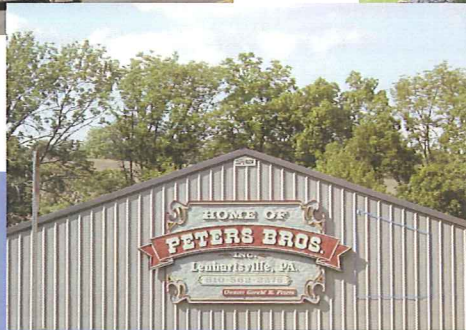
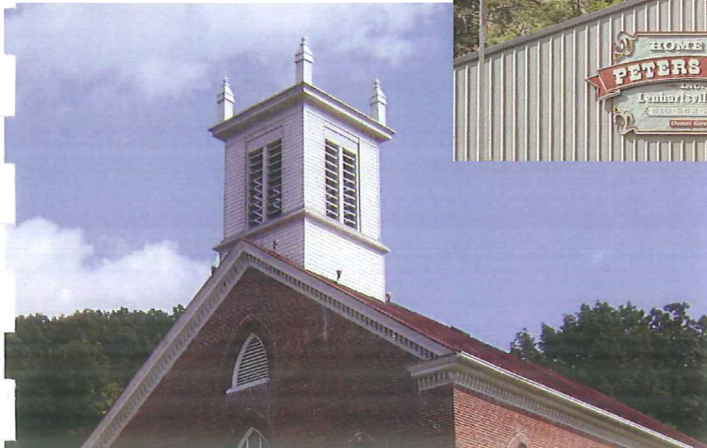
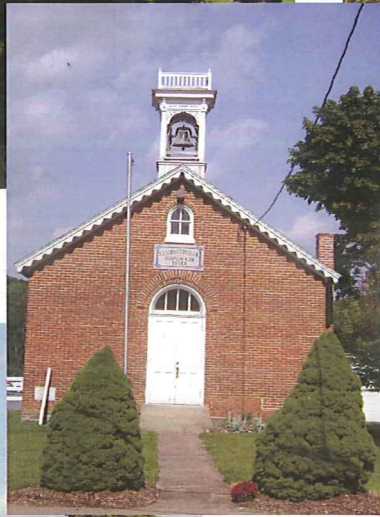


Greenwich Township - Lenhartsville Borough Joint Comprehensive Plan





Greenwich Township - Lenhartsville Borough Joint Comprehensive Plan

Berks County, Pennsylvania

Adopted by the Lenhartsville Borough Council
on June 3, 2009

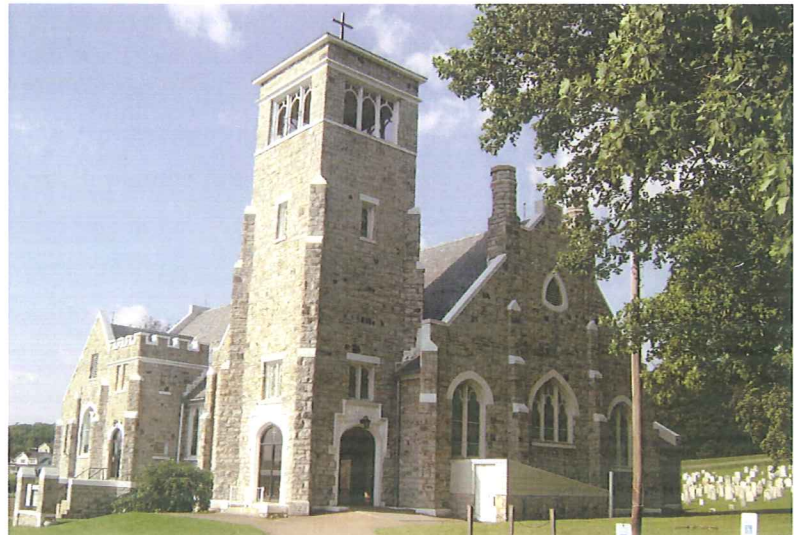
and Adopted by the Greenwich Township Board of Supervisors
on June 1, 2009

This project was partially funded by a Land Use Planning and Technical Assistance Grant, as administered by the Governor's Local Government Services Center, Pennsylvania Department of Community and Economic Development.

Community Planning Consultant

Urban Research & Development Corporation
Bethlehem, Pennsylvania

Background Mapping Prepared by the Berks County Planning Commission Staff



This Plan Was Developed under the Direction of the Following
Greenwich Township and Lenhartsville Borough
Officials - 2009

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Board of Supervisors

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Harry Hoppes, Vice-Chairperson
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INTRODUCTION

The Greenwich Township and Lenhartsville Borough Comprehensive Plan provides policies for guiding the growth and preservation of the Greenwich-Lenhartsville area over the next 10 to 15 years. The Plan's real value will be in evaluating proposed changes in the two communities against the Plan's policies for land use, roads and community facilities and services. The test of each change affecting any one of these elements should be a question: "Does it conform with our Comprehensive Plan?", or "Does it carry out the goals of our Plan?"

This Plan was primarily developed by the Greenwich Township Planning Commission, with assistance by the Board of Supervisors and Township Staff, and by the Lenhartsville Borough Council. This is an update of the 1996 Joint Comprehensive Plan.

Municipal officials considered the following when preparing the Plan:

- What are our area's assets and concerns?
- How do we build on our assets and overcome our concerns?
- What do we want to change and what do we want to preserve?
- How do we achieve the changes we desire, prevent the changes we want to avoid and preserve what is valuable to our area?

The Comprehensive Plan

This Comprehensive Plan describes the Township's and Borough's official policies for preservation, development and future public improvements. These policies are illustrated on the Comprehensive Plan Map and are described in the text of this document. Residents, businesses and community groups will assist both local governments in carrying out these policies.

The Greenwich Township and Lenhartsville Borough Joint Comprehensive Plan has three major parts:

1. Background for the Plan
2. A Plan For the Future
3. Action Program

Background For The Plan summarizes existing conditions and trends in the Greenwich-Lenhartsville area.

A Plan for the Future describes goals and recommendations which, when carried out, will lead Greenwich and Lenhartsville toward the future that the Township and Borough envision for the area.

The *Action Program* outlines actions Greenwich and Lenhartsville can take to ensure the Plan is put into practice. The Plan addresses joint concerns, as well as issues related specifically to each municipality.

BACKGROUND FOR THE PLAN

This part of the Plan summarizes major findings in the following subject areas:

- Regional Influences
- Brief History
- Natural Features
- Government Profile
- Population Housing and Employment
- Existing Land Use
- Community Facilities and Services
- Circulation

REGIONAL INFLUENCES

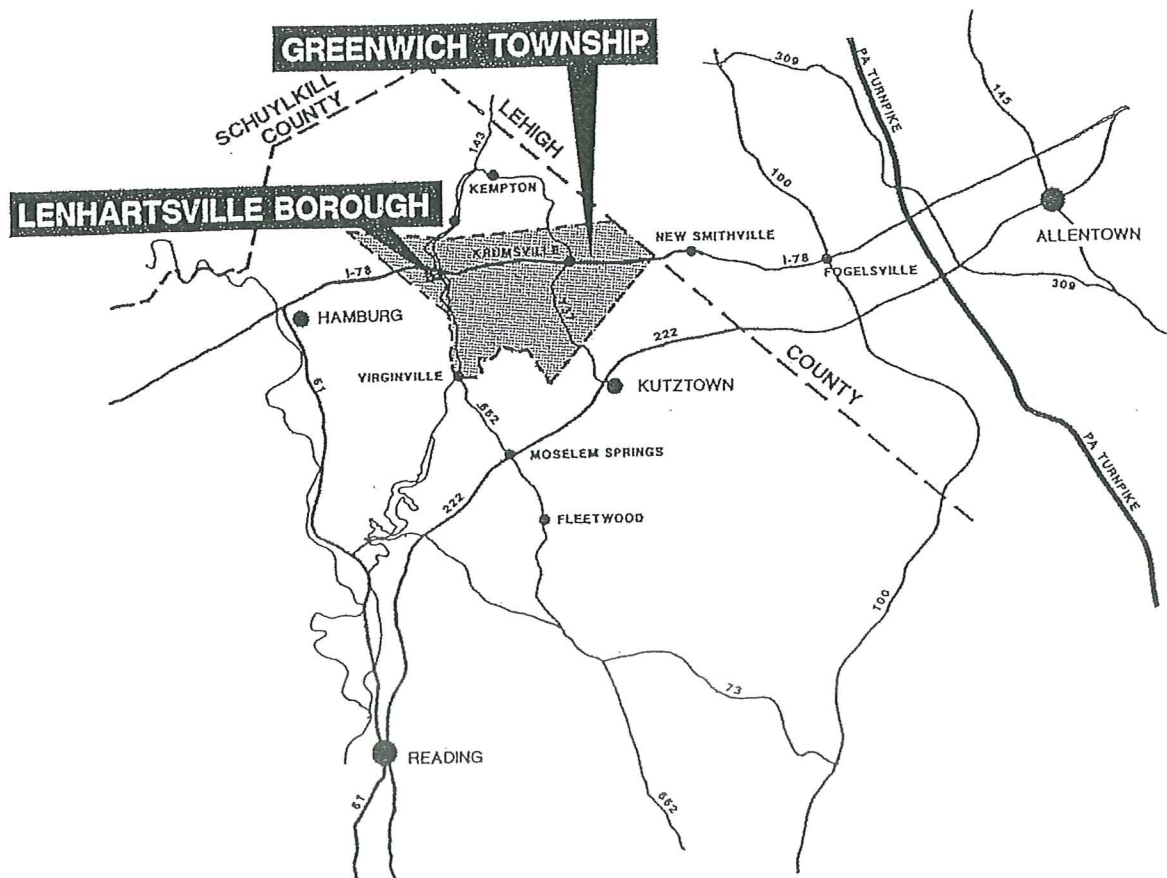
- *A community's regional setting is a prominent influence on its growth and development. Greenwich Township and Lenhartsville Borough are located in northern Berks County, a rural area at present but one likely to be in the path of future development steadily approaching from the Lehigh Valley, Kutztown and Reading areas.*

Greenwich Township and Lenhartsville Borough are situated in northern Berks County in southeastern Pennsylvania. Berks County lies along the edge of the Delaware Valley region, which is part of a growing urban corridor between New York and Washington D.C. and one of the leading industrial and trade regions of the United States.

Greenwich Township surrounds Lenhartsville, which lies within the northwest corner of the Township. Greenwich Township, in turn is bordered by Albany Township to the north, Weisenberg Township (Lehigh County) to the northeast, Maxatawny Township to the southeast, Richmond Township to the south, and Perry and Windsor Townships to the west. The Township and Borough together comprise 30.9 square miles, 30.8 square miles in Greenwich Township and 0.1 square mile in Lenhartsville. Greenwich Township is the fourth largest municipality in Berks County and Lenhartsville is the smallest.

Greenwich Township and Lenhartsville Borough are influenced by their close proximity to the growing Lehigh Valley, Kutztown and Reading areas. The western edge of the rapidly developing Lehigh Valley at the intersection of Interstate 78 and Route 100 is just 6 miles to the east of the Greenwich Township border. Reading is situated approximately 12 miles to the south of the Greenwich-Lenhartsville area. Kutztown and the growing Route 222 corridor are located within a mile of Greenwich Township's southern border. Direct and easy access to and through the Greenwich-Lenhartsville area via Interstate 78, Route 143 and Route 737 further increases the likelihood of future development in the area, especially in Greenwich Township which has an abundance of vacant developable land.

REGIONAL LOCATION



Greenwich Township is a picturesque, rural community of rolling farmland dotted with small villages, crossroad hamlets, single-family homes, a few suburban developments and limited commercial activity. The Township is one of the County's least densely developed municipalities. Winding roads, hilly terrain, farmland and scenic creek corridors are the primary features of Greenwich's landscape. Historic one-room schoolhouses, churches, farmsteads and other remnants of the area's unique heritage are found throughout the Township.

In contrast, Lenhartsville Borough is a small, mature community with residential and commercial uses mixing freely along the main streets. Of the small amount of undeveloped land within the Borough, most has steep slopes and is not suitable for development. Developing underutilized property and appropriate in-fill uses are the Borough's primary opportunities for future growth. The Borough's housing stock is a mix of attached and detached housing types. Lenhartsville's historic one-room schoolhouse, hotel and homes reflect the Borough's prosperous past as a manufacturing and trade center in northern Berks County.

PRESENCE OF THE PAST

- *Local history helps explain why communities look and function the way they do today. The role of farming, trade and commercial villages along Old Route 22 and the availability of*

water to power mills were the strongest influences on the Greenwich-Lenhartsville area's formative growth and development.

Lenhartsville Borough and Greenwich Township share a long and interesting history. The Borough and Township lie within the Hardyston Jasper Archaeological District. This District is eligible for the National Register of Historic Places and is characterized by the intensive use of jasper in lithic tool production dating back 10,000 years. The District is divided into two zones: a quarry zone where the jasper was quarried, and a wider activity zone where jasper was typically used more than other lithic forms for tools. The Greenwich-Lenhartsville Area lies within the activity zone of the district.

