How long have you lived in your municipality?

5 years or less	1
6-10 years	2
11-20 years	1
more than 20 years	10

31. What is your age?

18-24		45-64	5
25-44	4	65 and older	5

<i>32</i> .	In what municipality do you live?				
	Amity Township Exeter Township St. Lawrence Borough				
33.	Would you be willing to have your taxes increased for one	or mor	e of the	follow	ing?
	Farmland preservation/development right purchase	Yes_	11	_ No_	2
	Preservation and upkeep of more open space	Yes_	11	_ No_	2
	Greater recreational space and activities	Yes_	8	_ No_	4
34.	Should the Region proactively encourage environment-frie tech firms, to locate in the Region?	ndly bi	usinesse	s, such	as high
	$ \begin{array}{ccc} \text{Yes} & \underline{9} \\ \text{No} & \underline{2} \end{array} $				
35.	If you favor "growing" this region's tourism, what steps sh result?	ould be	e taken t	o ensui	e this
			Yes		No
	Promote the historical significance of the region		9		
	Promote parks and recreational opportunities		7	_	
	Develop the "village" concept of stores				
	(such as New Hope)		7_	_	2
	Develop an upscale "outlet" mall		1	_	4
	Other (Please specify)				
36.	Please list any additional comments:				
	Restrict new malls – existing malls are not at full capacity				
	Give the young people something to keep them active				_
	Open Elm Street extension				<u>—</u>
	Use lack of space in schools to stop development I am tired of seeing Exeter Township run by housing developers	why	con't wo	find	_
	a way to at least slow development like Oley	– wny	can t we	IIIIG	_
	Please save our community and heritage before it is destroyed –	2			
	A lack of knowledge allowed our community to grow without re		the quali	ity of lif	<u>e</u>
	Need to encourage quality, caring development		•	•	<u> </u>
	We need to let some land just be untouched				_
	Exeter has seen uncontrolled growth. It has the reputation amon	g build	ers that it	is an e	<u>asy</u>
	place to build because not many restrictions				

4. What kind of community do you want the St. Lawrence-Exeter-Amity Region to be in the future?

No busier than it is now
Parks and recreation facilities and programs
Access to a YMCA or other community-based organization
More health food restaurants, food markets & activities
Integrated economically, racially, in age and family stage
Self-serviced in terms of businesses, services, recreational facilities, etc.
Suburban/Rural community
Curtailment of development - 3
Friendly residential
Same as it is now
Improve business district
Keep urban
The way it was 20 years ago
Safe – 2
Not polluted by landfills
Not polluted with traffic
Diverse, convenient, high quality of life
Quiet, peaceful, safe suburb of Reading, not Philadelphia
Open space for walking/biking
Less "junky" attractions, more cultural attractions

5. What are you most dissatisfied with in the St. Lawrence-Exeter-Amity Region?

Too much traffic – 5
Too populated/overbuilt – 4
Conflict of interest in policy decisions by Exeter Supervisors
Lack of healthy services and activities
Lack of integration
Lack of self-sufficiency
No complaints – 2
Overcrowded schools
Too many variances
Lack of control of residential development
Poor management
Poor planning – 2
Destruction of rural landscapes
Landfill
No interest in preserving farmlands & historic sites
Cheap malls

Watersheds		
Wooded areas – 4		
Farmland – 6		
Tarinianu – 0		

French Creek State Park
Parkland

What natural resources or areas in the region are in particular need of protection in the future?

Any remaining – 2
Open land – 3

Antietam Creek groundwater wells – 2

Schuylkill River
Baumstown (oldest part of Township)

ST. LAWRENCE – 11 RETURNS ST. LAWRENCE-EXETER-AMITY REGION PLANNING QUESTIONNAIRE

1. Why did you choose to live in this area? (Please print your response.)

Like the area	Proximity to job
Lower taxes than some areas	House & community suited us
Small Borough	Quiet
Close to Reading	Good for young children
Quiet and close to stores	Nice, clean neighborhood
Own a business in area	Family and friends
Born & raised in this area – 3	Lot available
Employment	

2. What do you like most about the St. Lawrence-Exeter-Amity Region?

The older homes	Nearby open spaces & woodland
Environment/Fauna & Flora – 2	Climate
Smallness	Proximity to urban & rural areas
Relatively quiet & lack of traffic congestion	Friendly & uncrowded
Suburbs with some rural areas	Convenient location with amenities
Handy to stores & main roads out of Berks	Close to work
Exeter Park	Privacy with spacious surroundings

3. What are the most important issues facing the St. Lawrence-Exeter-Amity Region today?

Too many developments – 10	No bypass	
Traffic – 6	No swimming pools in schools	
Tax expense - 2	Loss of farmland	
Roadside clutter (store after store)	Traffic on Rt. 422	
Limit number of rules & regulations to bare minimum		
Municipal sewer system at Monocacy Creek & Schuylkill River		

What kind of community do you want the St. Lawrence-Exeter-Amity Region to be in the future?

No more developed than now – 3	Friendly & uncrowded	
No more row housing, no slum areas	Blend of suburban and rural	
Safe community	Less congested	
Combination of residential, commercial, industrial and agricultural use		
Primarily residential with some rural and some shopping and conveniences		

5. What are you most dissatisfied with in the St. Lawrence-Exeter-Amity Region?

Too many farms being sold for development in Amity Twp 2					
Very few ways to get from St. Lawrence Ave. to Rt. 422 – 2					
Poor planning in zoning, recreation, traffic, sewer and water					
Too many uncoordinated red lights	Traffic				
Number of homes and people – 3	Traffic at 562 & Shelbourne Road				
422 traffic flow – 2	Lack of a downtown				

If furt	Stay the same 3	opening as:	
		Yes	No
	Large individual lots scattered throughout the Townships along existing roads	8	3
	Cluster developments in which higher density single family housing is offset by open space and recreation areas	3	8
	Conservation single family home developments in which conservation areas containing the special features of a tract are identified first (typically 50 to 80% of the tract remains in open space), houses are located to maximize views of the open space, and road systems and lot lines are established to conform to open space and		
	house locations.	6	4
	Large scale developments involving a mixture of single family homes, townhouses and apartments	1	10
	Single family and two family homes on 1/4 acre lots	2	9
	Retirement communities	4_	7
	Single family homes on one acre lots along new streets built by subdividers	3_	8
	A village pattern, with a mix of uses and emphasis on human scale and walkability	5	6_
	Mobile Home Parks		11
	Apartment and Townhouse Developments		11
	Assisted Living Facilities	6_	5

From 1990 to 2000, the population of the St. Lawrence-Exeter-Amity Region grew by 6604 from 25,236 to 31,840, a 26% increase. In the future, would you like to see this rate

6.

7.

of growth:

8.	How should the economic base	e of this	region ch	ange by the ye	ear 2020'	!	
	Agriculture	Grow _	3	Stay the sam	ne <u>6</u>	Decline	2
	Tourism	Grow	2	Stay the sam		Decline	1
	Heavy Industry	Grow	1	Stay the sam		Decline	
	Light Industry	Grow	2	Stay the sam	_	Decline	
	Office Development	Grow	1	Stay the sam		Decline	2
	Warehousing	Grow		Stay the sam		Decline	1
	Technology	Grow	5	Stay the sam			
	Commercial Development		2	Stay the sam		Decline	1
	Research Labs	Grow _	4	Stay the sam		Decline	2
9.	If additional industrial develop development should take place Planned industrial park	?	curs in the	e region, what	t pattern	of industrial	
	Strips along roads						
	Individual sites near ex		dustries		2		
	Other (Please specify))					
10.	If you think the community ne- businesses do you feel are need				olishmen	ts, what types	s of
	Grocery Stores				3		
	Supermarkets				2		
	Video Stores				1		
	Drug Stores						
	Department Stores				1		
	Discount Stores						
	Clothing Stores				1		
	Mini Storage Facilities				3		
	Restaurants						
	Motels						
	Appliance/home furnis	hing/har	dware sto	res	1		
	Day Care (Children)				4		
	Day Care (Adult)				3		
	Service Stations						
	Doctor and Other Profe	essional (Offices				
	Convenience Stores						
	Fast Food Restaurants						
	Agriculture	ı			3		
	Entertainment Establish	hments					
	Trade Schools				3		
	Nursing Homes			-			
	Other (Please specify))		<u>Sc</u>	mething	like Grand Pri	<u>x - 1</u>

11.	If additional commercial developmed development should take place?	ent occurs in the region, what pattern of commercial
	Shopping Centers	6
	Strips along roads	1
	In St. Lawrence Borough	<u> </u>
	In the Villages in the Towns	hips
	In or next to residential deve Other (Please specify)	Existing buildings - 1 Employment - 1 Near population concentrations - 1
12.	Do you feel that the agricultural lan land?	d in the Townships should remain as agricultural
	Strongly agree	9
	Agree	2
	Disagree	
	Strongly disagree	
	No Opinion	
13.	If you feel agricultural land should	be preserved for farming, why do you think that way?
	Keep open space – 5	So don't have to import food
	Keep character of area as is now	Health
	<u>Diverse ecology – human/plants/an</u>	
	<u>Tradition – 3</u>	It can never be reclaimed
	_	nt begins in Monocacy following the creek to
	Limekiln	
	Provides pleasant scenery	
14.	What do you feel will be the most in the region over the next ten years?	mportant environmental challenges or issues facing
	Air pollution	Traffic - 2
	Water mallestian 2	Storm drainage
	Overpopulation/growth – 2	Wastewater
	Where go with trash – 4	Water supply – 1
	Providing channels for moving incr	easing amount of traffic efficiently
	Loss of open space and agriculture	
15.	What natural resources or areas in t future?	he region are in particular need of protection in the
	Streams – 3	Wildlife
	Open spaces – 2	
	Wetlands	Floodplains

	Limes	stone soil	Historic sites
	<u>Farm</u>	land	Water
	River		
16.	What	are the greatest open space needs for this regi	ion?
	Prote	ct farmland – 2	Protect recreational areas - 2
	Wood	llands	Tillable soil
		ed parks	
		ly place	
17.		nt rail passenger service became available in the Metro	he Region with the Schuylkill
	a.	Would you use the rail service? Daily Occasionally 9	Not at all2
	b.	Do you think the rail service would be an asset to the region? Yes	<u>9</u> No <u>1</u>
18.	buildi	ou in favor of programs to increase landscaping façade appearance and similar amenities in Townships such as Jacksonwald and Douglast	n St. Lawrence Borough and villages
		Yes <u>6</u> No <u>5</u>	
19.	Are th	nere intersections or road designs in the area y	ou would like to see improved?
		Yes <u>8</u> No <u>3</u>	
20.	If Yes	s, which intersections or road designs need im	provements?
		Where bypass dumps onto 422 in Exeter	422 & 37 th & 36 th Sts.
		Shelbourne & 562 – 4	422 & Oley Turnpike Road
		Bingaman & St. Lawrence	422 & Promenade Plaza
		422 & Gibraltar Road	422 in Amity
		Shelbourne Road	422
		Need left turn signal traveling east on 562 to en Left hand turn lane on 422 between Oley Turnpike	
21.	Checl	k any of the following which you think are tra	•
		Intersections with Route 422 West Shore By-pass exits Intersections with Route 562 Intersections with Route 662 Inadequate parking	

Inadeq Lack o Lack o Throug Lack o Conge	quate public transit quate road maintenance of walking trails of bikeways gh traffic on local roads of sidewalks stion along Route 422 (Please specify)		- - - - - - - - Sous sidewalk along St. Lawrence Ave. - - Cksonwald to Mt. Penn – 1 - 1
•	Route 422 is an area of cove the road corridor?	oncern, what	measures would you like to see
Do not allow	more businesses	Turnin	g lanes
Fix properly, of			onize traffic signals
	ge of bypass/Business 422		rvice would help congestion
-	-		te 176 - 3
	ng lanes or install jughand		
	valkways or hiking and bice those walkways or trails? 8		s were available in the community,
	here to where would you l	like to see w	alkways or trails?
	<u>Origin</u>	to	<u>Destination</u>
1.	Exeter to Douglassville		
2.	Exeter Park to Reading C	Country Club)
3.	Along Neversink Mounta	<u>ain</u>	
4.	Exeter Park to School Co	mplex	
5.	Along Schuylkill River		
Do you feel th	at additional public recrea	tion facilitie	es should be provided in the region?
Yes No	<u>7</u> 4		

23.