Early Inhabitants

The Delaware or Lenni Lenape Indians were the area's earliest known inhabitants. The Delaware were a meek and docile tribe whose ancient symbol was the turtle. The tribe was comprised of smaller clans. Of these clans, the Minsi (or wolf) Clan inhabited the Greenwich-Lenhartsville Area. The largest Minsi settlement in Berks County was located at present day Virgenville on the Township's southern border.

The first European settlers came to the area in the early 1700's. These settlers were mostly Germans, although some were descendants of French Huguenots. They came to America primarily from the German Province of Pfalz (or Palatinate). The Palatinates settled the area as farmers, building family farmsteads and clearing the land for agriculture.

The years 1755 to 1758 brought Indian raids to the frontier lands of the colonies, including northern Berks County. A system of forts and blockhouses were constructed along the frontier as Indian massacres struck fear into the hearts of settlers.

Churches and Schools

In 1744, a reformed congregation known as the High Dutch was organized on what is now the site of Dunkels Church in the Township. The original log structure was replaced by a second log structure in 1790 and by a brick building in 1859. The brick building is still standing and considered structurally sound, although it has been vacant since 1971. Two other churches of historical significance are the Bethel Lutheran Church (now known as Mount Zion Lutheran Church), which was organized in 1761 at Grimville, and the Friedens Church, which was erected in 1856 between Lenhartsville and Klinesville along the old Allentown State Road (Old 22). Between 1923 and 1925 the brick church in Grimville was replaced by the existing stone church.

These early churches probably doubled as schools until the Township adopted the public school system in 1851. By 1923, there were 11 one-room school houses in the Greenwich-Lenhartsville area. Some of these were still in use as late as 1944.

Inns, Public Houses and Trading Routes

Many trading routes crossed the Greenwich-Lenhartsville Area. The most prominent and influential of these was the Allentown State Road now known as Old 22. Early inns and public-houses emerged along this important route, around which small hamlets and other commerce grew.

One of the earliest inns was owned and operated by John and Samuel Lenhart, and was one of the first structures built in the village of Lenhartsville. Lenhartsville's location along the Allentown State Road and the Maiden Creek, which was the main creek in the area, made it an ideal commercial center. In 1842, the Washington Hotel was erected and operated on the same site until it was destroyed by fire in 1913. It was rebuilt and stands today as the Deitsch Eck Hotel. William Reis built the Farmers and Drovers Hotel in 1856. The hotel, which had been converted to three apartments, was severely damaged by fire in February of 1995. Mills, blacksmith shops, wagon shops, and a paint factory flourished here with the arrival of the Berks County Railroad in 1874.

Three smaller villages grew up around inns along what is now Old Route 22 in the Township. These were Klinessville, Krumsville and Grimville. Klinessville was founded by Peter Kline, who built a large log structure that served as an inn and a store.

Krumsville, earlier known as Smithville, was first settled by Reuben Smith who built a tavern there along the State Road. Mrs. Wilson P. Krum purchased most of Smith's property in 1885 and the village became known as Krumsville. Grimville is named after Col. David Bertolet Grim, who built a brick inn known as the Golden Lamb along this important cattle driving route in 1836. The cattle driving route was one of the two main cattle driving routes in Pennsylvania and allowed Grimville to prosper. In the years to follow, a store, tannery and distillery were added to the town to accommodate all the livestock traffic. In 1844 this thriving livestock town had a large cattle auction, three stores and seven taverns to serve the needs of the drovers.

Further south in the Township, an area known as Liscum emerged around the Three Mile House. Jacob Stein established this tavern in 1850, and nearby lies Stein's distillery and an old stone cabin believed to be the oldest structure in Greenwich Township. While several distilleries were operating in the area, Stein's producing fine quality rye whiskey, was probably the largest and best known. The old stone cabin was used by Adam Stein as a warehouse for the distillery.

Both Lenhartsville and Greenwich Township were originally part of Albany Township. Greenwich Township separated from Albany Township and incorporated as a township in 1755. The Township was named by English settlers after Greenwich, England. Lenhartsville separated from Greenwich and incorporated as a borough in 1887. Lenhartsville was named for the Borough's early inn owners, John and Samuel Lenhart.

Mills

With three substantial water sources in the Township, numerous mills were built and an excellent goods and services support system was established for what has been historically and remains today the Township's major industry--farming. The first mill in the Township was probably that of Peter Conrad, operating at an unknown location until being burned and destroyed by Indians around 1755. John Lenhart operated the Pioneer Mill in 1799 on the Maiden Creek near Lenhartsville, John Kremer's Mill (later Heffner's) was built around 1800 near the mouth of the Sacony, and Kistler's Mill (later Daniel Deitrick's) operated at an early date on Mill Creek. Milling operations at Dreibelbis Station, started by the Sunday family in the days of the American Revolution and carried on into the Twentieth century, served an important role in the economics of the community.

The American industrial revolution, occurring after the Civil War, brought little change to the mills. Some of the original saw or grist-mills were still operating and several new mills were established between the late 1850's to 1880's. All but Zettlemoyer's steam powered saw and grist-mill operated in the traditional water-powered manner. Dreibelbis had added clover milling and cider pressing to their operations. In 1901 a steam-powered apple butter cookery was added. Steam generated by the cooking process was used to drive a boring machine that would put the holes into fence posts. While the other operations were closed over the years, the cookery continued until 1962. Merkel's Mill, outside of Lenhartsville, with a succession of owners and some modernization, has the longest history of service for the area, operating as Kershner's Mill until 1972. All other mills had stopped production by the 1920's.

The Role of the Railroad

A new dimension in commercial trade was introduced when the Berks County Railroad established a passenger and freight station in Lenhartsville in 1874. In particular, the Maiden creek Furnace, operating since 1854 outside of Lenhartsville, was able to increase its production as the iron from the Moselem mines could now be shipped by rail rather than the slower wagon route. Other non-farming related industries developed around the Lenhartsville area. The Greenwich Manufacturing Company (known locally as the Paint Works) and Fisher's Shirt Factory are two businesses that depended on the railroad. Dreibelbis served as a flag station for the railroad as late as 1925 and was important in the settlement pattern of the Township and Borough. The railroad was used by students for commuting to school and by workers to commute to the city of Reading. Passenger service continued until 1949 and freight service until 1972.

The Early Role of Farming in the Township

The Greenwich/Lenhartsville's major industry has been and continues to be farming. The Pennsylvania Germans that settled the area had a reputation as excellent farmers. Abandoned limekilns on many farms are evidence of an early farming practice that helped them earn this reputation. Lime has many uses on the farm: as mortar, plaster, whitewash, disinfectant, but most importantly, as a crop fertilizer. Several large kilns in the Township were built to convert the crushed limestone into lime by a high temperature burning process.

Many farmers built small kilns in different places on their land so that they could supply their fields with the valuable fertilizer. A walk in the woods and fields will often turn up an abandoned kiln or two.

Farming has maintained the rural character of the Township. Ironically, the very industry that has preserved the rural, slow-to-change atmosphere has itself undergone revolutionary changes.

Before 1840 the only tools available to the farmer were the plow, harrow, sickle, scythe and rake. The next 50 years brought dramatic changes as horse-powered machines took over tasks previously done by men, and in 1925 the introduction of the light-weight gas-powered tractor had a revolutionary impact on the industry. The next twenty-five years brought important changes to the Greenwich-Lenhartsville area. Actual visual changes to the landscape resulted as newer farming techniques and modernization occurred in the community. Some roads were paved to accommodate the automobile and electric and telephone lines were added to the scenery. Though electricity was available in the more populated areas as early as 1925, it was not installed in most farm homes until the late 1940's.

The Later Role of Farming in the Township

Farming has long been a primary source of local income, and farmland continues to be predominant in the Township. The following tabulation of the number of farms and acres by size of farm was done in 1971.

<u>FARM SIZE</u>	<u>NO. OF FARMS</u>	<u>TOTAL ACRES</u>
5 - 19 Acres	50	497
20 - 49 Acres	42	1,360
50 - 99 Acres	63	4,617
100 Acres and Over	<u>61</u>	<u>9,349</u>
	216	15,823

Architecture and Historic Structures

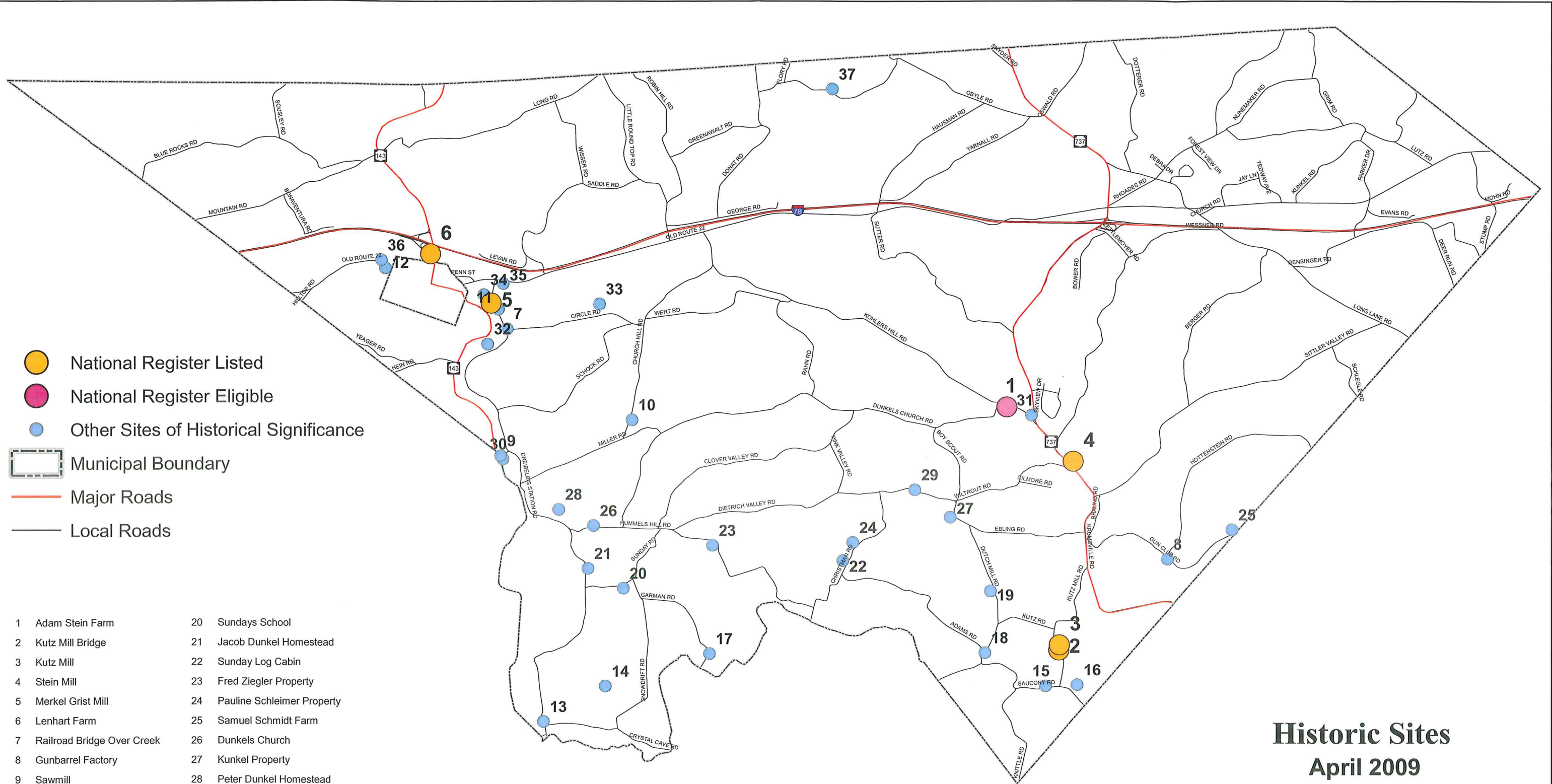
A variety of architectural styles and periods are represented in Lenhartsville Borough and the Township's villages. Many excellent examples of Pennsylvania German architecture in the farmhouses and barns also exist throughout the area. Equally as interesting are the numerous summer kitchens, smokehouses, butcherhouses, limekilns and other structures, very many still in use, that are a physical, recorded history of farm culture in the Township.

The stone cabin on the Stein Property is a excellent example of early Pennsylvania German architecture. Thought to be one of the oldest buildings in the Township, it was originally built by Henry Kohler, one of Greenwich's earliest settlers.

In 1986 the Berks County Conservancy conducted a historical survey of structures in the Township. Two hundred and sixty sites were surveyed based on locations supplied by county HELP maps. The following period structures were still standing:

Pre 1750	1	1850 - 1874	114
1750 - 1799	4	1875 - 1899	56
1780 - 1799	2	1900 - 1924	10
1800 - 1824	32	1924 - 1949	1
1825 - 1849	22	*later structures were not included in the survey	

Six sites in the Township appear on the National Register of Historic Sites in 1995. They include Kutz Mill Covered Bridge, Stein's Mill, Merkel's Mill, Kutz Mill, Dreibelbis Station Covered Bridge, and the Donald Kershner property (or Lenhart Farmstead) at the I-78 exit ramp at Route 143. Additional sites in the Greenwich-Lenhartsville area may be eligible for the Register.



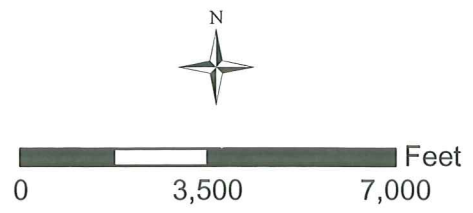
- National Register Listed
- National Register Eligible
- Other Sites of Historical Significance
- Municipal Boundary
- Major Roads
- Local Roads

- | | |
|----------------------------------|----------------------------------|
| 1 Adam Stein Farm | 20 Sundays School |
| 2 Kutz Mill Bridge | 21 Jacob Dunkel Homestead |
| 3 Kutz Mill | 22 Sunday Log Cabin |
| 4 Stein Mill | 23 Fred Ziegler Property |
| 5 Merkel Grist Mill | 24 Pauline Schleimer Property |
| 6 Lenhart Farm | 25 Samuel Schmidt Farm |
| 7 Railroad Bridge Over Creek | 26 Dunkels Church |
| 8 Gunbarrel Factory | 27 Kunkel Property |
| 9 Sawmill | 28 Peter Dunkel Homestead |
| 10 Dunkels School | 29 Spohn-Dietrich Homestead |
| 11 Iron Company Building | 30 Dreibelbis Station |
| 12 Grims Gristmill | 31 Steins Tavern |
| 13 Berks County Railroad Tunnel | 32 Hunter Forge |
| 14 Heffner Farm | 33 Kermit Heeps Property |
| 15 Frederick Quellmaltz Property | 34 Maiden Creek Charcoal Furnace |
| 16 Kohler Farm | 35 Friedens UCC Church |
| 17 Heffner Hotel | 36 Robert Ensminger Farm |
| 18 Shofers Mill | 37 J.H. Jarrett Property |
| 19 Kutz Homestead | |

The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.

Historic Sites April 2009

Greenwich Township Berks County, Pennsylvania



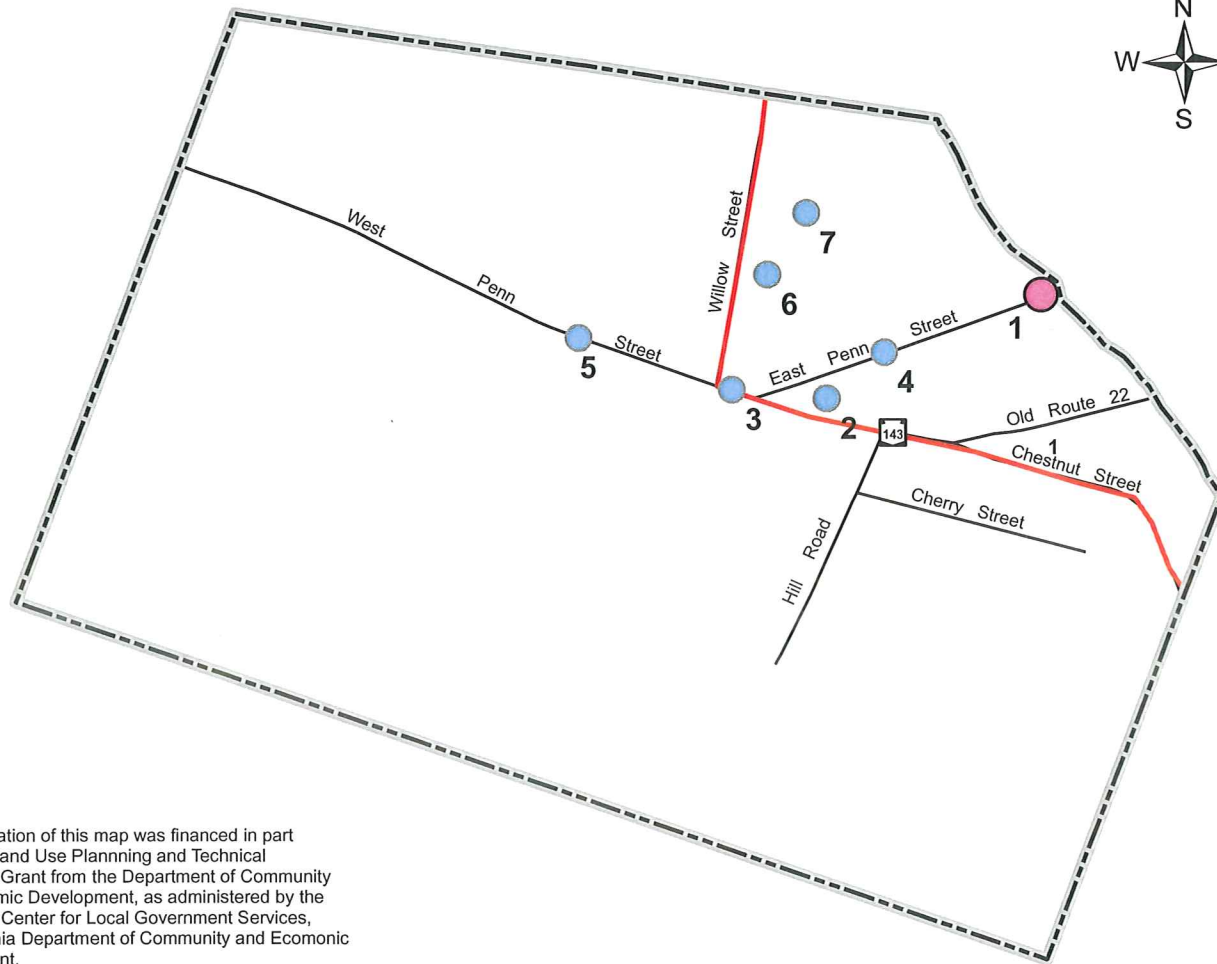
Source Data: Berks County Planning Commission, Urban Research & Development Corporation, PHMC, George Meiser IX

Historic Sites

April 2009



Lenhartsville Borough

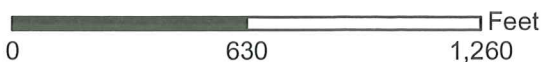
Berks County, Pennsylvania



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.

- 1 Penn Street Bridge
- 2 Farmers & Drovers Hotel
- 3 Lenhartsville Borough
- 4 Lenhartsville - Penn Street Sect
- 5 Lenhartsville - Old Route 22
- 6 Lenhartsville School / Lodge
- 7 Pennsylvania Dutch Folk Culture

-  National Register Listed
-  National Register Eligible
-  Other Sites of Historical Significance
-  Lenhartsville Boundary
-  Major Roads
-  Local Roads



NATURAL FEATURES

The use of the land is influenced by several types of natural features such as hydrology, steep slopes, woodlands and soil characteristics, among others. This section describes how natural features can influence the ways in which the Greenwich-Lenhartsville area can be developed and preserved.

Hydrology

Hydrology refers to the water-related features such as streams, floodprone areas and drainage characteristics. These features are important for the following reasons:

- Streams and creeks provide potential recreational areas, water sources and valuable aquatic habitats,
- Knowledge of drainage basins is necessary in designing sanitary sewers and storm sewers,
- Alluvial soils and floodplains denote areas prone to flooding; development in these areas may result in loss of property and lives and worsen flood conditions.
- Alluvial soils, hydric soils and wetlands indicate land where chronic or occasional wetness may weaken foundations or otherwise constrain construction, and
- Wetlands are important aquifer recharge areas, support a uniquely sensitive environment and are protected by both state and federal law.

The Maiden Creek and Sacony Creek are the two largest waterways in the Greenwich-Lenhartsville area. Each stream drains approximately one-half of the study area with a major watershed boundary running diagonally across Greenwich from the Township's northeast corner to its southwest corner. The Maiden Creek and the Sacony Creek converge in the southwest corner of Greenwich near the village of Virginville. Mill Creek and other tributaries of the Maiden Creek or Sacony Creek form several minor drainage basins in the Greenwich-Lenhartsville area, as shown on the accompanying Hydrology Map.

The Pennsylvania Department of Environmental Protection (DEP) considers Mill Creek, Sacony Creek and Furnace Creek within the Greenwich-Lenhartsville area to be Trout Stocking Fisheries. These are streams whose water quality should be protected to allow continued maintenance and propagation of trout and warm water flora and fauna. The Maiden Creek and its unnamed tributaries in the Greenwich-Lenhartsville area are cold water fisheries, according to DEP. These fisheries are streams that should be protected to remain as habitats for fish species and additional fauna and flora indigenous to cold water.

The entire Greenwich-Lenhartsville area drains into Lake Ontelaunee. The Lake Ontelaunee reservoir is the water supply for the City of Reading. A number of actions can help maintain the quality of this water supply such as limiting development along stream corridors, strictly controlling erosion and sedimentation, and identifying and improving septic systems which leach into waterbodies.

The accompanying maps show other hydrological features including the 100-year flood-plains, hydric soils and wetlands. One-hundred year flood-plains are flooded at least once every 100 years, as

determined by the Federal Insurance Administration. Many communities limit development within the 100-year floodplain to prevent the loss of lives and property. Development in the floodplain also worsens flooding conditions along creeks and rivers. In Greenwich and Lenhartsville, the most significant 100-year floodplains are found along the Maiden Creek, Sacony Creek, Furnace Creek and Mill Creek.

Wetlands are important to recharge groundwater and to support wildlife, fish and other aquatic life. The National Wetland Inventory Maps show the approximate locations of many of the most prominent wetlands, however, those maps do not include all wetlands. The National Inventory Maps do not identify any wetlands within Lenhartsville, but do identify wetlands in Greenwich along many stream corridors and other low-lying areas.

Hydric soils, which may indicate the presence of wetlands, are soils with high water tables. Hydric soils are found along streams, creeks and other low-lying locations throughout the Greenwich-Lenhartsville area.

Steep Slopes

Steep slopes and rolling farmland are prevalent throughout the area. The accompanying Topography Map shows two categories of slopes within the Borough and Township: land between a 15 percent and 25 percent grade (moderately steep slopes) and land over a 25 percent grade (very steep slopes). Knowledge of steeply sloping areas is important in planning for future development because:

- Construction and maintenance of roads and buildings on steep slopes is costly, and
- Steep slopes are susceptible to erosion when soil and vegetation are disturbed.

Both Lenhartsville and Greenwich include extensive steeply sloped areas. Almost the entire portion of Lenhartsville south of West Penn Street/Chestnut Street has moderately steep and very steep grades. A small area of moderately steep slopes is also located along the north side of West Penn Street. The remainder of Lenhartsville is relatively flat.

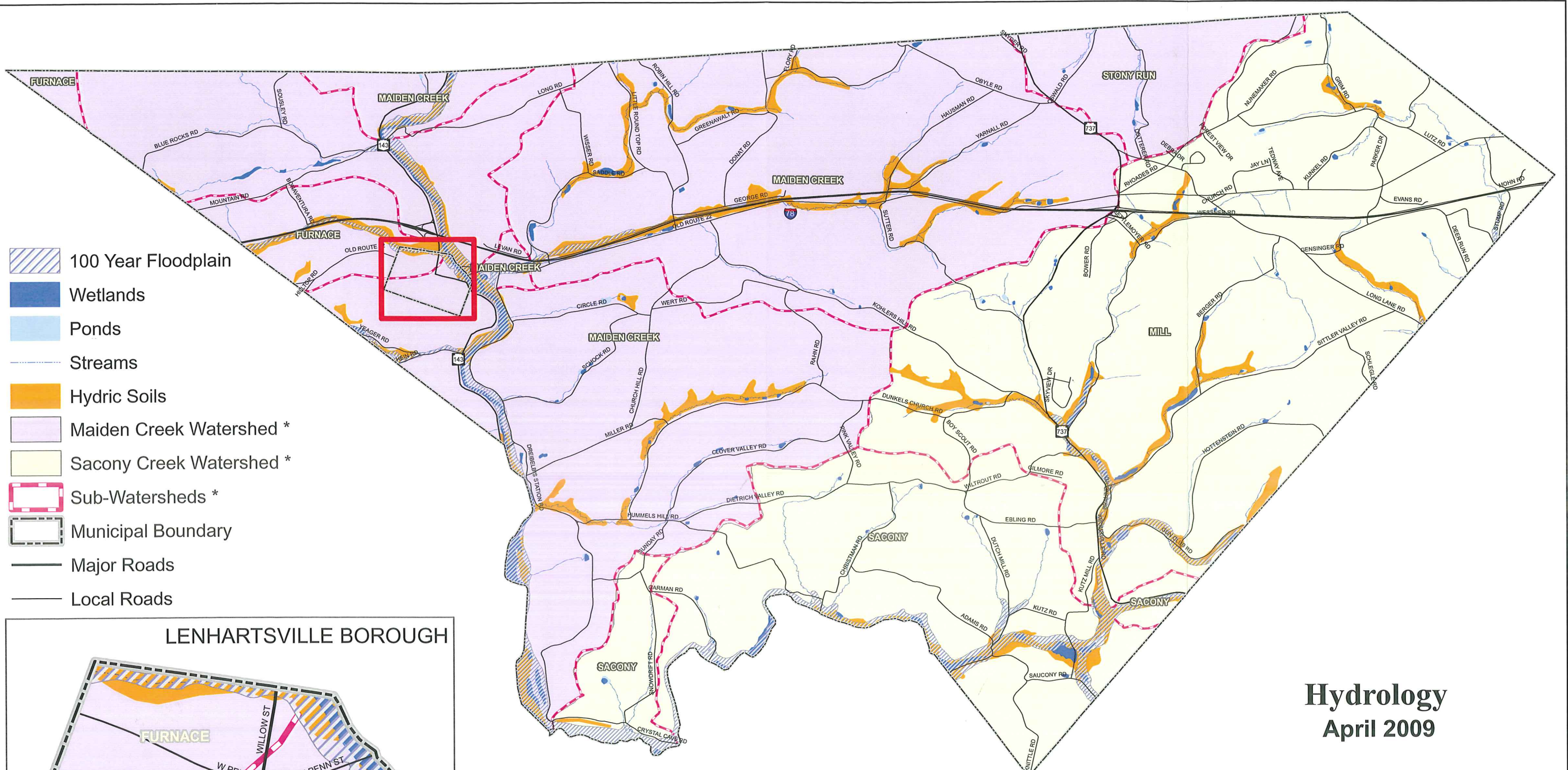
Steep slopes are extensive in every part of Greenwich and an important part of the Township's natural character. Both moderately steep and very steep grades are widespread throughout the Township, as illustrated on the accompanying map showing the area's topographic characteristics.