24.

26.	If yes, what new recreations	al facilities wou	ald you use?		
	Basketball courts				<u> </u>
	Baseball fields		741 : 1/:1	1111	
	Purchase Martin Ge		/41 in Kerrsvil	le and make it	<u>a_</u>
	recreational comple Wooded park with wa		comfort facilities	s_2	<u></u>
	wooded park with wa	uking trans and t	connort facilities	5 –2	
27.	If yes, where should they be	e located?			
	· · · · · · · · · · · · · · · · · · ·				
	Jacksonwald				
	Wherever suitable la	and is available	,		
	Skateboard park		,		
	Trails similar to one in		ver		
	North of St. Lawrence	2			
28.	Do you feel that the level of 422 or other roads should		evelopment alo	ong Route 562,	Route 662, Route
		Route 562	Route 662	Route 422	Other (Specify)
	Remain the same	9	9	8	
	Increase	2	1	1	
	Decrease	1		2	Empty strip-type stores
29.	Do you feel that the level of 662, Route 422 or other roa		office develop	ment along Rou	ate 562, Route
		Route 562	Route 662	Route 422	Other (Specify)
	Remain the same	7	7	8	
	Increase	3	2	2	
	Decrease	<u> </u>	1	$\frac{2}{2}$	
30.	How long have you lived in	vour municins	ality?		
50.	How long have you hved in	r your mamerpe	inty.		
	5 years or less	1			
	6-10 years	2			
	11-20 years				
	more than 20 years	6			
31.	What is your age?				
	18-24		45-64	5	
	25-44 3		65 and older	3	
	<u> </u>		os and older	<u> </u>	

32.	In what municipality do you live?		
	Amity Township Exeter Township St. Lawrence Borough		
33.	Would you be willing to have your taxes increased for one	or more of the	following?
	Farmland preservation/development right purchase Preservation and upkeep of more open space Greater recreational space and activities	Yes 6 Yes 7 Yes 4	No 3 No 3 No 5
34.	Should the Region proactively encourage environment-fried tech firms, to locate in the Region?	ndly businesses	s, such as high
	$ \begin{array}{ccc} \text{Yes} & \underline{7} \\ \text{No} & \underline{3} \end{array} $		
35.	If you favor "growing" this region's tourism, what steps sho	ould be taken to	ensure this
	result?		
	result?	Yes	No
	Promote the historical significance of the region Promote parks and recreational opportunities Develop the "village" concept of stores (such as New Hope) Develop an upscale "outlet" mall Other (Please specify)	Yes - 7 - 4 - 3	No 1 3 4 7
36.	Promote the historical significance of the region Promote parks and recreational opportunities Develop the "village" concept of stores (such as New Hope) Develop an upscale "outlet" mall	Yes - 7 - 4 - 3	11
36.	Promote the historical significance of the region Promote parks and recreational opportunities Develop the "village" concept of stores (such as New Hope) Develop an upscale "outlet" mall Other (Please specify)	7 4 3	1 3 4 7

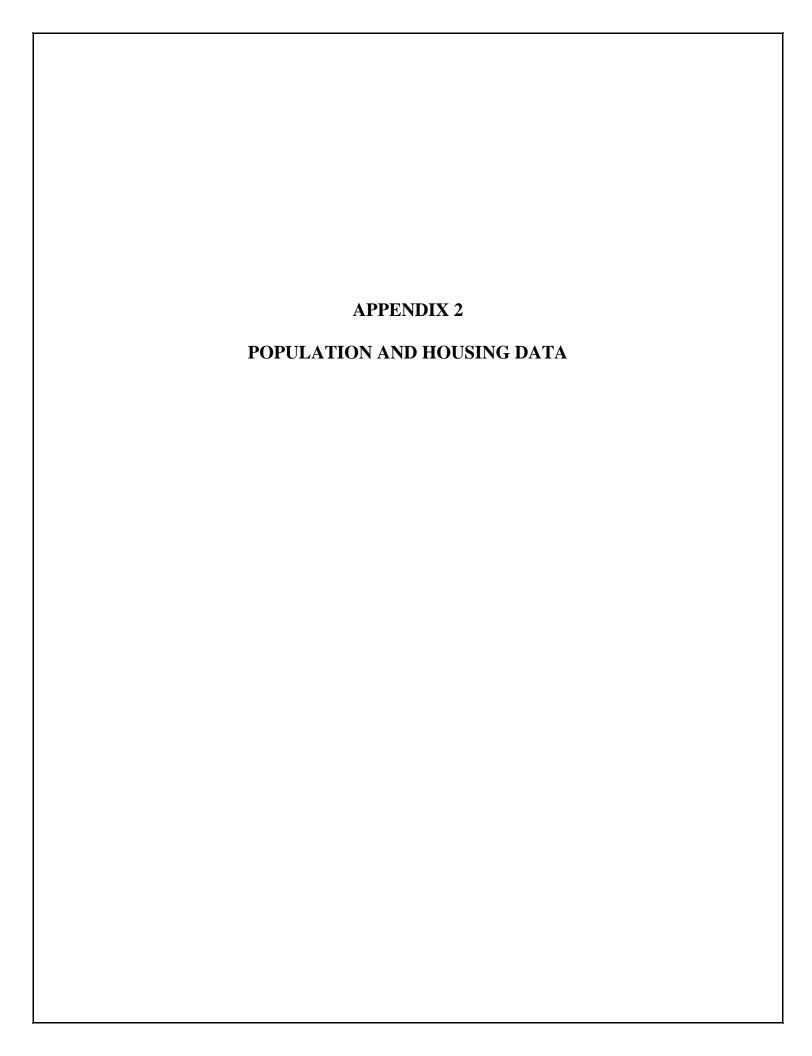


TABLE 1

GENDER

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP, BERKS COUNTY

2000

	Total	Males		Fem	nales
	Population	Number	Number Percent		Percent
St. Lawrence Borough	1,812	873	48.2	939	51.8
Exeter Township	21,161	10,351	48.9	10,810	51.1
Amity Township	8,867	4,380	49.4	4,487	50.6
Berks County	373,638	182,956	49.0	190,682	51.0

Source: U.S. Census

TABLE 2

LAND AREA AND POPULATION DENSITY PER SQUARE MILE

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP, BERKS COUNTY

1990-2000

	1990	2000	Land Area
St. Lawrence Borough	1,401.8	1,647.3	1.1 sq. mi.
Exeter Township	716.2	878.0	24.1 sq. mi.
Amity Township	349.7	481.9	18.4 sq. mi.
Berks County	387.8	432.3	864.3 sq. mi.

Source: Berks County Data Book

TABLE 3

RACIAL CHARACTERISTICS

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP, BERKS COUNTY

1990-2000

		1990		2000		
	All	Non-White		All	Non-White Persor	
	Persons	Pers	ons	Persons		
		Number	Number Percent		Number	Percent
St. Lawrence Borough	1,542	22	1.4	1,812	82	4.6
Exeter Township	17,260	453	2.6	21,161	980	4.6
Amity Township	6,434	167	2.5	8,867	383	4.3
Berks County	336,523	21,962	6.5	373,638	38,568	10.3

Source: U.S. Census

TABLE 4

AVERAGE PERSONS PER OCCUPIED HOUSING UNIT

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP, BERKS COUNTY

1990-2000

	Average Persons Per Household						
	1990 2000						
	Owner	Renter	Owner	Renter			
	Occupied	Occupied	Occupied	Occupied			
St. Lawrence Borough	2.71	2.11	2.55	2.02			
Exeter Township	2.72	2.33	2.68	2.35			
Amity Township	2.86	2.41	2.88	2.20			
Berks County	2.67	2.25	2.65	2.27			

Source: U.S. Census

TABLE 5 INCOME, POVERTY AND EDUCATION CHARACTERISTICS

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP, BERKS COUNTY

2000

Economic Data		wrence ough	Exeter T	ownship	Amity To	ownship	Berks (County
Median Household			_		-			
Income	47,400		56,956		59,595		44,714	
Percent Individuals								
Below Poverty								
Level	6.6		3.3		4.8		9.4	
Income Type		Mean		Mean		Mean		Mean
Households	Number	Income	Number	Income	Number	Income	Number	Income
With Earnings	587	\$54,158	6,667	\$67,067	2,837	\$65,269	112,868	\$55,353
With Social Security	235	\$12,332	2,029	\$12,892	751	\$12,092	41,420	\$12,172
With Supplemental								
Security Income	16	\$7,188	184	\$7,727	52	\$3,820	4,612	\$6,836
With Public								
Assistance Income	6	\$3,617	80	\$1,865	26	\$4,269	3,346	\$2,972
With Retirement								
Income	143	\$12,147	1,481	\$11,786	565	\$15,731	27,001	\$13,841
Percent Bachelor's								
Degree or Higher	21.0		24.3		23.2		18.5	
Percent High School								
Graduates, includes								
equivalency	42.1		36.8		35.1		39.4	

Source: 2000 U.S. Census Table DP-3. Profile of Selected Economic Characteristics: 2000.

TABLE 6
PERSONS BY AGE

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP

1990-2000

	St. Lawrence Borough				Exeter Township				Amity Township				
	1990 Po	pulation	2000 Po	pulation	1990 Population		2000 Population		1990 Population		2000 Population		
Age	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	
Under 5	5.4	84	6.0	108	6.6	1,152	6.1	1,299	7.3	472	7.7	679	
5-9	7.4	115	6.5	118	6.9	1,200	7.6	1,604	7.2	465	8.4	749	
10-24	16.6	256	17.4	314	17.7	3,069	17.3	3,662	19.7	1,273	17.2	1,523	
25-34	15.8	244	14.7	267	16.7	2,893	12.5	2,649	17.5	1,128	14.3	1,269	
35-44	15.6	242	15.7	285	16.8	2,915	17.7	3,735	17.7	1,140	18.5	1,640	
45-54	11.6	180	14.0	254	11.3	1,960	15.5	3,296	12.4	798	14.3	1,265	
55-64	9.8	152	9.5	171	10.3	1,782	9.5	2,002	8.2	529	9.8	872	
65-74	10.3	159	8.5	154	8.3	1,437	7.6	1,614	6.6	428	5.7	504	
75+	7.1	110	7.7	141	4.9	852	6.2	1,300	3.1	201	4.1	366	

Source: U.S. Census.

TABLE 7
EMPLOYMENT BY INDUSTRY

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP

2000

	St. Lawrence Borough		Exeter Township		Amity Township		
INDUSTRY	Number	%	Number	%	Number	%	
Agriculture, forestry, fishing, hunting, and							
mining	2	0.2	7	0.1	43	0.9	
Construction	61	6.5	558	5.0	272	5.8	
Manufacturing	163	17.3	2,395	21.6	1,047	22.4	
Wholesale trade	43	4.6	521	4.7	162	3.5	
Retail trade	135	14.3	1,419	12.8	547	11.7	
Transportation and warehousing, and							
utilities	34	3.6	472	4.3	276	5.9	
Information	24	2.5	261	2.4	178	3.8	
Finance, insurance, real estate, and rental							
and leasing	86	9.1	907	8.2	303	6.5	
Professional, scientific, management,							
administrative, and waste management							
services	69	7.3	928	8.4	513	11.0	
Educational, health and social services	179	19.0	2,130	19.2	893	19.1	
Arts, entertainment, recreation,							
accommodation and food services	63	6.7	723	6.5	177	3.8	
Other services (except public							
administration)	49	5.2	526	4.7	182	3.9	
Public administration	35	3.7	258	2.3	75	1.6	
Employed persons 16 years and over	977	68.9	11,493	69.9	4,788	72.0	

Source: U.S. Census Table DP-3. Profile of Selected Economic Characteristics: 2000.