Woodlands

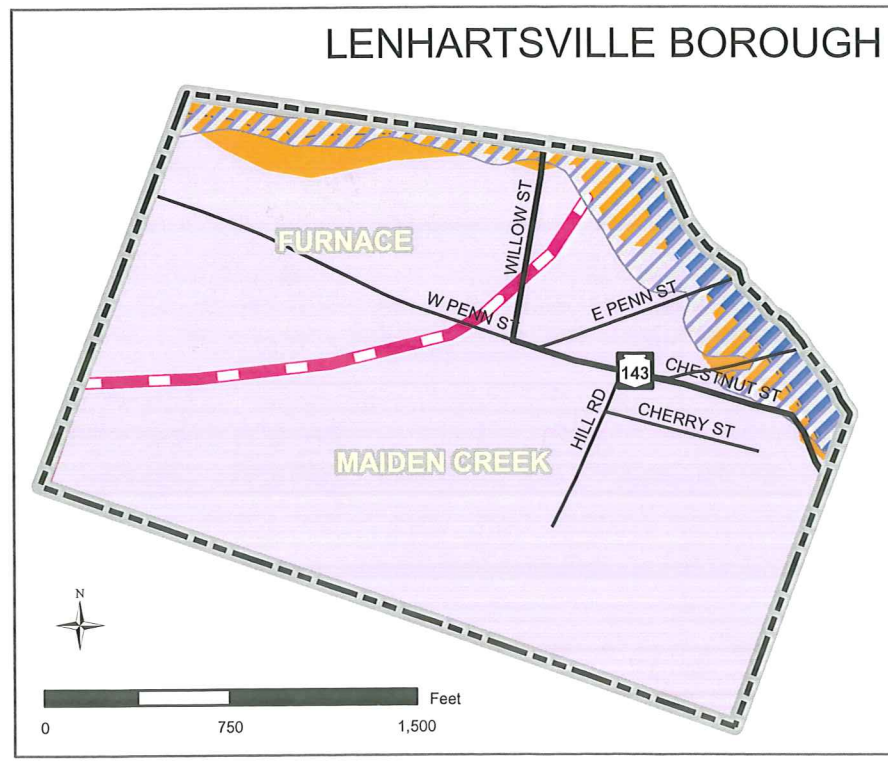
Woodlands are areas which contain primarily second and third generation forests. Knowledge of woodland areas are important for the following reasons:

- Woodlands are a scenic resource which provide visual relief, softening views of the landscape,
- Woodlands provide unique wildlife habitats which, once destroyed, take decades to recover, and
- Vegetation cover and root systems of the forest ecosystem protect against erosion and stabilize the soil.

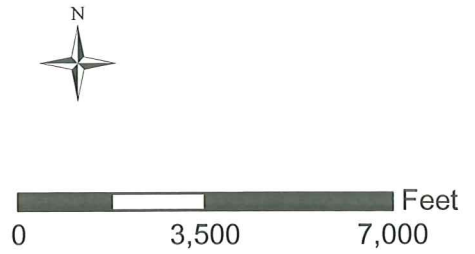
The developed parts of Lenhartsville have no remaining concentrations of significant wooded areas. However, the steep hills located in the Borough's undeveloped southern sector contain some woodlands. Greenwich Township has many significant stands of woodlands located throughout the Township. Many of these woodlands are found in areas that are unsuitable for farming such as areas with rocky soil, steep slopes, floodplains and along streambanks and drainageways.



-  100 Year Floodplain
-  Wetlands
-  Ponds
-  Streams
-  Hydric Soils
-  Maiden Creek Watershed *
-  Sacony Creek Watershed *
-  Sub-Watersheds *
-  Municipal Boundary
-  Major Roads
-  Local Roads



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.

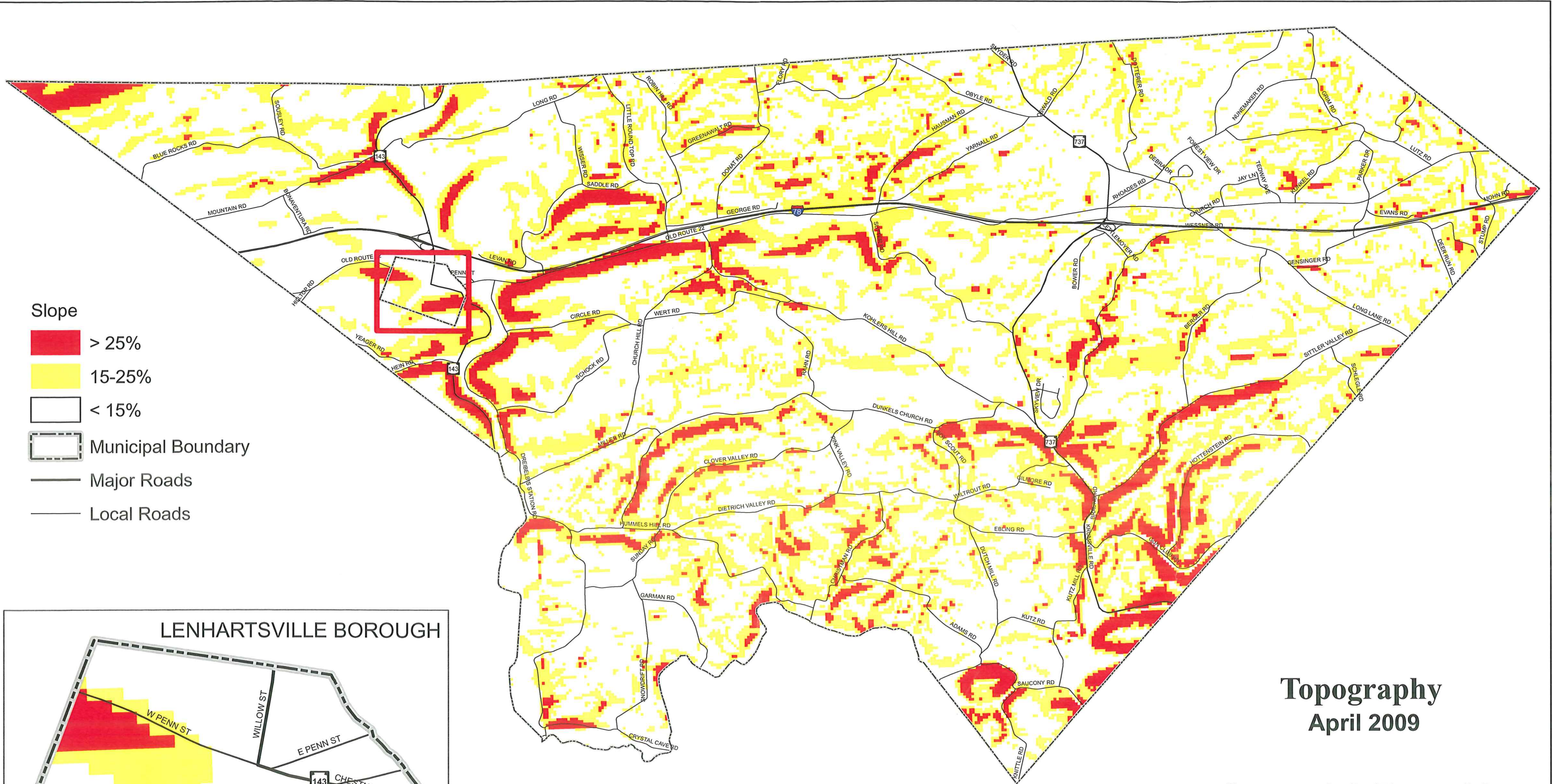


Hydrology April 2009

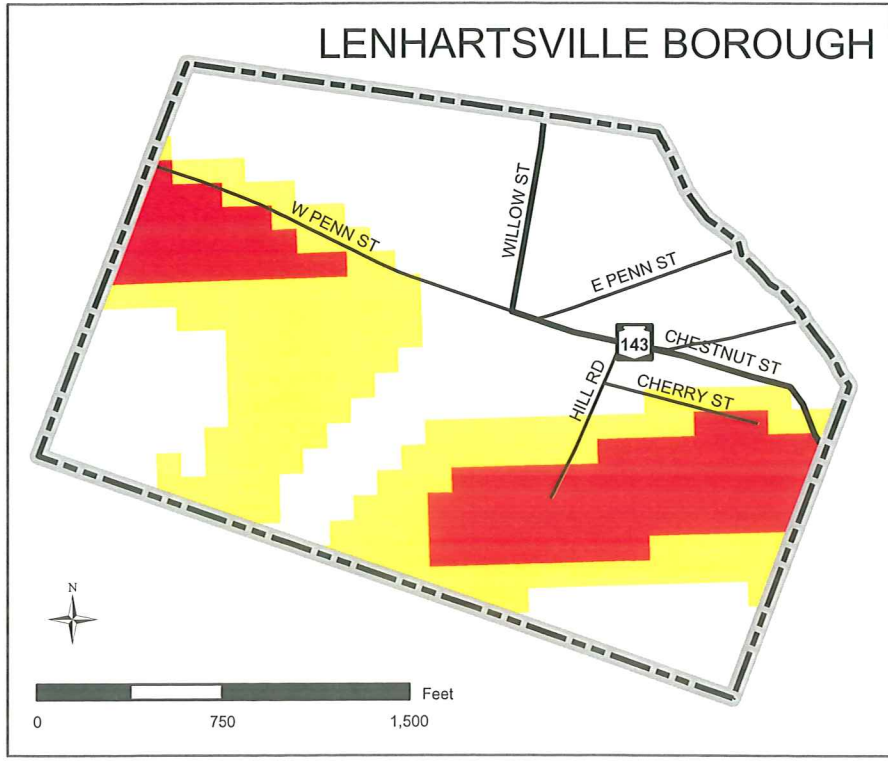
Greenwich Township & Lenhartsville Borough Berks County, Pennsylvania

* Watershed boundaries are for planning purposes only. Refer to Act 167 plans for engineering and official boundaries.

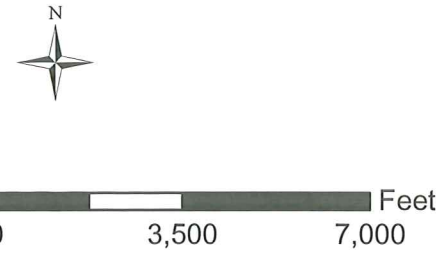
Source Data: Berks County Planning Commission, Urban Research & Development Corporation, USDA Natural Resources Conservation Service



- Slope**
- > 25%
 - 15-25%
 - < 15%
 - Municipal Boundary
 - Major Roads
 - Local Roads



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.



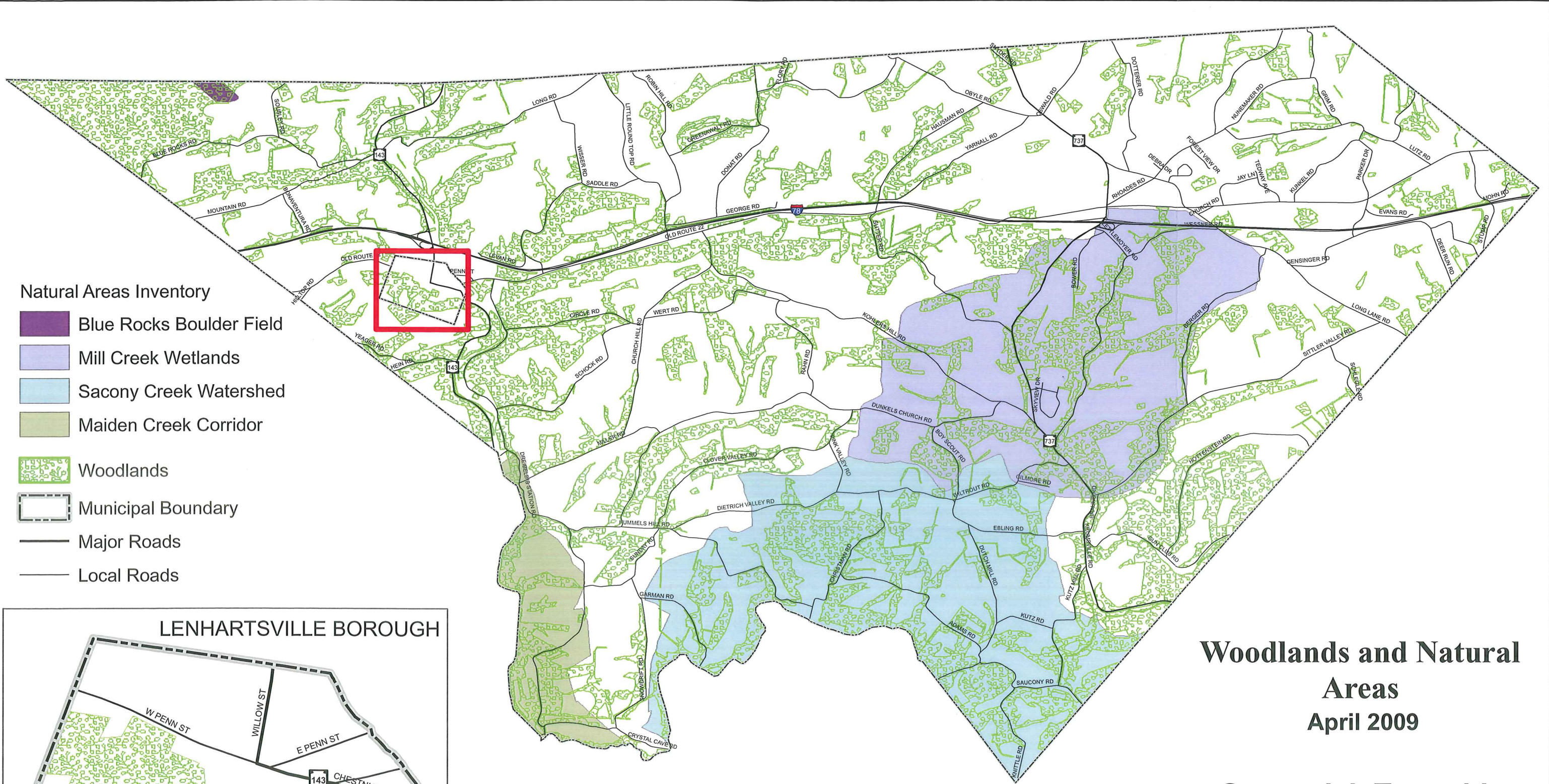
Topography

April 2009

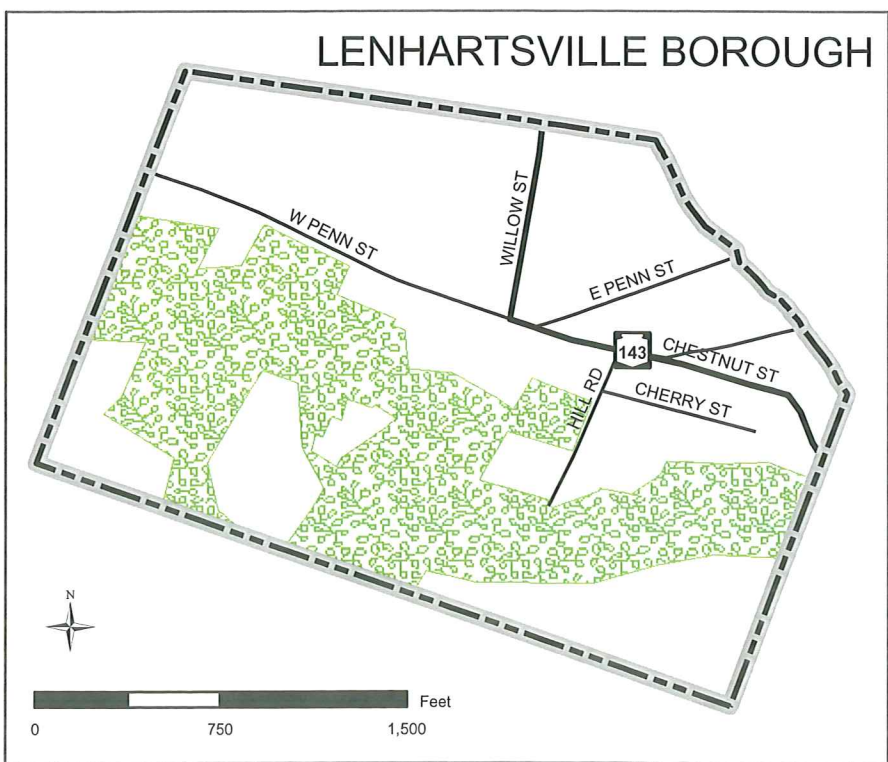
Greenwich Township & Lenhartsville Borough

Berks County, Pennsylvania

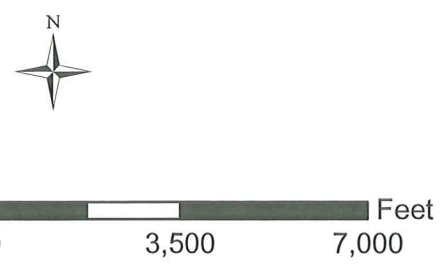
Source Data: Berks County Planning Commission, Urban Research & Development Corporation



- Natural Areas Inventory**
- Blue Rocks Boulder Field
 - Mill Creek Wetlands
 - Sacony Creek Watershed
 - Maiden Creek Corridor
 - Woodlands
 - Municipal Boundary
 - Major Roads
 - Local Roads



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.



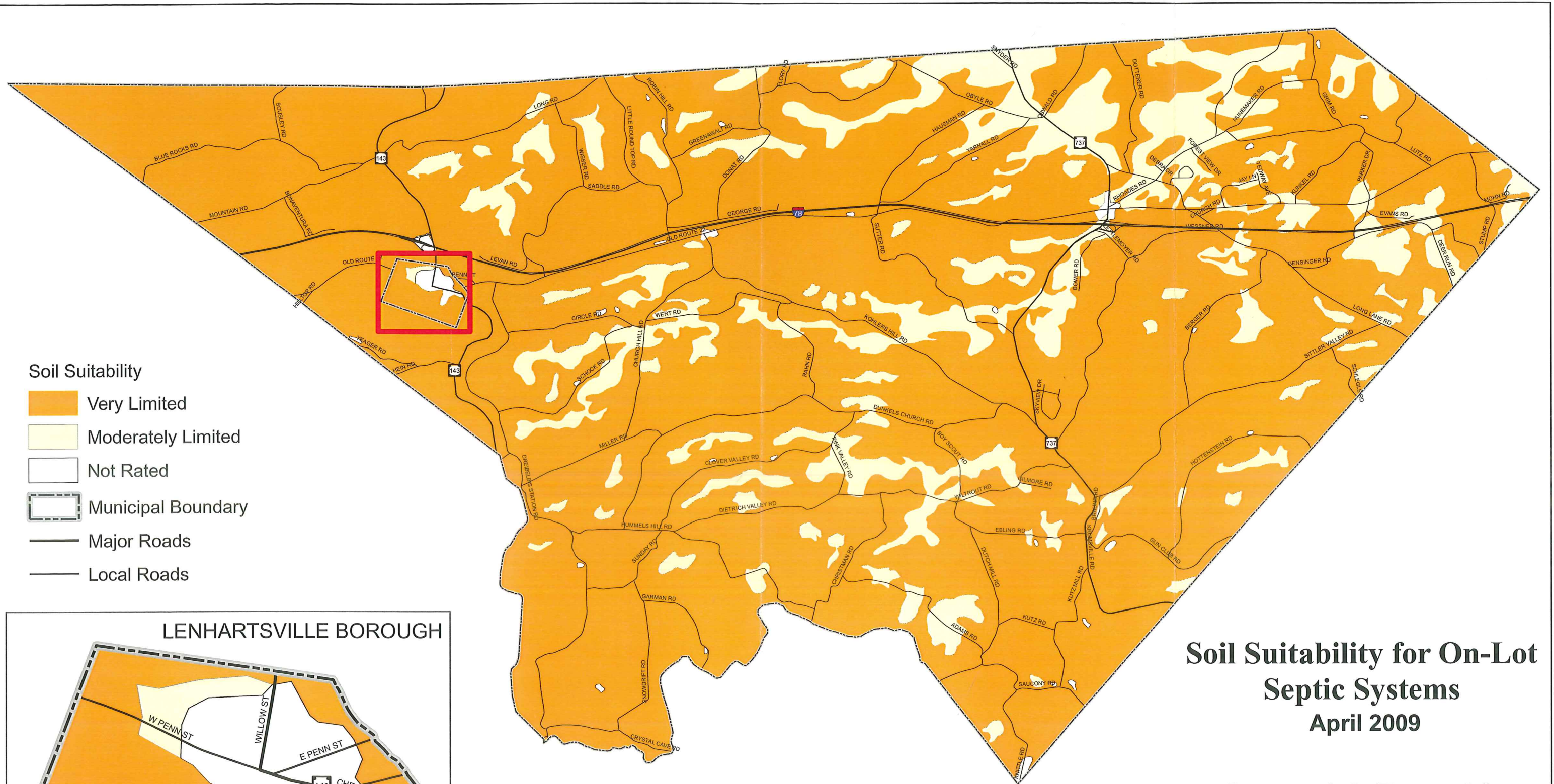
Woodlands and Natural Areas

April 2009

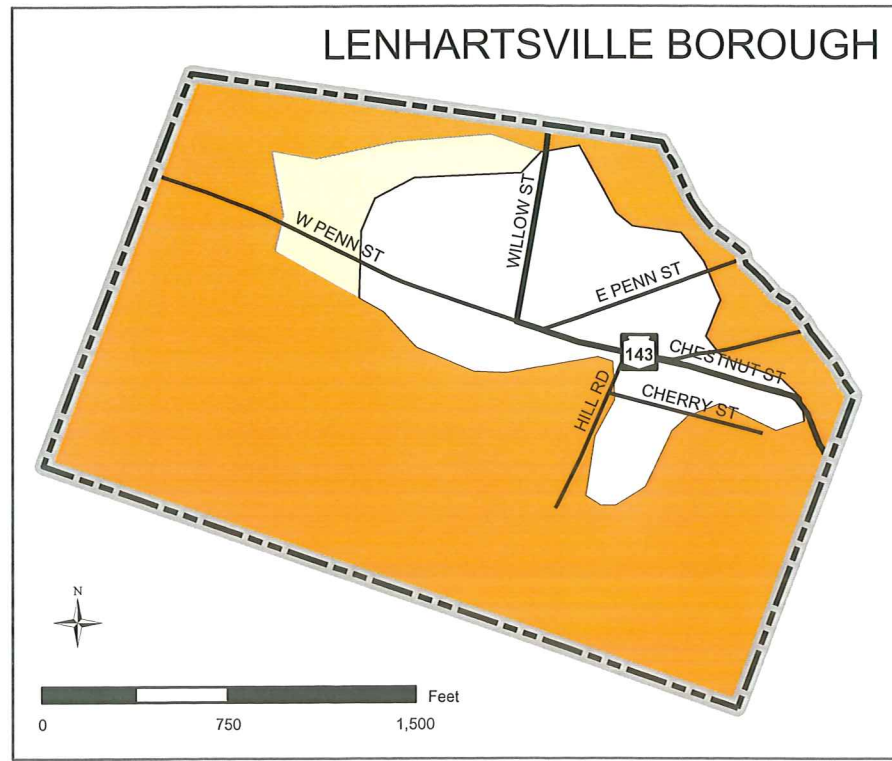
Greenwich Township & Lenhartsville Borough

Berks County, Pennsylvania

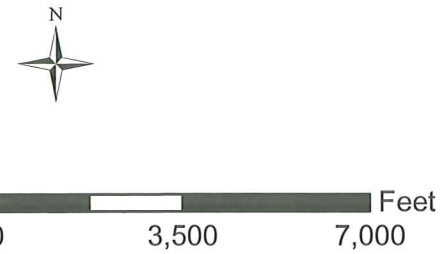
Source Data: Berks County Planning Commission, Urban Research & Development Corporation, The Nature Conservancy



- Soil Suitability**
- Very Limited
 - Moderately Limited
 - Not Rated
 - Municipal Boundary
 - Major Roads
 - Local Roads