TABLE 8
EMPLOYMENT BY OCCUPATION

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP

2000

	St. Lawrence Borough		Exet Towns		Amity Township	
OCCUPATIONS	Number	%	Number	%	Number	%
Management, professional, and related occupations	280	29.7	4,072	36.7	1,775	38.0
Service occupations	133	14.1	1,223	11.0	419	9.0
Sales and office occupations	297	31.5	3,151	28.4	1,287	27.6
Farming, fishing, and forestry occupations	2	0.2	32	0.3	-	ı
Construction, extraction, and maintenance occupations	88	9.3	888	8.0	490	10.5
Production, transportation, and material moving						
occupations	143	15.2	1,739	15.7	697	14.9

Source: U.S. Census Table DP-3. Profile of Selected Economic Characteristics: 2000.

TABLE 9

HOUSING OCCUPANCY, TENURE AND VALUE

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP, BERKS COUNTY

2000

	St. Lav	vrence					Bei	rks
	Boro	ugh	Exeter T	ownship	Amity Township		County	
OCCUPANCY	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Housing Units	3,323	100.00	8,208	100.00	781	100.00	150,222	100.00
Occupied	3,219	96.9	7,934	96.7	757	96.9	141,570	94.2
Vacant	104	3.1	274	3.3	24	3.1	8,652	5.8
TENURE	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupied Housing Units	3,219	100.00	7,934	100.00	757	100.00	141,570	100.00
Owner-Occupied	2,626	81.6	7,042	88.8	537	70.9	104,719	74.0
Renter Occupied	593	18.4	892	11.2	220	29.1	36,851	26.0
Median Value of								
Owner-Occupied Unit*	\$92,	400	\$98,	200	\$116,500		\$81,	800
Median Contract Rent*	\$4	44	\$5	15	\$4	63	\$3	42

Source: U.S. Census Table DP-1. Profile of General Demographic Characteristics: 2000.

TABLE 10

HOUSING TYPE

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP, BERKS COUNTY

1990

	St. Lawrence Borough		Exeter Township Amity		Amity T	ownship	Ber Cou	
TYPE	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single Family Detached	388	62.3	4,909	72.4	1,726	71.2	68,688	51.0
Single Family Attached	90	14.4	677	9.9	122	5.0	33,036	24.5
2-4 Unit Structure	31	4.9	200	2.9	82	3.3	13,594	10.1
5-9 Unit Structure	9	1.4	134	1.9	71	2.9	4,446	3.3
10 or more Unit Structure	94	15.1	327	4.8	168	6.9	7,836	5.8
Mobile Home and Others	10	1.6	533	7.8	253	10.4	6,882	5.1
Total	622		6,780		2,422		134,482	

Source: 1990 U.S. Census

2000

	St. Lav Bord		Exeter Towns		Amity To	Amity Township		rks inty
ТҮРЕ	Number	Percent	Number	Percent	Number	Percent	Number	Percent
One unit, detached	386	49.4	5,861	71.1	2,574	76.8	81,581	54.3
One unit, attached	214	27.4	1,084	13.3	178	5.3	34,822	23.2
2 units	24	3.1	71	0.9	53	1.6	6,587	4.4
3 or 4 units	11	1.4	144	1.8	25	0.7	7,813	5.2
5 to 9 units	2	0.3	204	2.5	110	3.3	4,893	3.3
10 to 19 units	39	5.0	97	1.2	136	4.1	3,350	2.2
20 or more units	101	12.9	61	0.7	82	2.4	5,446	3.6
Mobile Home	4	0.5	656	8.0	186	5.5	5,650	3.8
Boat, RV, van etc	-	-	_	-	9	0.3	80	0.1
Total	781	100	8,178	100	3,353	100	150,222	100

Source: U.S. Census DP-4. Profile of Selected Housing Characteristics: 2000.

TABLE 11 HOUSEHOLDS BY TYPE

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP

2000

Type of Household	St. Lawrence Borough	Exeter Township	Amity Township
Family households (families)	517	6,058	2,511
With own children under 18 years	238	2,754	1,213
Married-couple families	415	5,210	2,188
With own children under 18 years	167	2,330	1,035
Female householder, no husband present	68	595	216
With own children under 18 years	44	294	120
Nonfamily households	240	1,876	708
Householder living alone	199	1,531	550
Householder 65 years and over	89	617	204
Households with individuals under 18	251	2,945	1,303
Households with individuals 65 years and over	215	1,926	644
Total households	757	7,934	3,219

Source: U.S. Census Table DP-1. Profile of General Demographic Characteristics: 2000.

TABLE 12

AGE OF HOUSEHOLDER PER OCCUPPIED HOUSING UNIT

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP

2000

	St. Lawrence					
Age of Householder	Boro	Borough Exeter Township		Amity Township		
	Number	Percent	Number	Percent	Number	Percent
Total Occupied Units	757	100.0	7,934	100.0	3,219	100.0
15 to 24 years	21	2.8	129	1.6	70	2.2
25 to 34 years	135	17.8	1,166	14.7	565	17.6
35 to 44 years	165	21.8	1,936	24.4	865	26.9
45 to 54 years	140	18.5	1,844	23.2	677	21.0
55 to 64 years	100	13.2	1,146	14.4	498	15.5
65 years and over	196	25.9	1,713	21.6	544	16.9
65 to 74	95	12.5	982	12.4	308	9.6
75 to 84 years	89	11.8	594	7.5	186	5.8
85 years and over	12	1.6	137	1.7	50	1.6

Source: U.S. Census Table DP-3. Profile of Selected Economic Characteristics: 2000.

TABLE 13

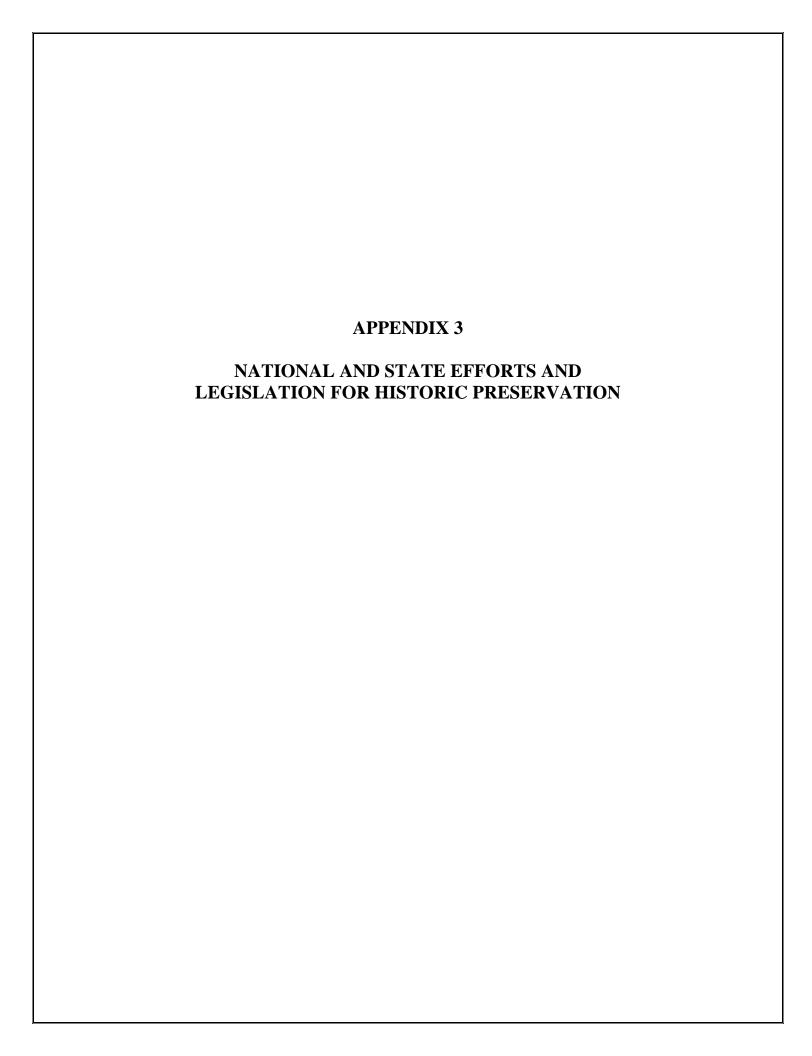
PLACE AND MEANS OF TRANSPORTATION TO WORK

ST. LAWRENCE BOROUGH, EXETER TOWNSHIP AND AMITY TOWNSHIP

2000

Means of Transportation to Work	St. Lawrence Borough	Exeter Township	Amity Township	Berks County
Car, Truck or VanDrove	Dorough	Township	Annty Township	Derks County
Alone	818	9,570	3,991	144,140
Car, Truck or VanCarpooled	74	876	435	17,825
Used Public Transportation				
(including taxicab)	11	57	7	2,942
Walked	15	85	54	6,453
Other Means	5	51	-	1,346
Worked at home	13	313	128	5,125
Mean travel time to work	_			
(minutes)	21.1	21.9	29.4	22.3

Source: U.S. Census Table DP-3. Profile of Selected Economic Characteristics: 2000



NATIONAL EFFORTS AND LEGISLATION FOR HISTORIC PRESERVATION

Federal programs encouraging historic preservation include:

- Maintenance of the National Register of Historic Places.
- Section 106 Review of federally funded or assisted projects that impact historic resources.
- Historic Preservation Tax Credits on federal income tax for qualifying rehabilitation and adaptive reuse of historic buildings used for income-producing purposes.
- The Certified Local Government Program was created to facilitate historic preservation at the local level.

The earliest Federal preservation stature 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 sties, 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 Mayor undertook a study of historic preservation in the Unites States. The resulting report, "With Heritage So Rich," revealed a growing public interest in preservation and the need for a unified approach to the protection of historic resources. This report influenced Congress to enact a strong new stature establishing a nationwide preservation policy: The National Historic Preservation Act of 1966.

National Historic Preservation Act of 1966 (NHPA)

The National Historic Preservation Act (1966) and its subsequent amendments established a legal basis for the protection and preservation of historic and cultural resources. Historic resources are defined as "any prehistoric or historic district, site, building, structures or object included in, or eligible for inclusion in the National Register; the term includes artifacts, records, and remains which are related to such a district, site, building, structure or object".

The Act promoted the use of historic properties to meet the contemporary needs of society. It directed the Federal Government, in cooperation with State and local governments, Native Americans, and the public, to take a leadership role in preservation. First, the Act authorized the Security of the Interior to expand and maintain the National Register of Historic Places. This is an inventory of districts, sites, buildings, structures, and objects significant on a national, State, or local level in American history, architecture, archeology, engineering, and culture. Once a property is eligible to be placed on the list, the property, site, or object can be qualified for Federal grants, loans, and tax incentives.

Second, NHPA encourages State and local preservation programs. States may prepare and submit for approval, programs for historic preservation to the Secretary of the Interior. Approval can be granted if they provide for the designation of a State Historic Preservation Officer (SHPO) to administer the State preservation program; establish a State historic preservation review board; and provide for adequate public participation in the State program. The SHPO must identify and inventory historic properties in the State; nominate eligible properties to the National Register; prepare and implement a statewide historic preservation plan; serve as a liaison with Federal agencies on preservation matters; and provide public information, education, and technical assistance. The NHPA also authorized a grant program, supported by the Historic Preservation Fund, to provide monies to States for historic preservation projects and to individuals for the preservation of properties listed in the National Register.