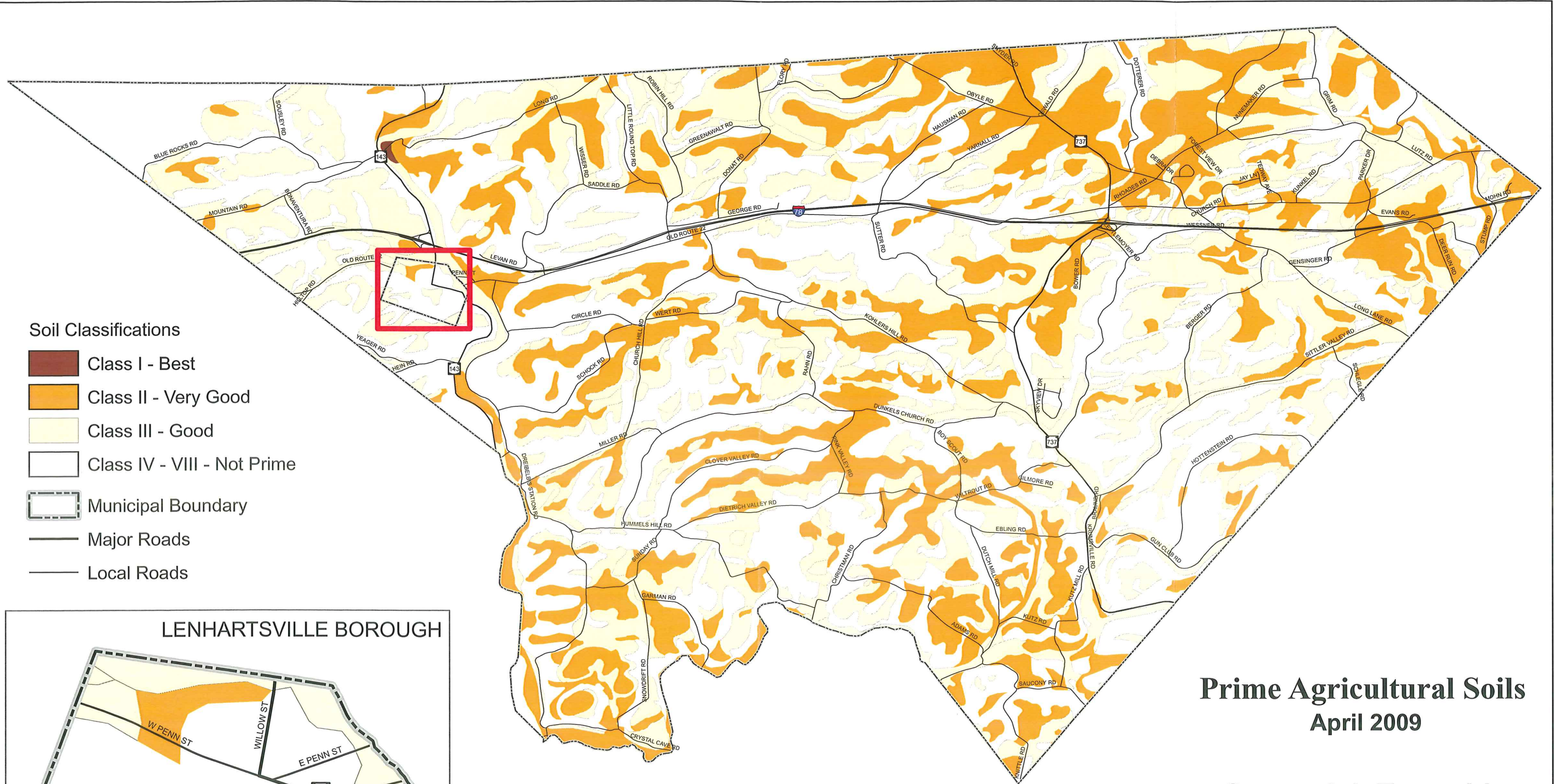
The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.



**Soil Suitability for On-Lot
Septic Systems
April 2009**

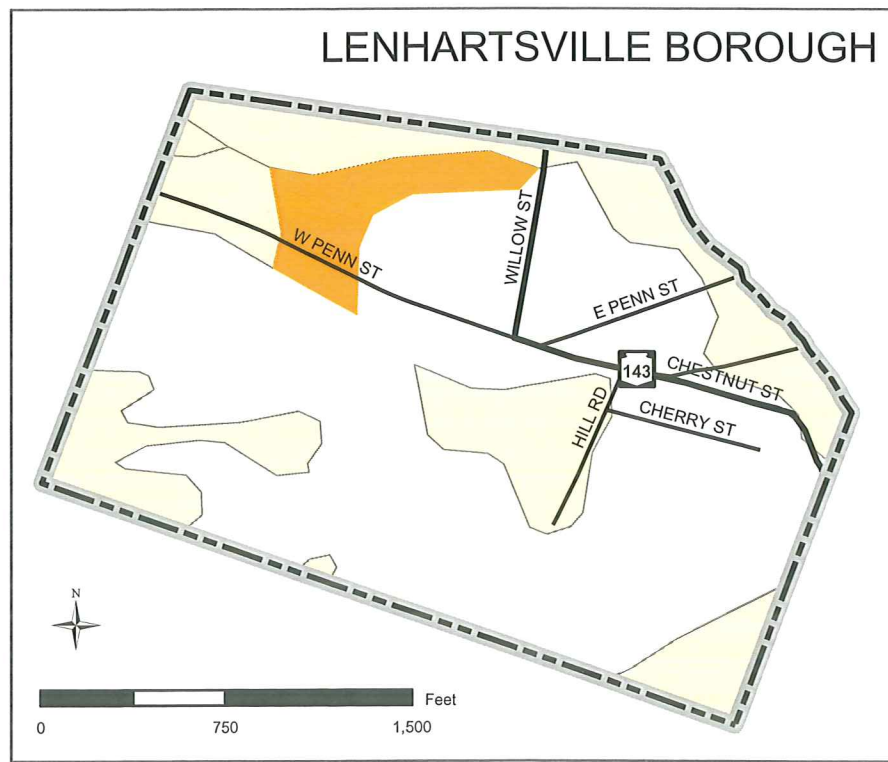
**Greenwich Township
& Lenhartsville Borough**
Berks County, Pennsylvania

Source Data: Berks County Planning Commission, Urban Research & Development Corporation, USDA Natural Resources Conservation Service



Soil Classifications

- Class I - Best
- Class II - Very Good
- Class III - Good
- Class IV - VIII - Not Prime
- Municipal Boundary
- Major Roads
- Local Roads

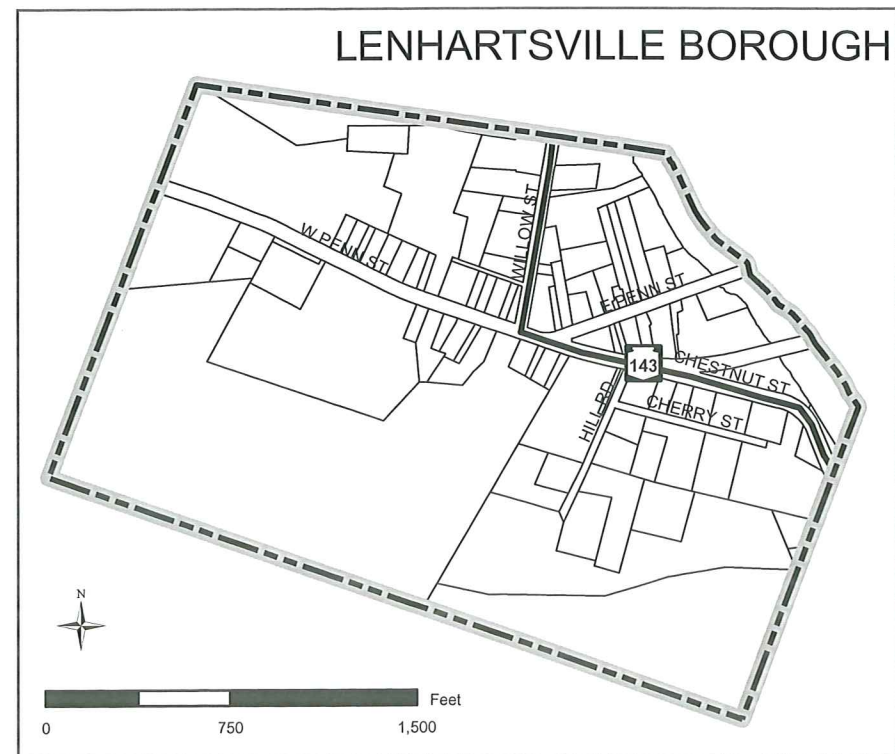
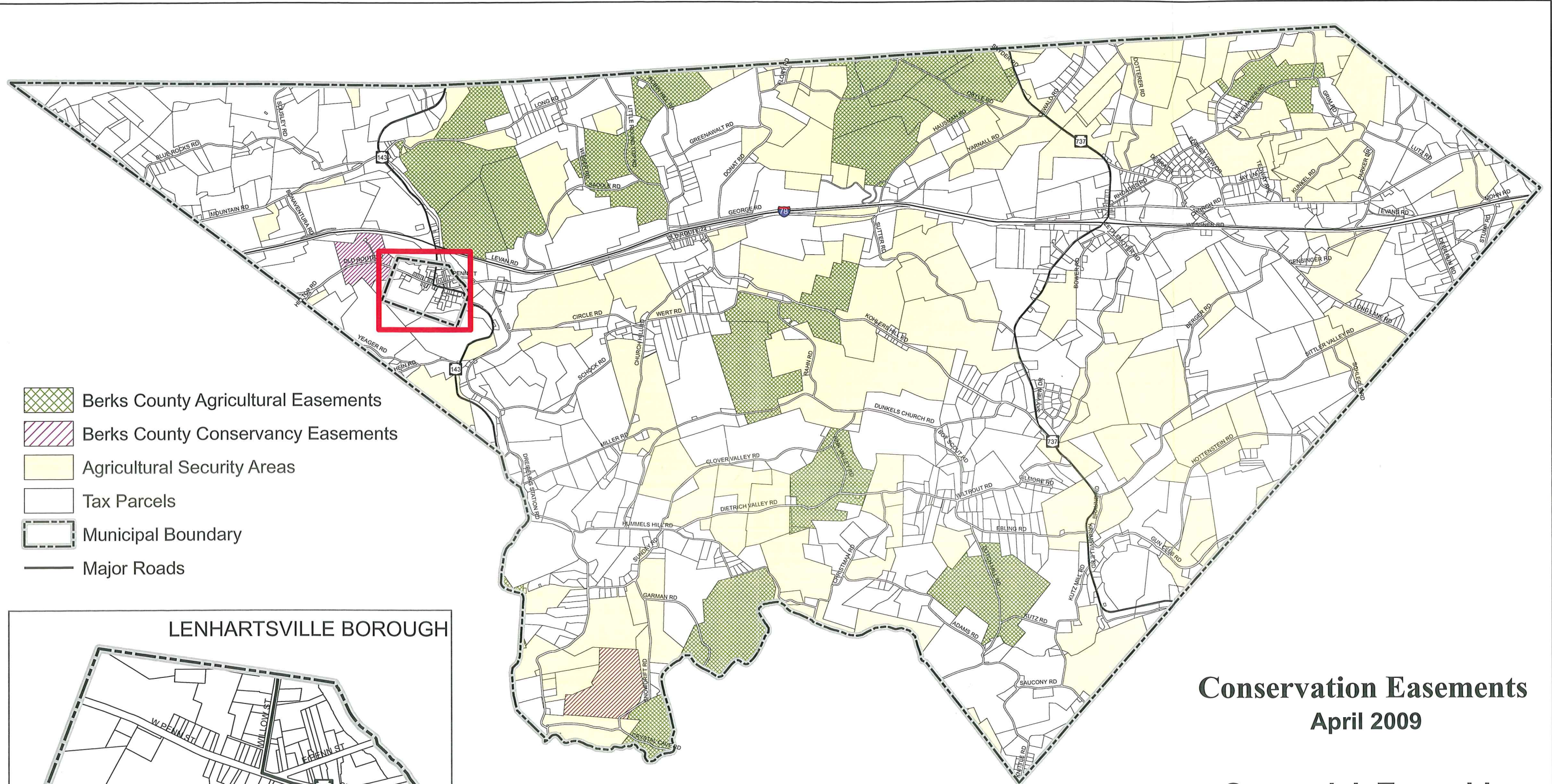


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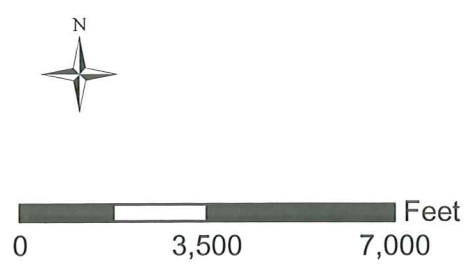


**Prime Agricultural Soils
April 2009**

**Greenwich Township
& Lenhartsville Borough
Berks County, Pennsylvania**



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.



Conservation Easements April 2009

Greenwich Township & Lenhartsville Borough Berks County, Pennsylvania

Geology and Groundwater

Geology and the availability of groundwater need to be considered when planning for future development. Greenwich Township and Lenhartsville Borough are both located within the Valley and Ridge Province. The geology of this region was formed during the Ordovician Age and consists primarily of Martinsburg Shale. Ordovician Age formations are considered to yield small to moderate amounts of groundwater.

Martinsburg Shale is a dark-gray shale, which is sandy toward the top. Martinsburg Shale is the parent material and forms the base of the Berks-Weikert-Bedington soil association. The Berks-Weikert-Bedington soil association contains shallow to deep well-drained, rolling soils formed in material weathered mainly from shale and siltstone. The following section further describes the area's soil characteristics.

Radon

Radon gas is an invisible, odorless and radioactive gas whose presence is related to geology. Radon is thought to increase health risks when persons are exposed to concentrations of the radon over a period of time. Concentrations occur when enclosed areas (such as basements) accumulate these natural gases.

The Greenwich-Lenhartsville area's close proximity to the Reading Prong increases the likelihood of the presence of radon gas. (Several homes in the area have been tested and reported high levels of radon.) The Reading Prong is a geologic area which produces a very high level of radon from Reading to the Lehigh Valley along the South Mountain corridor.

In the siting of new residential construction, builders would like to be able to predict the potential for radon problems associated with each building site. Unfortunately, at present there are no reliable methods for correlating the results of radon soil tests at a building site with subsequent indoor radon levels in a house built on that site. Houses vary significantly in their ability to resist radon entry. This is true even among houses where controlling radon entry was not considered during construction. Determining where high levels of radon are located can thus be difficult. Radon could be found at high levels in one home and be virtually non-existent next door.

Soils

Many different soil types with a variety of soil features exist within the Greenwich-Lenhartsville area. Typically, soils are analyzed for the following two important qualities:

- the ability of the soil to support septic systems, and
- the ability of the soil to support agriculture.

Soils are classified according to their ability to support on-site septic systems. Soils which are considered unsuitable for on-lot systems are shallow, stony, poorly drained or on steeply sloped land. Soil suitability for on-site septic systems is not an important issue in areas served by public or private community sewage systems, such as Highland Estates in Greenwich Township. However, soil suitability for on-site septic systems is a critical issue for existing and future development within most of the Greenwich-Lenhartsville area.

As shown on the Soil Suitability for On-Lot Septic Systems Map, soil suitability varies considerably within the Greenwich-Lenhartsville area. West of the Maiden Creek and in large portions of central and southern Greenwich, there is virtually no land suitable for on-site septic systems. Bands of soils with only moderate to slight limitations for on-site waste treatment run through all parts of the Township east of the Maiden Creek. The heaviest concentrations of soils best suited for on-site septic systems are in the northeastern quadrant of the Township and in parts of Greenwich's central sector.

As seen on the Prime Agricultural Soils Map, soils are also classified according to their ability to support agriculture. Class I and Class II agricultural soils are considered prime agricultural soils and indicate where the best farmland is located. Class III soils have limitations in their ability to support certain crops and require additional conservation practices. Classes IV-VII are considered the least favorable for agricultural use because of their very severe limitations to farming.

No Class I agricultural soils are located within Greenwich or Lenhartsville. Many Class II and III agricultural soils are found through the Township and the Borough. Class IV through Class VIII soils are found throughout the Greenwich-Lenhartsville area, especially areas that are on steep slopes, rolling hills, creek bluffs and along the Blue Mountain.

Animals and Plants of Special Concern

The Pennsylvania Natural Diversity Inventory (PNDI) provides information on unique and endangered plants, animals and geological features in the State. PNDI sites in the Greenwich-Lenhartsville area include a habitat for the Bog Turtle and a habitat for a wildflower known as Blue Curl. The Bog Turtle (*Clemmys muhlenbergii*) is the rarest of North American Turtles and may be found in a small pond and tributary of the Sacony Creek along the east side of Kutz Mill Road between Sacony Road and the Sacony Creek in the southeast corner of the Township. The wildflower named Blue Curl or "Trichostema setaceum" can reportedly be found along the bluffs overlooking the Sacony Creek between Crystal Cave Road and Garman Road.

In addition, the Pennsylvania Science Office of the Nature Conservancy completed the Berks County Natural Areas Inventory. This Inventory notes the importance of the Blue Mountain and the Appalachian Trail. The Blue Mountain is the largest forested area in Berks County and an important recreational resource. Blue Mountain is also home to four animal species of special concern because of the dwindling populations.

The Appalachian Trail is a well known, multi-state hiking path that passes through northern Greenwich Township.

POPULATION, HOUSING AND EMPLOYMENT

- *Local population, housing and employment trends illustrate how an area's residents, housing stock and economy are changing over time. These trends help determine planning and zoning policies such as how much land to set aside for commerce, industry and different types of residential uses. In particular, there has been an increase throughout the nation in the number of non-traditional households, including single person households, divorced persons, and larger numbers of senior citizens.*

Total Population

Greenwich Townships 2000 population was 3,386, an increase of 409 persons (13.7%) since 1990. When compared to Berks County's growth, the Township was slightly higher from 1990 to 2000, which was more in comparison when compared to the growth experienced from 1980 to 1990 with a difference of 14.7%.

Lenhartsville Borough has experienced a loss in population since 1970, with the period between 1990 and 2000 having the largest drop in population at 22 people (-11.3%). Lenhartsville still remains one of the least populated in the region.

TOTAL POPULATION Greenwich Township, Lenhartsville Borough, and Berks County 1970-2000

YEAR	GREENWICH TOWNSHIP			LENHARTSVILLE BOROUGH			BERKS COUNTY		
	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change	Persons	Number Change	Percent Change
1970	1,404	-	-	220	-	-	296,382	-	7.6
1980	2,432	1,028	73.2	200	- 20	- 9.7	312,509	16,127	5.4
1990	2,977	545	22.4	195	- 5	- 2.5	336,523	24,014	7.7
2000	3,386	409	13.7	173	- 22	- 11.3	373,638	37,115	11.0

Source: U. S. Census

The U.S. Census has recently completed estimates for 2006. Greenwich Township is estimated to include 3,541 persons, an increase of 155 (4.6%) from 2000. Lenhartsville Borough is estimated to have experienced a decrease, by 2 people to a total of 171 persons.

According to the Berks County Planning Commission, the population projections for the years 2010, 2020 and 2030 show increases in population for both Greenwich Township and Lenhartsville Borough.

Greenwich is expected to grow to 3,587 in 2010, 3,801 in 2020, and 4,030 in 2030. Lenhartsville, over the same time periods is expected to grow to 183 in 2010, 194 in 2020, and 206 in 2030. The increase in population for Lenhartsville can be related to the installment of a Borough sewage system.

The following table shows total population increases and decreases for the surrounding municipalities of Greenwich Township and Lenhartsville Borough. Greenwich, in population, is average in total population when compared to the surrounding municipalities, while Lenhartsville remains significantly lower. Maxatawny Township remains the leading regional municipality for total population with 5,982 people in 2000, according to the U.S. Census.

TOTAL POPULATION
Greenwich Township, Lenhartsville Borough,
Adjacent Municipalities and Berks County
1970-2000

MUNICIPALITY	1970	1980	1990	2000
Albany Township	1,109	1,381	1,547	1,662
Greenwich Township	1,404	2,432	2,977	3,386
Lenhartsville Borough	220	200	195	173
Maxatawny Township	4,640	5,269	5,724	5,982
Perry Township	2,112	2,420	2,516	2,517
Richmond Township	2,745	3,204	3,439	3,500
Windsor Township	2,108	2,199	2,101	2,392
BERKS COUNTY	296,382	312,509	336,523	373,638

Source: U. S. Census

Gender

Gender refers to the number of males and females in a population. There are no special conditions in either Greenwich Township or Lenhartsville Borough that have altered the traditional 50/50 balance between total males and total females.

GENDER
Greenwich Township, Lenhartsville Borough, and Berks County
2000

AREA	TOTAL POPULATION	MALES		FEMALES	
		Number	Percent	Number	Percent
Greenwich Township	3,386	1,733	51.2	1,653	48.8
Lenhartsville Borough	173	85	49.1	88	50.9
BERKS COUNTY	373,638	182,956	49.0	190,682	51.0

Source: U. S. Census

Persons By Age

Information on age trends with a population is helpful in assessing existing and projected needs for housing, schools, recreation programs and other municipal services. Age trends also provide clues to whether an area is likely to gain or lose population in coming years.

Greenwich Township and Lenhartsville Borough had a very distinct change in age cohorts from 1990 to 2000. With children ages 9 and under, Lenhartsville increased its population by 90% from 1990 to 2000, while Greenwich experienced a 15.3 decrease in the same age cohort and time period. Age groups between 10-21 years of age experienced a reversal, in both municipalities, when compared to the children of 9 years old and under. Greenwich increased in this age cohort by 13.5% while Lenhartsville decreased by 55%. Greenwich saw an increase of adults in the 45-54 category by 95.3% while Lenhartsville decreased by 21.4%.

When comparing the different age groupings to the County, the percentage in increases and decreases in all the various groups differ. The 22-34 year olds are the only consistent age cohort that have decreased in Greenwich, Lenhartsville and Berks County, between 1990 and 2000. Greenwich's largest age cohort growth was in the 45-54 year olds, consistent with Berks County.

PERSONS BY AGE
Greenwich Township, Lenhartsville Borough and Berks County
1990 - 2000

AGE	GREENWICH TOWNSHIP			LENHARTSVILLE BOROUGH			BERKS COUNTY		
	2000 Population		% Change 1990-2000	2000 Population		% Change 1990-2000	2000 Population		% Change 1990-2000
	%	Number		%	Number		%	Number	
0 - 9	13.1	442	- 15.3	11.0	19	90.0	13.3	49,606	10.1
10 - 21	16.8	572	13.5	10.6	18	- 55.0	16.1	59,960	12.1
22 - 34	15.7	527	- 17.8	22.4	39	- 7.1	16.8	62,834	- 7.2
35 - 44	19.0	642	18.7	13.3	23	- 4.2	16.2	60,489	21.8
45 - 54	17.1	580	95.3	12.7	22	- 21.4	13.7	51,035	47.3
55 - 64	9.2	310	27.3	13.3	23	43.8	8.9	33,254	- 0.6
65 - 74	5.8	196	31.5	6.9	12	- 36.8	7.7	28,766	- 3.1
75+	3.5	117	46.3	9.8	17	6.3	7.3	27,424	20.2
Total	100.0	3,386	13.7	100.0	173	- 11.3	100.0	373,638	11.0

Source: U. S. Census

Race

Outside of Reading, Berks County has a relatively small non-white population. Non-whites were 6.5% of Berks County's population in 1990, but only 0.4% of all residents in Greenwich Township and 3.5% in Lenhartsville. Non-whites grew as a percentage of all people in Berks County during the 1990's. This trend was evident in both Greenwich and Lenhartsville.

RACIAL CHARACTERISTICS
Greenwich Township, Lenhartsville Borough, and Berks County
1990-2000

AREA	1990		2000	
	All Persons	Non-White Persons	All Persons	Non-White Persons
Greenwich Township	2,977	12 (0.4%)	3,386	51 (1.5%)
Lenhartsville Borough	195	7 (3.5%)	173	0
BERKS COUNTY	336,523	21,962 (6.5%)	373,638	44,178 (11.8%)

Source: U. S. Census

Population Density

Greenwich Township has approximately 30.8 square miles of land. This means the Township has a population density of 109.9 persons per square mile based on a 2000 population of 3,386. Lenhartsville has a much higher population density of 1,730 persons per square mile due to the Borough's small size of 0.1 square miles.

Lenhartsville has a considerably higher population density than any of the surrounding townships. Greenwich Township has a lower density when compared to the adjacent townships. Population increases since 1980 suggest the area's future will be characterized by more development. Berks County as a whole has a population density of 431.8 persons per square mile, as of 2000.

Household Size

Households refer to all persons living in a housing unit whether related or not. Reflecting a national trend, the area's and the County's households became smaller during the last decade. Later marriages, more divorces, fewer children and more elderly families contributed to this trend across the U.S. The typical Greenwich Township household had 2.7 persons in 2000. This was slightly higher than the average household in Lenhartsville (2.2) and Berks County (2.5).

A large average household size is typical of growing areas with many young families. Smaller households are characteristic of older communities with more singles and elderly persons.

AVERAGE PERSONS PER HOUSEHOLD
Greenwich Township, Lenhartsville Borough and Berks County
1990-2000

AREA	AVERAGE PERSONS PER HOUSEHOLD	
	1990	2000
Greenwich Township	2.9	2.7
Lenhartsville Borough	2.4	2.2
BERKS COUNTY	2.6	2.5

Source: U. S. Census

Income and Education

Median income is the income level at which half an area's households earn more and half earn less. Greenwich Township's 1999 median annual household income of \$51,250 was higher than the Berks County average of \$44,714. However, 1999 median annual income in Lenhartsville (\$36,071) was significantly lower than the County's median.

According to the 2000 Census, Greenwich Township had 4.1% of its population living below poverty level in 1999, compared to 9.8% in Lenhartsville and 9.4% in Berks County overall. The poverty rate dropped in Greenwich Township but increased in both Lenhartsville (1.0% to 9.8%) and Berks County (7.8% to 9.4%), from 1989 to 1999.

Since 1964, the federal government has computed annual income levels that represent the threshold of poverty. These figures are adjusted to account for family size, age, gender of family-head, farm or non-farm residence and other considerations. The poverty threshold is intended to measure the minimum income necessary to maintain healthy living conditions.

Education is often related to a person's ability to get and keep a good job. The percentage of all adults in Greenwich Township that graduated from high school increased from 76.4% to 80.6% but college graduates dropped from 20.2% to 18.8%, from 1990 to 2000. Lenhartsville's high school graduation rate significantly rose from 59.6% to 78.5% and college graduates rose from 7.8% to 9.2%, in the same time period. Both Greenwich and Lenhartsville had a higher percentage of high school graduates than the County (78.0%) but Greenwich was just over the County's average of college graduates (18.5%).