Since 1966, Congress has strengthened national preservation policy further by recognizing the importance of preserving historic aspects of the Nation's heritage in several other statures, among them the National Environmental Policy Act and several transportation acts, and by enacting statures directed toward the protection and preservation of archeological resources. These laws require Federal agencies to consider historic resources in their planning and decision-making and overlap with provisions of NHPA.

Section 106 Review

Section 106 of the NHPA requires Federal agencies to consider the effects of their actions on historic properties and provide the Council an opportunity to comment on Federal projects prior to implementation. Section 106 review encourages, but does not mandate, preservation.

To successfully complete Section 106 review, Federal agencies must:

- Determine if Section 106 of NHPA applies to a given project and if so, initiate the review;
- Gather information to decide which properties in the project area are listed on or eligible for the National Register of Historic Places;
- Determine how historic properties might be affected;
- Explore alternatives to avoid or reduce harm to historic properties; and
- Reach agreement with the SHPO/tribe (and the Council in some cases) on measures to deal with any adverse effects or obtain advisory comments from the Council, which are sent to the head of the agency.

The Executive Branch has also expressed support for preservation through several Executive Orders. Examples include Executive Order No. 11593 President Nixon signed in 1971, which instituted procedures Federal agencies must follow in their property management activities. In 1996, President Clinton signed another important Executive Order No. 13006, which put forth support for locating Federal offices and facilities in historic districts and properties in the Nation's inner cities. Executive Order No. 13006 also directs Federal agencies to use and rehabilitate properties in such areas wherever feasible and reaffirms the commitment to Federal leadership in the preservation of historic properties set forth in NHPA. Another 1996 Executive Order, No. 13007, expresses support for the protection of Native American sacred sites.

Federal Tax Incentives for Historic Buildings

According to the Tax Reform Act of 1986, a property owner is eligible for a 20% tax credit, along with a 27.5 to 31.5% straight-line depreciation for the substantial rehabilitation of historic buildings for commercial, industrial and rental residential purposes (but not owner-occupied buildings), and a 10% tax credit for the substantial rehabilitation of nonresidential buildings built before 1936. The 10% tax credit is not available for rehabilitations of certified structures.

Two Federal Tax Incentive Programs currently apply to preservation activities in Pennsylvania: the rehabilitation investment tax credit and the charitable contribution deduction.

Rehabilitation investment tax credits are the most widely used incentive program. Certain expenses incurred in connection with the rehabilitation of an old building are eligible for a tax credit. Rehabilitation investment tax credits are available to owners and certain long-term leases of incoming-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 administered in the Commonwealth by the Pennsylvania Historical and Museum Commission; the Certified Local Government Program provides additional benefits to municipalities interested in historic preservation. Once certified, the local government is then eligible to:

- Participate directly in the federal historic preservation program.
- Have greater access to Historic Preservation Funds;
- Have greater level of information exchange with the State Historic Preservation Office (SHPO);
- Get technical assistance and training from the SHPO;
- Have a higher degree of participation in statewide preservation programs and planning.

Several critical requirements for CLG designation are:

- Adopt and enforce appropriate legislation for designation and protection of historic properties;
- Establish a qualified historic preservation commission;

- Enact a system for surveying historic properties;
- Enact a public participation component as part of the local program;
- Adequately perform duties and responsibilities delegated through the certification process.
- Continuing in-service historic preservation training for Historical Architecture Review Board (HARB) and Historical Commission members (8 hrs training annually per member);
- Regular attendance at HARB or Historical Commission meetings;
- A good faith effort by the governing body to appoint HARB members with professional qualifications and historic preservation backgrounds;
- Submittal of an annual report of the municipality's historic preservation activities;
- Continuing enforcement of the historic district ordinance

This was established to allow local governments to participate directly in the national historic preservation program and to provide funding to local governments to carry out their historic preservation responsibilities (survey, inventory, designation and protection of their historic resources). To achieve "certified local government" status in Pennsylvania a municipality applies to the Pennsylvania Historical and Museum Commission's Bureau for Historic Preservation.

All states are required to set aside 10% of 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.

Pennsylvania State Legislative Response to Historic Preservation: Historical and Museum Commission Act 1945

Act No. 446, approved June 6, 1945, amending the Administrative Code to consolidate the functions of the Pennsylvania Historical Commission, The State Museum and the State Archives, created the Pennsylvania Historical and Museum Commission. The Pennsylvania Historical and Museum Commission is responsible for the following historic preservation activities in the Commonwealth:

- State Historic Preservation Office for *Determination of Eligibility* and nominations to the National Register, of Historic Places;
- Section 106 Review;
- Administering Historic Preservation Grants;
- Assisting local governments with the Certified Local Government Program.

The Commission is an independent administrative board, consisting of nine citizens of the Commonwealth appointed by the Governor, the Secretary of Education ex officio, two members of the Senate appointed by the President Pro Tempore and Minority Leader, and two members of the House of Representatives appointed by the Speaker and Minority Leader. The Executive Director, appointed by the Commission to serve at its pleasure, is an ex officio member of the Environmental Quality Board, County Records Committee and the Local Government Records Committee.

As the official agency of the Commonwealth for the conservation of Pennsylvania's historic heritage, the powers and duties of the Commission fall into these principal fields; care of historical manuscripts, public records, and objects of historic interest; museums; archaeology; publications; historic sites and properties; historic preservation; geographic names; and the promotion of public interest in Pennsylvania history.

The Commission is funded partially through an annual legislative appropriation, various grants provided by Federal programs, and private donations. Officially recognized local historical organizations may benefit financially through the Commission's eligibility to receive matching funds from various federal programs. The PHMC is active in many phases of historic preservation. The PHMC also conducts a landmark identification program, presenting identification plaques to property owners for attachment on structures included in the PA Inventory of Historical Places. The landmark identification program also includes the placement of roadside historical signs at various sites and locations having statewide and national historic significance. Today nearly 1,900 markers are placed along city roads and highways to represent sites of historical significance in Pennsylvania.

An executive order went into place to require the Office of Historic Preservation of the PHMC to approve all proposals involving the demolition of a state building. The Office of Historic Preservation was also directed to develop and implement a program that will assist the public and private sectors in implementing the Commonwealth's policy to "protect and enhance our irreplaceable resources." The Office has since implemented a five-point program to achieve the executive order as follows:

- 1. Registering historically or architecturally significant sites and structure on the National Register of Historic Places and on the Pennsylvania Inventory of Historic Places;
- 2. Advising and guiding individuals and organizations regarding historic preservation and its funding;
- 3. Reviewing applications for federal preservation grants;
- 4. Working for legislation at the state level as an effective tool in historic preservation; and

5. Working with other governmental agencies to review the impact of projects, such as highways, on the Commonwealth's historic resources.

The Contact information for the Pennsylvania Historical and Museum Commission is as follows:

Commonwealth Keystone Bldg. 2nd Floor 400 North Street Harrisburg, PA 17120-0093

(717) 787-3362 fax: (717) 783-9924

www.phmc.state.pa.us

Pennsylvania's Bureau for Historic Preservation (Bureau)

The Bureau is part of the PHMC and serves as the State Historic Preservation Office (SHPO). The PHMC is the Commonwealth's official history agency and the Executive Director is designated as the State Historic Preservation Officer.

The Bureau provides technical assistance for the preservation, rehabilitation and restoration of historic buildings throughout Pennsylvania. The Bureau reviews architectural plans and specifications and provides comments on historic building projects for state and federal compliance. They also assist in code-related issues and accessibility programs in the form of letters of support for variances to historic buildings. In an effort to inform the general public, public agencies, local governments and other stewards of historic properties, the Bureau assists in the development and distribution of material on applying the Secretary of the Interior's *Standards for Rehabilitation*, preservation planning and the appropriate treatment and repair of historic building materials.

The Bureau also administers the Federal Rehabilitation Investment Tax Credit (RITC) program in partnership with the National Park Service. The tax credit program is one of the most successful and cost-effective programs that encourage private investment in rehabilitating historic properties such as office buildings, rental housing, hotels and retail stores. According to PHMC's website, since its inception in 1976, Pennsylvania has been a national leader in certified tax credit projects, completing over 1,800 projects and generating over \$2.5 billion in qualified rehabilitation expenditures. The Bureau provides technical assistance throughout the application process.

They can provide property owners with publications and technical assistance that discuss the appropriate treatment of historic buildings according to the Secretary of the Interior's Standards for Rehabilitation.

The Bureau administers the state's historic preservation program as authorized by the Pennsylvania History Code and the National Historic Preservation Act of 1966 and is guided by advisory boards and The Pennsylvania Historic Preservation Plan. A board of Commissioners, appointed by the Governor, provides oversight of the Commission.

The Pennsylvania General Assembly is in the process of considering legislation to establish a Historic Homesites Grant Program. Once established, this legislation will provide funds to the Pennsylvania Historical and Museum Commission to support rehabilitation grants (up to \$6,000) to individuals owning and residing in a historic residential building, as well as to individuals intending to purchase and reside in a historic residential building.

The buildings must serve as the owner's principal residence, 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, or be located in an Act 167 historic district, or be designated as a historic property under the local ordinance or city code in Pittsburgh and Philadelphia. All work on a historic homesite must conform to the U.S. Secretary of Interior's "Standards for the Treatment of Historic Properties."

The Pennsylvania Historic Preservation Plan

The PHMC is gearing up to create a PA Historic Preservation Plan. Below states the agenda and goals of the plan. The agenda of the plan is to:

- 1. Educate Pennsylvanians About Our Heritage and Its Value
 - Bring Pennsylvania heritage alive for our children
 - Get the preservation message out
 - Reach out to elected officials and key professionals in the public and private sectors
- 2. Build Better Communities Through Preservation
 - Strengthen and expand preservation planning at the local and regional levels
 - Expand the use of preservation as an economic development strategy
 - Make technical assistance more available and useful to citizens and local governments
- 3. Provide Strong Leadership At The State Level
 - Seek increased financial support for historic preservation
 - Lead by example
 - Build strong partnerships

Historic District Designation in Pennsylvania

To establish a designation of a Historic District on the local level requires an assessment of the present status of the community's historic resources, knowledge of past historic preservation efforts, and a list of goals and objectives to be obtained in the future.

Taking advantage of historic preservation incentives available at the national, state, and local governmental levels, such as grants, income tax credits for historic rehabilitation, low-interest loans, and local tax abatements will help in the success and acceptance of preserving historic buildings in the community.

It is useful to relate local historic preservation efforts to state and national programs, which will provide a broader perspective by identifying national, state and local historic preservation organizations and government agencies as resources.

Act 167- Establishing Historical Districts

Act 167 was adopted in 1961 and amended in 1963. This Act authorizes "counties", cities, boroughs, ... and townships to create historic districts within their geographic boundaries; provides for the appointment of Boards of Historical Architectural Review; empowers governing bodies of political subdivisions to protect the distinctive historical character of these districts and to regulate the erection, reconstruction, alteration, restoration, demolition or razing of buildings within the historic districts." It provides the necessary authority for municipalities to adopt and implement historic preservation programs.

Pennsylvania Municipalities Planning Code Act 247

The State Legislature enacted Act 247, the Pennsylvania Municipalities Code, in 1969. The Act, as enabling legislation, authorizes local governments (counties, cities, township, and boroughs) to establish by ordinances, local planning commissions, zoning regulations and subdivision regulations; and by resolution adopt a municipal comprehensive plan. In particular, Article VI, Zoning, Section 605, states:

"The provisions of all zoning ordinances may be classified so that different provisions may be applied to different classes of situations, uses and structures... Where zoning districts are created, all provisions shall be uniform for each class of uses or structures, within each district, except that additional classifications may be made within any district:

... For the regulation, restriction, or prohibition of uses and structures at or near... (vi) places having unique historical or patriotic interest of value..."

The combination of Act 167 and Act 247 provides the constitutional authority and legislative framework for local governments to develop, adopt and implement historic preservation programs, in conjunction with a municipal comprehensive plan based on sound planning and legal principles. The legislative authority is provided, expert legal and planning advice is available, however; local governments must yet be sold on the necessity and benefits of historic preservation.

Historic Preservation at the Local Level

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

1. Act 247 - Pennsylvania Municipalities Planning Code (MPC): In 2001, two new amendments to the MPC, Act 67 and 68 strengthened the ability of local government to provide for the protection of historic resources in their comprehensive plans, zoning ordinances and subdivision ordinances.

Multi-municipal Comprehensive Plans shall consider the conservation and enhancement of natural, scenic, historic and aesthetic resources in their municipalities [§1106 (a) (6)].

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

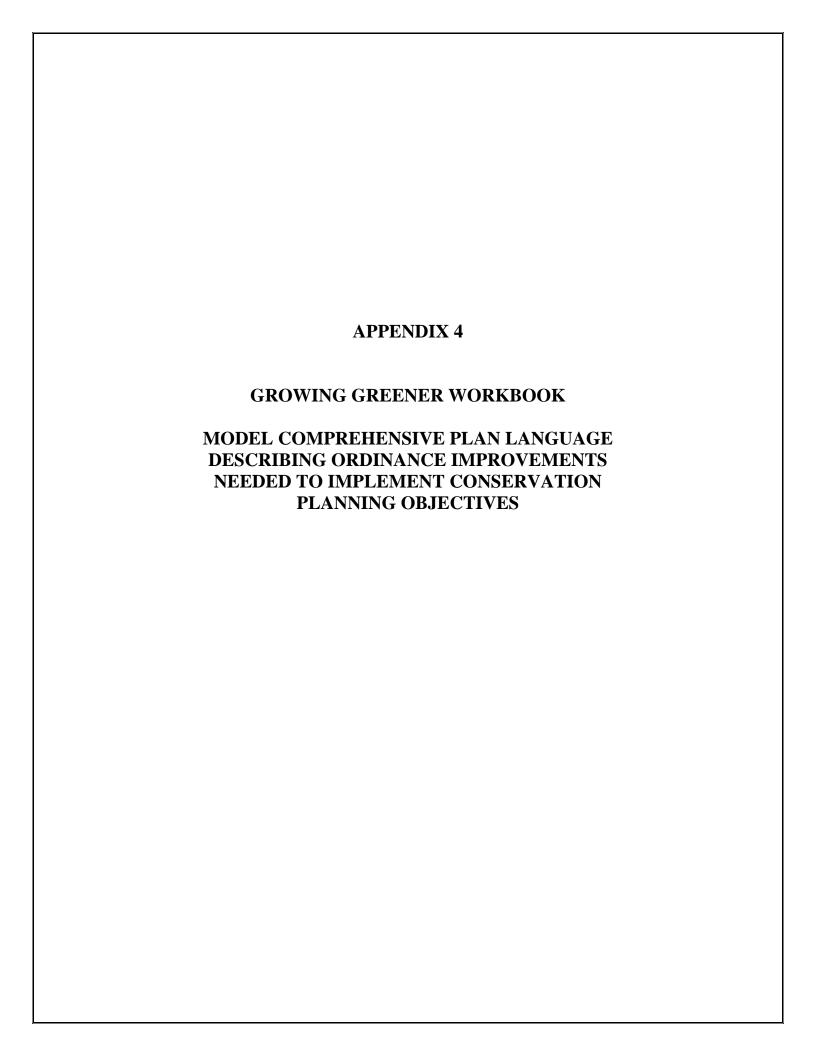
Zoning ordinances are required to protect natural and historic resources [$\S603$ (G)(2)].

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. [Article VII-A §702 (1) (ii)].

A Historic Overlay Zoning District, unlike the protection offered through the establishment of an Act 167 Historic District, can include individual sites as well as clusters, as long as the resources are well documented and identified on an historic

resources map. An historic overlay district could require new buildings to be similar in type and scale to those already existing. Setbacks should be consistent with the common building setback. Requirements to replicate the existing building line, and height and bulk could help to preserve the existing neighborhood character.

2. Act 167 - The Historic District Act (1961): Townships and boroughs may create historic districts within their municipalities to protect the historic character through regulation of the erection, reconstruction, alteration, restoration, demolition or razing of buildings within the district. The Pennsylvania Historical and Museum Commission must certify districts, including a *determination of eligibility* for the National Register of Historic Places: Therefore historic districts established through Act 167 are afforded the same protection from federal projects associated with National Register Properties. Act 167 requires appointment of an historic architectural review board, or HARB, to advise the local governing body on the appropriateness of building activity in the district.



Model Comprehensive Plan Language Describing Ordinance Improvements

Needed to Implement Conservation Planning Objectives

Outline Of Contents

A. ZONING ORDINANCE REFINEMENTS

- "Menu" of Options Offering a Variety of Densities and Conservation Requirements
- 2. Natural Features Conservation Standards
- 3. "Density Zoning"
- 4. "Landowner Compacts"
- 5. Traditional neighborhood Model
- 6. Transfer of Development Rights (TDRs)
- 7. Purchase of Development Rights (PDRs)

B. SUBDIVISION ORDINANCE REFINEMENTS

- 1. Existing Resources/Site Analysis Maps
- 2. Pre-Sketch Conference and Site Visit
- 3. Voluntary Sketch Plans
- 4. Two-Stage *Preliminary Plans* (Conceptual and Detailed)
- 5. Conservation Subdivision Design
- 6. Four-Step Approach to Designing Land-Conserving Subdivisions

Model Comprehensive Plan Language

Describing Ordinance Improvements Needed to Implement Conservation Planning Objectives

A. ZONING ORDINANCE REFINEMENTS

In order to protect the community's existing open space network municipal officials should consider amending the zoning ordinance to include the following special techniques for "creative development":

1. "Menu" of Options Offering a Variety of Densities and Conservation Requirements

The first zoning technique discussed here provides landowners with a "menu" of options to encourage land-conserving subdivision designs, and to discourage land-consumptive layouts that needlessly divide all the acreage into suburban houselots and streets. In its most basic form, this "menu" of five choices consists of two low-density options, one "density-neutral" option, and two higher-density options.

The "density-neutral" option would yield the same number of lots attainable under the preexisting zoning. To attain full density, developers would have to submit a "conservation design" in which lots are reduced in area in order to permanently conserve half the unconstrained land. Developers willing to leave a greater percentage of the unconstrained land as undivided open space would receive a density bonus through a second layout option.

To encourage landowners to consider creating rural "estates" or mini-farms (at one principal dwelling per 10 acres, for example), a "Country Properties" option is included. Several incentives are offered for those who choose this alternative, including special street standards for gravel-surfaced "country lanes", and the ability to add two accessory dwellings per lot (subject to certain size limits and design requirements for harmonizing with the rural landscape). Another low-density option of four-acre lots is provided for developers who feel that there is a strong local market for executive homes on large lots, but which are smaller than the 10-acre mini-estates.

The fifth, highest-density option would involve a significant density bonus, doubling the preexisting yield to produce well-designed village layouts in a neo-traditional manner, including architectural standards for all new construction, tree-lined avenues, village greens, parks, playgrounds, and broad perimeter greenbelts or conservancy areas in which mini-farms could be situated. (For additional details about this design option, please refer to #5 below.)

2. Natural Features Conservation Standards

The zoning technique known as *Natural Features Conservation Standards* typically excludes certain environmentally sensitive lands from development activities. Depending upon the fragility of the resource, restrictions can prohibit construction, grading, and even vegetative clearing (especially when steep slopes co-occur with highly erodible soils). "Net-outs", which subtract constrained land from the acreage on which building density is calculated, often accompany *Natural Features Conservation Standards* and effectively reduce the maximum allowable density when environmentally constrained lands occur. The percentage of constrained land which is subtracted typically varies according to the severity of the building limitation imposed by the site feature involved. This variation on *Natural Features Conservation Standards* is sometimes called "density zoning" or "performance zoning", described below.

3. "Density Zoning"

This approach, frequently referred to as "performance zoning", was first promoted actively in Bucks County during the early 1970s, and an excellent publication by that name is still available from the county planning department in Doylestown. Under "density zoning", the permitted intensity of development directly relates to the ability of the site to safely accommodate it. This tool provides municipalities with a highly defensible way to regulate building density, in contrast to conventional zoning which designates entire districts for a single uniform lot size. While the latter "blanket" approach is defensible at higher densities in serviced areas, this more finely-grained "performance" approach, which responds to the constraints present on individual parcels, is legally more sustainable in outlying areas where a community wishes to place stricter limits on new development for a variety of sound planning reasons. Courts which have rejected attempts to zone entire districts for two-, three-, or five-acre lots in Pennsylvania have upheld ordinances that place similarly restrictive density limitations on land that is steeply sloping, shallow to bedrock, or underlain by a seasonally high water table. (The definitive court decision on this issue is *Reimer vs. Upper Mt. Bethel Twp.*, 615 Atlantic Reporter, 2nd, 938-946.)

Under this approach, various "density factors" are applied to different kinds of land to objectively calculate the true area of unconstrained, buildable land within any given parcel. In that way, tracts of good flat, dry land would be eligible for full density, while other parcels of the same overall size but with fewer buildable acres would qualify for proportionately fewer dwellings. However, for more effective control over the location of house-sites and to limit the percentage of the development parcel that is converted from woodland, meadow, or farmland to suburban lawn, density zoning must be combined with other land-use techniques encouraging or requiring "conservation subdivision design", described under "Subdivision Ordinance Refinements", below.

"Landowner Compacts"

Although this approach is not currently prohibited, neither is it encouraged (or even mentioned in the zoning as an option for people to consider) in most communities. Simply put, a landowner compact' is a voluntary agreement among two or more adjoining landowners to essentially dissolve their common, internal, lot lines, and to plan their separate but contiguous landholdings in an integrated, comprehensive manner. Areas for development and conservation could be located so that they would produce the greatest benefit, allowing development to be distributed in ways that would preserve the best parts of the combined properties. Taking a very simplified example, all the development that would ordinarily occur on two adjoining parcels could be grouped on the one containing the best soils or slopes, or having the least significant woodland or habitat, leaving the other one entirely undeveloped. Two landowners would share net proceeds proportionally, based upon the number of houselots each could have developed independently. The accompanying illustration shows how a "landowner compact" might occur on two hypothetical adjoining properties.

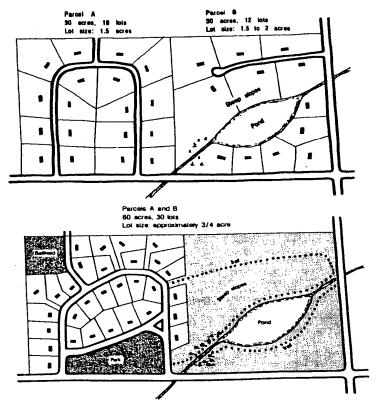


Figure 14-10. These sketches illustrate contrasting approaches to developing two adjoining parcels, each 30 acres in area. Parcel A contains very few site constraints and could easily be developed into the maximum number of lots permitted under local zoning: 18 lots. Parcel B contains some steep slopes, a pond, and a small wetland area, but could still be divided into 12 lots. However, much of parcel B is also covered with some rather special stands of trees, which would be completely unprotected under local regulations: mature hemlock groves around the pond, and numerous large beeches on the hillside. The landowner compact approach would allow the common boundary between the two parcels to be erased, so that an overall plan could be created for distributing houselots in a manner that would preserve all the important natural features on parcel B. The en-tire development of 30 homes could be located on parcel A, together with a natural park/buffer along the public road, and a ball field in one corner. Net proceeds would typically be divided in a proportional manner between the two owners, for example, 18/30ths (60 percent) for the owner of parcel A, and 12/30ths (40 per-cent) for the owner of parcel B.

5. Traditional Neighborhood Model

When it is deemed necessary or desirable to accommodate a diversity of housing sizes and types, including semi-detached and multi-family dwellings at a variety of price ranges, that development can best be handled through the creation of new neighborhoods designed along traditional lines, rather than as suburban-style 'Planned Residential Developments' with garden apartments and townhouse condominiums (where the central organizing principle typically appears to be the asphalt parking lots). Accordingly, the zoning ordinance should be amended so that higher-density development will be guided by detailed design and layout standards regarding lot size, setbacks, street alignment, streetscape design, on-street parking, the provision of interior open space as well as surrounding greenbelt areas, etc. Where appropriate, high density development should be allowed in a manner that reflects the best of traditional villages and small towns in the Commonwealth, such as Bellefonte in Centre County and Lititz in Lancaster County. (An excellent resource in preparing such zoning design standards can be found in Crossroad, Hamlet Village, Town: Design Characteristics of Traditional Neighborhoods, Old and New, by Randall Arendt, American Planning Association Planning Advisory Service Report, 1999.) Zoning standards for traditional neighborhoods should always include numerous illustrations including aerial perspectives, street cross-sections, building elevations, photographs, and streetscape perspectives, so that intending developers will know what the municipality expects before they prepare their proposals.

6. Transfer of Development Rights (TDRs)

Another technique that might ultimately help to conserve some of the Township's undeveloped lands is known as the "transfer of development rights" (TDRs). Under this approach, a zoning ordinance amendment would authorize developers to purchase the rights to develop one parcel of land and to exercise those rights on another parcel within the township. Such an ordinance would determine the areas from which those rights may be "sent" and those which would "receive" them, either by designating special districts for such purposes or by establishing certain objective criteria to be met in each case.

When most rural lands are already zoned at suburban densities (one-half to two acres per dwelling), the number of potential units that would need to be accommodated within TDR 'receiving districts' becomes extremely high, unless only a small part of the rural area were to be protected in this manner. The experience of TDRs in several Pennsylvania townships is that the "sending districts" (to be preserved) should therefore be relatively modest in scale, so that they will not overwhelm the 'receiving districts' with more dwelling units than they could reasonably handle. For this reason, in areas zoned for suburban densities (e.g. 0.5 to 2.0 dwellings/acre), TDRs are inherently limited to playing only a partial role in conserving a community's undeveloped lands, and they should therefore be viewed as a tool mostly for use on an occasional basis. An exception to this general rule in Pennsylvania is Lancaster County, where numerous townships have -- with the political support of their Amish and Mennonite farmers -- down-zoned much of the agricultural land to base densities of 20 or more acres per dwelling. Once those local political decisions were made, it became relatively easy to draw

"urban growth boundaries" around the remaining parts of those townships and to designate them as TDR "receiving areas".

In West Bradford Township, Chester County, the TDR technique was used successfully in 1997 to protect the scenic and historic Albertson-Yerkes farm at the edge of the historic village of Marshallton, from which the majority of development rights were transferred to a wooded tract several miles away. The success of this transaction was largely due to the general public consensus that preserving the scenic viewshed around Marshallton was extremely important to conserving the Township's rural character, and the broad support which existed among residents for employing this special technique to achieve that objective gave the Supervisors and Planning Commission the backing they needed to adopt this special procedure. Areas that are designated to receive the TDR development rights must be appropriate in terms of general location, accessibility, and public water/sewer service or soils suitable for community water and sewage treatment systems. To gain greater political acceptability at the local level, it is important that the TDR technique should be combined with detailed design standards to control the appearance of the areas designated to receive the additional development rights, so that they will resemble historic hamlets and villages with traditional streetscapes and neighborhood greens (as advocated in A.5 above), rather than higher-density groupings of attached housing arranged in a suburban manner around cul-de-sacs and large parking lots.

In West Vincent Township, also in Chester County, the Supervisors saw a large proposed golf course subdivision with its own new spray irrigation sewage treatment system as an incredible opportunity to save pristine farmland elsewhere in the municipality. By identifying that project site -- a lovely gentlemen's farm already targeted to be bulldozed and developed -- as a TDR "receiving area", West Vincent could, in effect, "turn lemons into lemonade". With conservation uppermost in their minds, officials strongly suggested that the applicant buy a large number of development rights from farmers in other parts of the Township previously identified as TDR "sending areas". In this way the developer could significantly increase the number of units over which it could spread its fixed costs (sewage system, golf course, etc.), while at the same time playing a very major role in conserving many acres of productive farmland elsewhere in the community, where rural preservation was much higher on the municipal agenda.

Common characteristics of these two examples are the outstanding vision and leadership shown by local officials who pro-actively led developers in new directions and had the courage to pursue this course amidst the inevitable objections of abuttors in the "receiving areas". Another common thread is the laser-like focus of these officials on preserving certain well-defined, very special areas, for which there existed broad agreement and popular support. Where these two communities succeeded, others had previously failed, often because their TDR "sending area" boundaries had been drawn far too generously, encompassing considerably more acreage than could possibly be saved without creating new developments that would be much larger or denser than local residents could comfortably accept as the price of preserving land elsewhere in their township.

In other words, TDR policies should be pursued -- at least at first -- in a "baby step" fashion producing modest but solid successes, and avoiding large-scale "fantasyland" notions of preserving entire rural landscapes with a TDR "silver bullet". Better to register a respectable gain with a relatively small project than to experience an embarrassing defeat from an idealistic attempt to accomplish too much, too fast. Such was the sad case in Kennett Township, also in Chester County, where local officials tried to preserve 700 acres of farmland by compressing that many acres of development onto a 55-acre site. The tightly-packed model village plan they commissioned an urban design team to produce was vociferously rejected by large numbers of residents who judged the proposed layout containing hundreds of rowhouses, twins, and occasional single-family homes as more appropriate to Philadelphia than to their quiet rural community. Some residents suggested that the Supervisors turn their energies instead into actively promoting conservation subdivision design -- as exemplified in the successful "Ponds at Woodward" project which had preserved a 50-acre orchard and a 10-acre woodland, while not increasing overall density above the two-acre/dwelling standard in that district. A well-balanced approach would include both strategies, in addition to PDRs and landowner stewardship (such as easement donations to land trusts). Unfortunately, the political firestorm ignited by the Township's overly ambitious TDR/village initiative effectively killed any further interest in that approach in that community, at least in the foreseeable future.

Inter-municipal TDRs could alleviate problems typically associated with finding areas of the community where designation of higher-density "receiving areas" is politically acceptable, provided the *Municipalities Planning Code* were amended to authorize such transfers. However, transferring development rights between jurisdictions would require a much higher degree of cooperation and coordination than typically exists among local governments. Another consideration is that Pennsylvania communities cannot rely upon TDR provisions to meet their conservation objectives, as the MPC prohibits municipalities from mandating this technique.

7. Purchase of Development Rights (PDRs)

As with TDRs, this technique is inherently limited as an area-wide protection tool by suburban zoning densities, which create land values that are beyond the affordability range of most communities. However, PDRs (like TDRs) provide an excellent way for a municipality to conserve an entire parcel on an occasional basis, and for this reason they can become an important element in protecting individual properties of great local significant, from time to time. As with TDRs, PDRs can potentially play critical supporting roles to other techniques that hold more promise as a method for protecting the majority of unbuilt lands in the community, such as conservation subdivision design (see B.5). Their advantage is that they protect typically whole properties, while conservation subdivision design (CSD) protects 40-70 percent of each parcel. (However, CSD can protect interconnected networks of open space, while PDRs usually save isolated parcels.)

B. SUBDIVISION ORDINANCE REFINEMENTS

The subdivision and land development ordinance should be specifically amended to include the following six items:

1. Existing Resources/Site Analysis Maps

Base maps showing fundamental site information (such as topography, and the boundaries of floodplains and wetlands) have long been required as part of the subdivision review process. In recent years several municipalities have substantially expanded the list of features to include many resources identified in their open space plans. The new kind of base map that has emerged from this evolution, sometimes called an *Existing Resources and Site Analysis Map*, identifies, locates, and describes noteworthy features to be designed around through sensitive subdivision layouts. These resources include many otherwise "buildable" areas such as certain vegetation features (including mature, undegraded woodlands, hedgerows and copses, trees larger than a certain caliper), farmland soils rated prime or of statewide importance, natural areas listed on the *Pennsylvania Natural Diversity Inventory (PNDI) or* which support flora or fauna that is known to be threatened or endangered, unique or special wildlife habitats, historic or cultural features (such as farmhouses, barns, springhouses, stone walls, cellarholes, Indian trails, and old country roads), unusual geologic formations, and scenic views into and out from the property.

Even in conventional large-lot subdivisions a few of these natural and cultural features can occasionally be conserved through sensitive street alignment, and by drawing lot lines so that particularly large trees, for example, are located near lot boundaries and not where houses, driveways, or septic systems would be likely to be sited. However, flexible site design in which lot dimensions can be substantially reduced offers the greatest potential to conserve these special places within new subdivisions. It is recommended that this kind of approach be more strongly and effectively encouraged through updated zoning provisions (such as those which offer a combination of density bonuses for sensitive land-conserving layouts to encourage this conservation design approach -- and also density disincentives to discourage conventional land-consuming layouts).

2. Pre-Sketch Conference and Site Visit

Subdivision applicants should be encouraged to meet with officials or their staff informally to discuss ideas for their properties prior to the submission of a Preliminary Plan, and to walk the land with the *Existing Resources/Site Analysis* Map in hand at this formative stage. As state law does not specifically authorize Sketch Plans, these steps should be included within the subdivision procedures section as optional but strongly recommended. Developers interested in expediting the review process will often take advantage of this option, as it helps everyone become better acquainted with the issues earlier in the process. Developers can obtain clearer insights into what local officials are looking for, in terms of conserving particular site features, or wanting to avoid (in terms of impacts) by walking the property with them early in the planning process and identifying the noteworthy features.

3. Voluntary Sketch Plans

Sketch Plans are simple and inexpensive drawings illustrating conceptual layouts of houselots, streets, and conservation areas. They should ideally be based upon the Existing Resources/Site Analysis Map, and comments received from local officials during the presketch conference and on-site visit. As with that conference and visit, municipalities currently lack authority under state law to require that applicants submit Sketch Plans per se, because such a requirement would expand the subdivision process from a two-stage procedure (with 90 days each for the Preliminary and Final Plans) to one involving a third stage and additional time. However, some developers have found the sketch plan process to **be** time well spent, because it helps them to identify and address community concerns prior to spending large sums on detailed engineering typically required for so-called "Preliminary Plans" (where about 90% of the total engineering effort is often expended). The voluntary Sketch Plan helps all parties avoid the extremely common situation in which developers first pay to engineer expensive "Preliminary Plans" and then understandably refuse to modify their layouts in any substantial manner. The final nature of the highlyengineered Preliminary Plan, as the first document which local officials see, deeply flaws the subdivision review process by limiting dialogue and information exchange at the very point when it is most needed -- during those first crucial months when the overall layout should be examined and be open to modification.

4. Two-Stage Preliminary Plans (Conceptual and Detailed)

Many developers perceive sketch plans as adding to their time and costs (which is generally true only in the short run), and generally forego this opportunity to start the process with an informal sharing of ideas. To ensure that concepts are sketched out and discussed with local officials early in the process, before plans become heavily engineered and "hardened", it is highly recommended that subdivision ordinances be amended to split the 90-day review period authorized under state law for Preliminary Plans into two phases. Those applicants who decide not to submit voluntary sketch plans would be required to prepare a Conceptual Preliminary Plan during the first 30 days, and a Detailed Preliminary Plan during the following 60 days. The former would closely resemble the voluntary sketch plan in its requirements, while the latter would essentially encompass the requirements for the standard "Preliminary Plan". By the end of the first 30 days the Planning Commission or its staff must complete their informal but detailed review, specifying the kinds of modifications needed to bring the proposal into compliance with the applicable zoning and subdivision ordinance requirements. As with standard Preliminary Plan applications, in those instances where additional time is needed, a mutually-agreed extension should be signed by the applicant.

5. Conservation Subdivision Design

The term "conservation subdivision design" describes a relatively new breed of residential development where, in addition to wetlands, floodplains and steep slopes, the majority of

flat, dry and otherwise buildable land is protected from clearing, grading and construction by reducing lot sizes in order to achieve full-yield density. Conservation subdivision design offers the single most cost-effective way for municipalities to conserve their natural lands and the other significant resources identified in their Comprehensive Plans. It is seen as a potentially very useful tool for augmenting the land protection efforts possible through state and county funding programs, which are quite limited in scope. This design approach avoids the "taking" issue because developers can -- as of right -- achieve the full density allowed on their properties under the zoning ordinance, and because the land not converted to suburban houselots remains privately owned, typically by homeowner associations (although in some instances

developers have preferred to donate those portions of their subdivisions to local land trusts).

Conservation subdivision design differs from "clustering" in three important ways. First, it sets much higher standards for the quantity, quality and configuration of the resulting open space. Where cluster ordinances typically require only 25 or 30 percent open space to be set aside, conservation subdivisions designate at least 40 (and usually 50 or more) percent of the land as permanent, undivided open space. Unlike most cluster provisions, this figure is based only on the acreage that is high, dry, flood-free, and not steeply sloped. In this way important farmland or woodland resources (including terrestrial habitat), and historic or cultural features can usually be included within the minimum required open space.

Second, municipalities can exercise greater influence on the design of new conservation subdivisions. Rather than leaving the outcome purely to chance, this flexible design approach can be strongly encouraged or even required where the Comprehensive Plan has identified the location of noteworthy resources. That encouragement could take the form of strong density disincentives to actively discourage land-consuming layouts of large lots, combined with density bonuses for land-conserving design exceeding the minimum 50% open space requirement. In certain overlay districts where the resources are critically important or particularly sensitive, the ordinance could simply require all plans to follow the principles of conservation subdivision design. Those principles are described below, in #6.

Third, the protected land is also configured so that it will, wherever practicable, contribute to creating an interconnected network of open space throughout the community, linking resource areas in adjoining subdivisions, and/or providing buffers between new development and pre-existing parklands, state forests, game lands, wildlife refuges, or land trust preserves.

6. Four-Step Approach to Designing Land-Conserving Subdivisions

The majority of subdivisions across the Commonwealth are prepared by civil engineers and land surveyors whose professional training and experience has typically not included a strong emphasis on conserving the wide range of natural and cultural features essential the successful design of this new kind of subdivision. Therefore, subdivision ordinances should be updated to explicitly describe the steps involved in designing conservation subdivisions. A

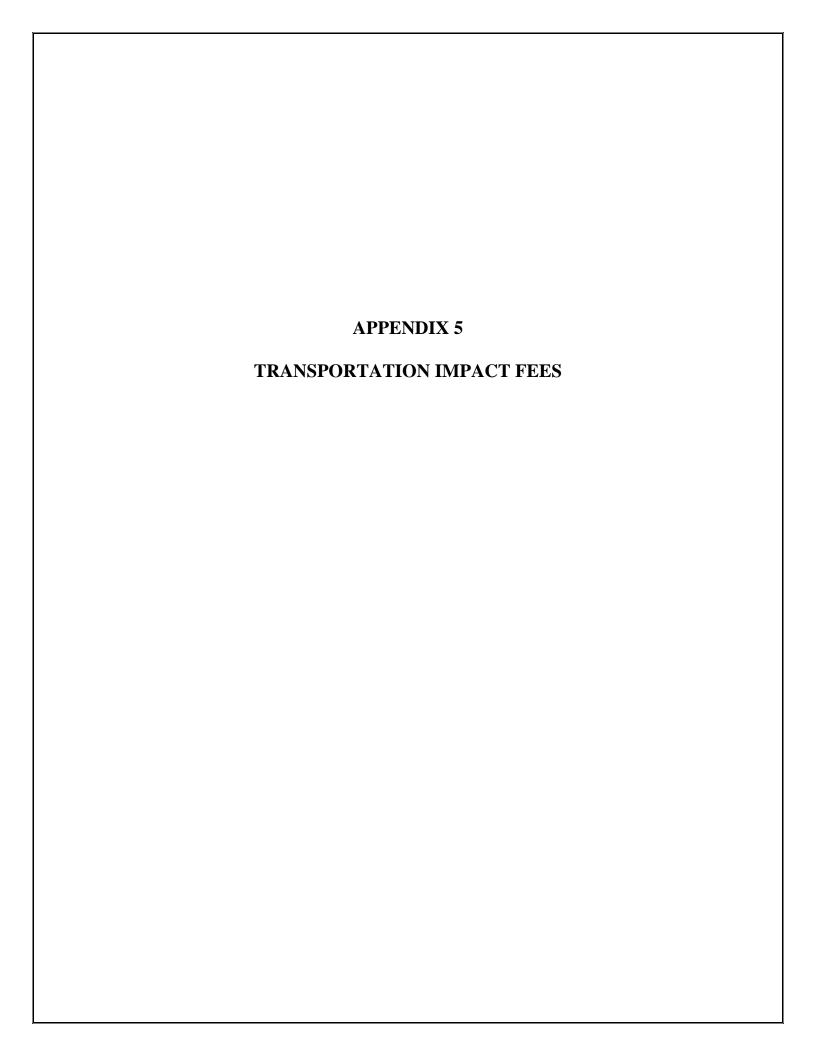
simple-four-step design approach has been devised by Natural Lands Trust as a way of clarifying the process for all parties involved, including the landowner, the developer, and local officials.

The sequence of these four steps is critical and reflects their relative importance, with the first and most significant one being the identification of conservation areas. These include both the unbuildable land (wet, floodprone, steep) which are classified as "Primary Conservation Areas", as well as noteworthy site features which would typically not **be** highlighted as elements to be designed around in conventional subdivisions. Among those "Secondary Conservation Areas" would be mature woodlands, hedgerows, large trees, prime farmland, natural meadows, upland habitats, historic buildings, geologic formations, and scenic views (particularly from public roads). In other words, this design approach seeks to conserve those special places that make each community a distinctive and attractive place and, in that regard, is a tool that is uniquely well-adapted to implementing both the letter and the spirit of the municipal open space plans. Identifying these conservation areas is a fairly easy task, once the *Existing Resources/Site Analysis Map* (described above) has been carefully prepared.

Once the primary and secondary conservation areas have been identified (which comprise the most critical step of the process), house sites are located to enjoy views of, and often direct access to, the protected open space—which enhances their desirability and value. Siting the homes in this manner provides developers with a strong marketing advantage, compared with layouts where homes are boxed in on all sides by other houselots. The third step, aligning streets and trails, is almost a matter of "connecting the dots" for vehicular and pedestrian access, while the fourth and final step of drawing in the lot lines typically involves little more than marking boundaries midway between house locations.

It is virtually impossible to design a truly bad subdivision when following this simple four-step approach. Conservation subdivision design and the four-step approach can be institutionalized in municipal ordinances, providing communities with a ready tool to help them implement their open space conservation objectives even when parcels cannot be protected in their entirety, through donations, purchases, or more sophisticated planning techniques such as TDRs.

(Note: In laying out hamlets, villages, and other forms of traditional neighborhoods such as TDR "receiving areas", Steps Two and Three are reversed, signifying the increased importance of streetscapes, terminal vistas, and public squares in such developments.)



SUMMARY OF THE STEPS ASSOCIATED WITH IMPLEMENTING A TRAFFIC IMPACT FEE ORDINANCE

	<u>Task</u>	Responsible Entity
1.	Establish Transportation Service Area and appoint advisory committee. Note: Committee must be at least 7 members, and can be the entire Planning Commission, with ad hoc members if necessary to meet the 40% builder/realtor requirement. Other than this, the committee cannot contain municipal officials or employees.	Governing Body
2.	Public Notice of Intent to implement a Traffic Impact Fee Ordinance. Note: This allows for fees to start being collected and starts an 18 month clock, by which time the Ordinance must be adopted.	Governing Body
3.	Committee oversees preparation of Land Use Assumptions plan, holds public hearing, forwards to Governing Body for adoption.	Impact Fee Advisory Committee
4.	Committee oversees preparation of Roadway Sufficiency Analysis and forwards to Governing Body for approval.	Impact Fee Advisory Committee
5.	Committee oversees preparation of Capital Improvements Plan, holds public hearing, forwards to Governing Body for approval.	Impact Fee Advisory Committee
6.	Impact Fee Ordinance text developed and Ordinance adopted.	Governing Body

TRAFFIC IMPACT FEE ADVISORY COMMITTEE FUNCTIONS

- Develop Land Use Assumptions Report
 - Describe existing land uses
 - Project land use changes within the next 5 to 10 years
 - Project development densities and population growth rates
 - Submit to County Planning Commission for review
 - Hold public hearing
 - Forward to Governing Body for approval
- Develop Roadway Sufficiency Analysis
 - Identify intersections and/or roads that will be affected by development
 - Collect traffic data
 - Analyze existing conditions [Level of Service (LOS)]
 - Identify preferred LOS
 - Identify existing deficiencies and required improvements
 - Project conditions with "pass-through" trips
 - Identify deficiencies and required improvements
 - Project conditions with new development trips
 - Identify deficiencies and required improvements
 - Forward to Governing Body for approval
- Develop Capital Improvements Plan
 - Identify needed improvements and proportionate costs according to:
 - Needed for existing conditions
 - Needed to accommodate pass-through traffic
 - Needed to accommodate development generated traffic
 - Identify time frame for construction
 - Identify other funding sources (e.g., PennDOT, Federal funds)
 - Hold public hearing
 - Forward to Governing Body for approval

TRAFFIC IMPACT FEE BASICS

- Allows collecting dollars for "off site" roadway improvements from developers
- Will ultimately require matching PennDOT or municipal funds for improvements, based on the proportionate share of traffic
- Municipality sets study area, which may ultimately be broken up into one or more Transportation Service Areas (TSA); some of the study area can be eliminated
- Each TSA must be less than 7 square miles
- First step is to determine the study area and appoint an advisory committee
- Advisory committee to be at least 7 members with 40% representation of the builder/realtor community
 - Must be residents or those doing business in the municipality
 - Cannot be municipal officials or employees
- After committee appointed, study must be done within 18 months, but all development plans filed in that period are subject to the fee
- Background studies include
 - Land Use Assumptions
 - Roadway Sufficiency Analysis
 - Capital Improvements Plan
- Collected monies must be used within certain timeframe, set by Capital Improvements Plan
- Partial cost of the Roadway Sufficiency Analysis can be recouped through the collected fees

Adoption Process

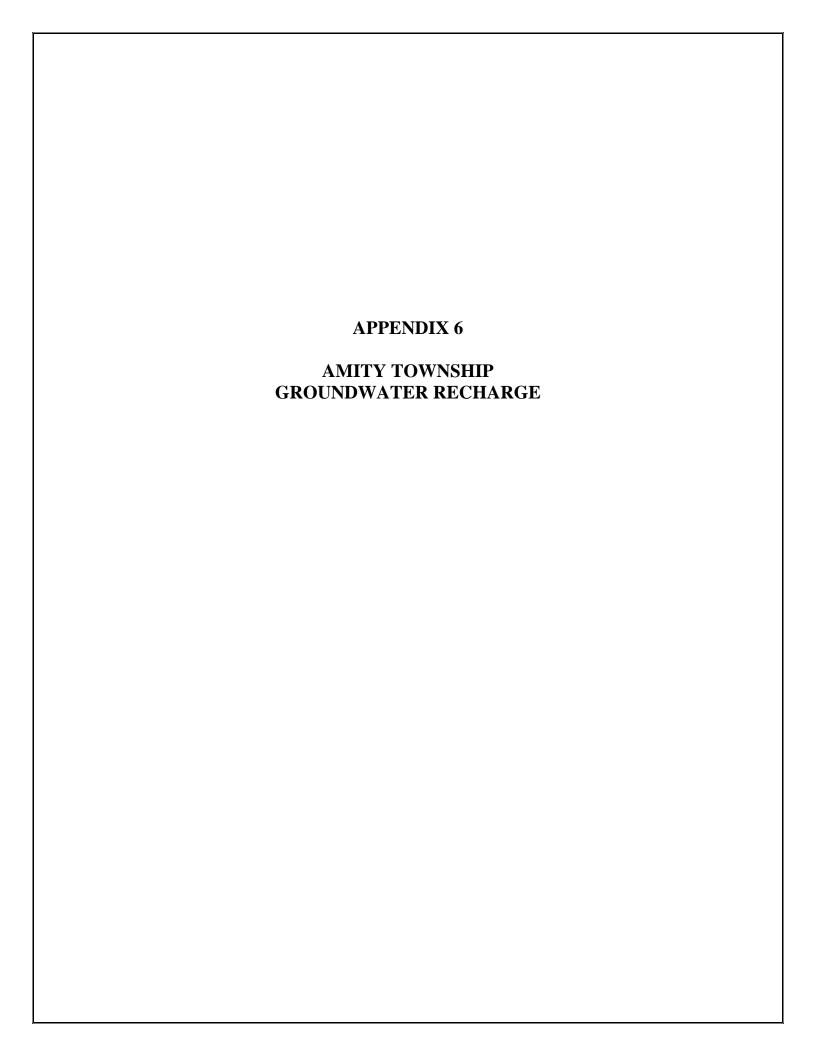
for Transportation Impact Fee Ordinance

- 1. Upon completion of the draft of Land Use Assumptions report, the Advisory Committee must forward copies to the County Planning Commission, the School District, and each of the adjoining municipalities. Each of these entities has a minimum of thirty (30) days to review the document and submit comments to the municipality.
- 2. At the conclusion of the review period, the Advisory Committee must conduct a hearing (advertised in compliance with MPC) to present the assumptions and receive comments from municipal residents and the general public. Comments received from the other review entities (those listed above) must be addressed at this hearing.
- 3. Following the public hearing, the Governing Body must pass a resolution that approves, approves with specific modifications, or disapproves the report. Unless the resolution disapproves the report, it must include a provision stating that the report is adopted as an official policy of the municipality.
- 4. Upon adoption of the Land Use Assumptions report, the Advisory Committee shall develop a Roadway Sufficiency Analysis to establish the existing level of infrastructure sufficiency and preferred levels of services within the Transportation Service Area (TSA) established by the Land Use Assumptions report. The Roadway Sufficiency Analysis must address every road where there is an anticipated need for improvements due to projected future development. Roads not addressed by the Roadway Sufficiency Analysis are deemed to be unaffected by future development; impact fees collected pursuant to this Analysis may only be spent to improve roads addressed in the Analysis.
- 5. At the completion of the Roadway Sufficiency Analysis, the Advisory Committee shall submit it to the Governing Body. The Governing Body must pass a resolution that approves, approves with specific modifications, or disapproves the Analysis. No public hearing or review by outside agencies is required at this stage, although the resolution must be presented and voted upon at a duly advertised public meeting, such as any regular Governing Body meeting.
- 6. Based upon the Land Use Assumptions report and the Roadway Sufficiency Analysis, the Advisory Committee shall identify specific capital projects for inclusion in the municipality's Transportation Capital Improvements Plan for the Transportation Service Area. The plan must include a projected timetable and budget for the identified projects in addition to the other elements required by the MPC.
- 7. The completed draft of the Transportation Capital Improvements Plan must be made available for public inspection for a period of not less than ten (10) working days. Following this inspection period, the Advisory Committee must hold at least one (1) public hearing to present the Plan formally to the public and to receive comments from them. This hearing must be advertised as required by the MPC.
- 8. After the public hearing(s), the Governing Body may make revisions to the draft Plan that are consistent with comments received at the hearing(s). The Governing Body must then adopt the

Plan pursuant to municipal procedures.¹ If the Plan proposes improvements to be funded at least in part by impact fees for Federal aid or state highways, the Plan must be approved by PennDOT and, if necessary, the U.S. Dept. of Transportation.

9. Once the Plan is adopted, the municipality may establish an Impact Fee Ordinance meeting the requirements of the MPC. The Ordinance must establish the boundaries of the Transportation Service Area and a fee schedule. The draft Ordinance must be available for public inspection for not less than ten (10) working days prior to the adoption date. The collection of fees may be retroactive for a period of up to eighteen (18) months prior to the date of enactment of the Ordinance.

¹ The MPC specifically requires that the Land Use Assumptions report and the Roadway Sufficiency Analysis be approved and adopted by resolution. The MPC provisions addressing the adoption of the Transportation Capital Improvements Plan make no reference to the means of adoption.



AMITY TOWNSHIP GROUNDWATER RECHARGE

There are numerous factors that can influence the amount of water that an aquifer receives as recharge. Groundwater recharge is directly connected to the hydrologic cycle. In a very simple form, the hydrologic cycle can be described of as water being transported from the ocean to the atmosphere by evaporation; then from the atmosphere to land surface by precipitation; from the land, water can take several routes, but eventually the water returns to the ocean. Due to the finite quantity of water that is present on our planet, the hydrologic cycle is considered a closed system. Once precipitation reaches land surface by rainfall or snowfall, numerous factors control its eventual migration back to the ocean. Basically, the precipitation will follow three routes; storage in surface depressions such as lakes, overland runoff to streams or subsurface infiltration (groundwater recharge). This section of the plan investigates the amount of groundwater recharge (subsurface infiltration) that is available in Amity Township.

Once the water infiltrates the earth's surface, some of the water will replenish the soil moisture, some will be utilized to sustain vegetation and the remaining amount will percolate downward to replenish the groundwater aquifer(s). Numerous factors can influence the amount of precipitation that will recharge the groundwater supply. Some of these factors include soil type, soil moisture content, duration and intensity of the precipitation event, temperature, time of year, slopes and man-made impacts. Of these numerous factors, groundwater recharge is most directly controlled by the frequency of the precipitation events and the soil conditions. The underlying rock type largely derives the soil conditions. Due to the complexities involved, groundwater recharge cannot be directly measured.

Although direct measurement options for groundwater recharge are not available, recharge can be estimated by the natural groundwater discharge to a stream (baseflow of a stream). The assumption utilized for calculating the groundwater recharge of an extended area is that the long-term stream baseflow equals the long-term rate of groundwater recharge. The stream baseflow separation method is considered a conservative approach for obtaining groundwater recharge values. Modified groundwater recharge values from a 1996 U.S. Geological Survey (USGS) Study of the Neshaminy Creek Basin (Schreffler 1996: 12) were utilized for calculating the available recharge for Amity Township. Conservative (1 in 10 year) recharge rates were used that reflect dry conditions. Basically, the recharge rates used for this study will be exceeded during 90 percent of the years.

Spatially, Amity Township covers 18.41 square miles. The quantity of groundwater recharge for the study area is calculated by multiplying the geologic recharge rate by the surface area of each type of geologic rock unit. The USGS recharge rates are subdivided into the following four categories: Brunswick and Lockatong Formations, Stockton

Formation, Carbonate rocks and Crystalline rocks. The study area includes all of these aquifer types. Uniquely, the Brunswick Formation in Amity Township does not directly conform to the combination of the Brunswick and Lockatong Formations described in the 1996 USGS Study. The Brunswick and Lockatong Formations in the USGS Study is primarily composed of shales, mudstones and siltstones. Due to a different depositional environment, the Amity Study Area contains more sandstone units that have a higher groundwater recharge rate. The Amity Area is located along the northern border of the Triassic Lowland Physiographic Province. As classified by Longwill, "Near the north border of the Triassic basin, the typical shales, mudstones, and siltstones of the Brunswick Formation are interbedded with and grade laterally into sandstone and fanglomerate".

This is supported by over eight (8) percent of the study area being underlain by the Brunswick limestone fanglomerate rock unit. Another difference with the USGS Study, is that the Amity area only contains less than one (1) percent of the Lockatong Formation. Based on the greater proportion of sandstone beds and the minimal coverage of the Lockatong Formation, the groundwater recharge value for the Brunswick Formation more closely correlates to the recharge values of the Stockton Formation. The Stockton Formation is a regional aquifer that is comprised of shale, siltstone and sandstone rocks. The groundwater recharge rate for the Stockton Formation is 342,000 gallons per day per square mile (Schreffler 1996: 12). We cross-referenced the Stockton groundwater recharge value with a 1982 R.E. Wright (REW) Study commissioned by the Delaware River Basin Commission (DRBC). In the REW Study, the mean recharge rate between the shale/siltstone unit and the sandstone unit is 340,000 gallons per day per square mile, which is consistent with the Stockton Formation in the USGS Study.

Based on the USGS 1 in 10 year recharge rates, the average groundwater recharge for Amity Township is 6.3 million gallons per day. Table 1 presents the square mile area of the geologic units and the groundwater recharge that were utilized to calculate the recharge values.

TABLE 1 AMITY TOWNSHIP GROUNDWATER RECHARGE RATES

Geologic Unit	Area (mi ²)	Recharge Rate (mg/d/mi ²)
Brunswick	16.84	343,000
Lockatong & Martinsburg	0.03	189,000
Carbonate Rocks	0.9	408,000
Crystalline Rocks	0.64	302,000

GROUNDWATER WITHDRAWAL

This section of the joint comprehensive plan provides estimates for the average daily groundwater withdrawals for Amity Township as well as the projected future demands. This data, coupled with the recharge data is valuable to assess the relative condition of the groundwater resources for the study area. The compilation and review of this data is a tool for making informed decisions on the future management of the water resources. In simple terms, effective groundwater management monitors the rate of groundwater withdrawal vs. the rate of groundwater recharge for a given hydrologic area.

Known and projected groundwater withdrawals for the study area along with projected population estimates were utilized to calculate the total volume of groundwater that is being withdrawn on a daily basis. A combination of public water supply wells and on-lot domestic wells withdraw water from within the Township. The public water supply system is metered and monitored on a daily basis. From a water management viewpoint, greater control and management of a public water supply system can be obtained compared to the individual on-lot wells.

The estimated water withdrawal in Amity Township in the year 2000 is 835,900 gallons per day (gpd).

For the year 2000 in Amity Township, the groundwater withdrawal was calculated by the following assumptions:

- Total Population 8,867 (2000 census),
- Citizens Water System serves an estimated population of 4,428 with an average daily withdrawal of 392,000 gpd.

• The remainder of the population, 4,439 was multiplied by 100 gpd/person, which equates to 443,900 gpd. The 100 gpd/person figure is a very conservative approach that takes into account residential wells along with commercial and industrial water users. Citizens Utilities Water Company averages 88 gallons of water per person per day.

Based on the public water system expanding by 150 connections per year over the next 10 years, the estimated population served by public water in 2010 is 8,478. Utilizing the current 88 gallons per person per day, the estimated groundwater withdrawal of the water system is 0.8 mgd. If the Amity population served by on-lot water expands by 10 percent, the estimated water withdrawal is 0.4 mgd. The total estimated groundwater withdrawal in Amity Township for the year 2010 is 1.2 mgd.

Based on a groundwater recharge estimate of 6.3 mgd and a year 2010 groundwater withdrawal of 1.2 mgd, Amity Township has sufficient groundwater resources to support the projected populations. Even with the available groundwater supply, it does not eliminate well pumping interference issues, particularly during dry periods. These well interference issues may be more evident in areas underlain by diabase such as Monocacy Hill. The diabase generally is a poor aquifer with the majority of the stored water contained in the shallow weathered zones of the bedrock. Also, the Brunswick Formation produces an anisotrophic cone-of-depression with preferential groundwater flow along geologic strike. Wells located along strike are more likely to be impacted by pumping than wells located perpendicular to strike.