INCOME AND EDUCATION CHARACTERISTICS Greenwich Township, Lenhartsville Borough and Berks County 1990-2000

AREA	MEDIAN ANNUAL HOUSEHOLD INCOME		PERCENT OF PERSONS IN POVERTY		PERCENT COLLEGE GRADUATES		PERCENT HIGH SCHOOL GRADUATES	
	1989	1999	1989	1999	1990	2000	1990	2000
Greenwich Township	\$36,550	\$51,250	5.9	4.1	20.2	18.8	76.4	80.6
Lenhartsville Borough	\$24,167	\$36,071	1.0	9.8	7.8	9.2	59.6	78.5
BERKS COUNTY	\$32,048	\$44,714	7.8	9.4	15.1	18.5	70.0	78.0

Source: U. S. Census

Total Housing Units

Trends in total housing units usually mirror changes in total persons. However, even areas losing population tend to add housing units to accommodate the new households being created by singles, divorced people and the elderly. Greenwich added 252 housing units during the 1990's, an increase of 23.4%. This growth rate was significantly higher than both Lenhartsville's 3.5% decrease and the 11.7% gain experienced County-wide.

Housing unit density for 2000 reflects the 2000 population density discussed earlier. Greenwich Township, with its large land area, has a density of 43.2 housing units per square mile. This figure reflects the large areas of undeveloped land within the Township. In comparison, Lenhartsville has a housing unit density of 820 housing units per square mile. The Borough's small land area, smaller lot sizes and relatively small amounts of remaining undeveloped land contribute to this higher density.

TOTAL HOUSING UNITS
Greenwich Township, Lenhartsville Borough, and Berks County
1990-2000

AREA	TOTAL HOUSING UNITS		1990-2000 CHANGE	
	1990	2000	Number	Percent
Greenwich Township	1,078	1,330	252	23.4
Lenhartsville Borough	85	82	- 3	- 3.5
BERKS COUNTY	134,482	150,222	15,740	11.7

Source: U. S. Census

Housing Type

Households tend to demand various types of housing as they mature. The cycle begins with young adults and family starters who often need smaller, less expensive housing. Households with children tend to prefer larger, single-family homes. As the household grows older and divides, housing preferences and needs often return full-circle to apartments, townhouses and other small units such as mobile homes.

Lenhartsville as an older community and Greenwich as a municipality more oriented to young families will each face different types of housing markets in the near and longer term future.

In 2000 single-family detached homes comprised 72.0% of the housing stock in Greenwich Township. Single-family attached units, such as twins, row homes and townhouses, accounted for only 2.8% of the Township's housing. These statistics are typical of a rural township, except Greenwich had a high percentage of mobile homes (22.5%) due to the large mobile home park of Highland Estates.

In Lenhartsville, single-family homes were 58.4% of all Borough housing in 2000, compared to 13.0% for single-family attached units. Lenhartsville has more single-family homes than is typically found in an older, established borough. Berks County's overall housing profile, more closely resembles Lenhartsville than Greenwich due to the significant effect of Reading on County-wide totals.

HOUSING TYPE
Greenwich Township, Lenhartsville Borough, and Berks County
2000

TYPE	GREENWICH TOWNSHIP		LENHARTSVILLE BOROUGH		BERKS COUNTY	
	Number	Percent	Number	Percent	Number	Percent
Single Family Detached	897	72.0	45	58.4	78,946	55.8
Single Family Attached	35	2.8	10	13.0	32,377	22.9
2-4 Unit Structure	30	2.4	15	19.5	12,458	8.8
5+ Unit Structure	4	0.3	5	6.5	12,542	8.9
Mobile Home & Others	280	22.5	2	2.6	5,247	3.7
Total	1,246	100.0	77	100.0	141,570	100.0

Source: U. S. Census

Housing Ownership and Value

The amount of rental housing in an area compared to owner-occupied homes affects housing affordability and an area's ability to respond to the life cycle changes in housing demand described earlier. More rental units usually means less expensive housing, more affordable to singles, young families and older people. Areas with high rates of owner-occupied housing can be less accessible to singles, starter families and the elderly.

Owner-occupied homes account for 86.1%, up from 80.1% in 1990, of Greenwich Township's housing, compared to 62.8% in Lenhartsville and 74.0% County-wide. Typically, more owner occupied homes exist in townships and more rental housing is found in boroughs.

The high percentage of rental units in Lenhartsville is primarily the result of a long history of residential conversions within the Borough. Many rental units were converted from single family homes. Continued conversions will negatively affect the overall housing quality of the community.

Berks County's 2000 vacancy rate of 5.8% was higher than that recorded in Lenhartsville Borough (4.9%) but not in Greenwich Township (6.4%). Vacancy rates of 3% to 5% are usually considered desirable to offer sufficient choice for households moving into an area. Greenwich's slightly higher vacancy rate appears to be characteristic of a more active housing market that features both new, unoccupied housing and many job transfers, while Lenhartsville's reflects a more stable population.

HOUSING OWNERSHIP AND VALUE
Greenwich Township, Lenhartsville Borough and Berks County
2000

OWNERSHIP	GREENWICH TOWNSHIP		LENHARTSVILLE BOROUGH		BERKS COUNTY	
	Number	Percent	Number	Percent	Number	Percent
Owner-Occupied	1,072	86.1	49	62.8	104,719	74.0
Renter-Occupied	173	13.9	29	37.2	36,851	26.0
Vacant	85	6.4	4	4.9	8,652	5.8
Total	1,330	100.0	82	100.0	150,222	100.0
MEDIAN VALUE OF OWNER-OCCUPIED UNIT	\$ 140,300		\$ 84,600		\$ 104,900	

Source: U. S. Census

The 2000 median value for owner-occupied homes in Greenwich Township was \$140,300. This was significantly higher than the Berks County average of \$104,900. Lenhartsville's median (\$84,600) was significantly lower than either the Greenwich Township or County-wide values for the same year. Greenwich's owner-occupied homes are typically larger and situated on more acreage than those found in Lenhartsville Borough and other more urbanized locations.

In 2000, Greenwich Township had a rental vacancy rate of 7.0% and median monthly rental rate of \$574. By comparison, Lenhartsville had a rental vacancy rate of 6.5% and median monthly rental rate of \$518 in 2000.

Housing Age and Condition

Age can be a valuable indicator of housing quality when viewed in conjunction with other characteristics such as housing value and housing condition. Lenhartsville's housing stock is considerably older than housing in Greenwich Township and Berks County overall. In Lenhartsville, 72.7% of the housing units were built before 1940, compared to 25.8% in the Township and 31.3% County-wide.

Overcrowded units comprise 2.3% throughout Berks County, and 0.9% in Greenwich Township.

HOUSING AGE AND CONDITION
Greenwich Township, Lenhartsville Borough, and Berks County
2000

	GREENWICH TOWNSHIP	LENHARTSVILLE BOROUGH	BERKS COUNTY
Percent Overcrowded (1.01 or more persons per room)	0.9	0.0	2.3
Percent Built Before 1940	25.8	72.7	31.3
Total Housing Units	1,246	77	141,570

Source: U. S. Census

Employment

Historically, agriculture has been the prime employer in Greenwich Township while in the Lenhartsville Borough it has been retail and manufacturing trades. The largest employment sectors for Township residents consist of the following; Manufacturing (22.2%); Education, health and social services (21.1%); and Retail Trade (10.8%). In Lenhartsville, education, health and social services (19.5%) and professional services (10.3%) have grown to become two of the top three employment sectors, while manufacturing (14.9%) is still important to Borough residents.

EMPLOYMENT BY INDUSTRY
Greenwich Township and Lenhartsville Borough
2000

	GREENWICH TOWNSHIP		LENHARTSVILLE BOROUGH	
	Number	%	Number	%
Agriculture, Forestry & Fisheries	77	4.0	4	4.6
Construction	134	6.9	6	6.9
Manufacturing	429	22.2	13	14.9
Wholesale Trade	63	3.3	2	2.3
Retail Trade	209	10.8	5	5.7
Transportation, warehousing & utilities	105	5.4	8	9.2
Information	16	0.8	3	3.4
Finance, Insurance & Real Estate	116	6.0	1	1.1
Professional Services	139	7.2	9	10.3
Education, health and social services	407	21.1	17	19.5
Arts, entertainment, recreation, food services	145	7.5	7	8.0
Other Services (except public admin)	74	3.8	7	8.0
Public Administration	17	0.9	5	5.7
TOTAL	1,931	100.0	87	100.0

Source: U.S. Census

GOVERNMENT PROFILE

Each community operates an efficient local government that relies largely on volunteers with only a minimum of municipal staff.

Greenwich is a township of the second class governed by a three-person Board of Supervisors. The Supervisors are elected at large for six-year terms. Lenhartsville is a borough governed by a seven-person Borough Council and a Mayor. The Borough Council and Mayor are elected at large for four-year terms. Only Greenwich Township has a planning commission. Both municipalities have a zoning hearing board.

Greenwich and Lenhartsville each retains a solicitor and a consulting municipal engineer. Lenhartsville's municipal offices are located in the one-room school house on Willow Street in the Borough. Greenwich Township operates a municipal building and garage along Old Route 22 between Klinesville and Krumsville.

EXISTING LAND USES

Concern for the use of land is the essence of comprehensive planning. Lenhartsville includes several businesses, with single-family homes occupying almost all remaining developed area in the Borough. Steep, unbuildable land covers much of Lenhartsville south of Old Route 22, which bisects the community in an east-west direction.

Greenwich is a rural, largely undeveloped area. Farming and scenic wooded hillsides still dominate the Township, although newer residential subdivisions are now also found in various areas throughout the municipality. There is very little commerce and industry in Greenwich outside of a small cluster of businesses located near the Route 737 interchange with Interstate 78 and along Old 22.

Residential Land Uses

Residential land uses are by far the predominant use of developed land in both the Township and Borough.

Farmsteads and single-family detached homes are the two main housing types in Greenwich. Farmsteads are located along major and minor roads in every part of the Township. Single-family detached homes have developed in unplanned fashion throughout the community. There are some unified residential subdivisions in Greenwich, complete with loop roads and suburban style cul-de-sacs. Glendale Farms North on Old Route 22 and Meadow View Farm off Route 737 are two prominent examples of this residential development type in the Township. There is virtually no multi-family or attached housing in Greenwich.

Like Greenwich, Lenhartsville's housing stock is largely single-family detached homes. However, the Borough does have some attached housing, as shown on the accompanying Existing Land Use Map. There are also apartments in Lenhartsville on the upper floors of the Deitsch Eck Inn.

Commercial Land Uses

Only a small proportion of land in the Greenwich/Lenhartsville area is in commercial use. Greenwich contains approximately 70 acres of commerce, 0.4% of the Township. Lenhartsville has approximately 3 acres devoted to commercial use, 4.7% of all Borough land.

The largest concentration of commerce related uses in Greenwich is found in and around the village of Krumsville at the Route 737 interchange of Route 22. This area includes a gas station/convenience store, an inn, a restaurant and auto-related uses. There are assorted commercial uses grouped along Old Route 22 in the eastern sector of the Township. A recreational vehicle business, a motel and a firewood business are located on Old Route 22 just east of Lenhartsville. The remainder of Greenwich's commercial land uses are isolated in scattered locations throughout various parts of the community in otherwise residential areas.

Lenhartsville's small commercial sector mainly consists of a two restaurants, an appliance store and a gas station. These uses are all concentrated within one block of where Willow Street, Old Route 22 and East Penn Street converge in the center of the Borough.

Industrial Land Uses

Industry accounts for only a small proportion of all land use in the Greenwich/Lenhartsville area: 14 acres in the Township, 0.1% of total land and 12 acres in the Borough, 18.8% of total land area.

There are only a few major industrial land uses in Greenwich. There is a welding fabrication shop on Hottenstein Road and an engineering operation at the intersection of Route 737 and Rhoades Road.

A trucking and meat processing operation is the only industrial land use in Lenhartsville. This business occupies a significant part of that quadrant of the Borough north of West Penn Street and west of Willow Street.

Public/Semi-Public Land Uses

Public/semi-public uses comprise 60 acres in Greenwich, 0.3% of the Township's total land area. Public/semi-public uses occupy 0.3 acres in Lenhartsville, 0.5% of all land in the Borough.

Public/semi-public uses in Greenwich include the Township Garage on Old Route 22 and a PaDOT salt and stone storage area on Route 737. Three active churches are located in Greenwich: one at Old Route 22 and Long Lane, one on Route 737 and another along Old Route 22 just east of Lenhartsville. There is also an unoccupied church building with a cemetery on Dunkels Church Road. Greenwich-Lenhartsville Elementary School on Route 737 is the only school site in the Greenwich-Lenhartsville area.

The Borough Hall on Willow Street and the Lenhartsville Post Office on West Penn Street are the Borough's only public/semi-public land uses.

Public Recreation and Open Space Land Uses

Play fields at the Greenwich Elementary School and the State Gamelands in the far southern portion of the Township are the only Public Recreation and Open Space properties in Greenwich.

The Borough community park is the single recreation site in Lenhartsville. The Borough's community park, while publicly-accessible, is owned and maintained by a private resident.

Private Recreation Uses

Greenwich Township includes the following private recreation uses:

- Blue Rocks Campground - Sousley Road
- Camp Edmar - Boy Scout Road
- Grace Evangelical Congregation Church Campground - Boy Scout Road
- Kutztown Rod & Gun Club - Gun Club Road
- Pine Hill Campground - Old Route 22
- Old Dutch Mill Camp Sites - Saucony Road
- Robin Hill Camping - Robin Hill Road
- Highland Estates Recreation Area - Highland Estates Mobile Home Park

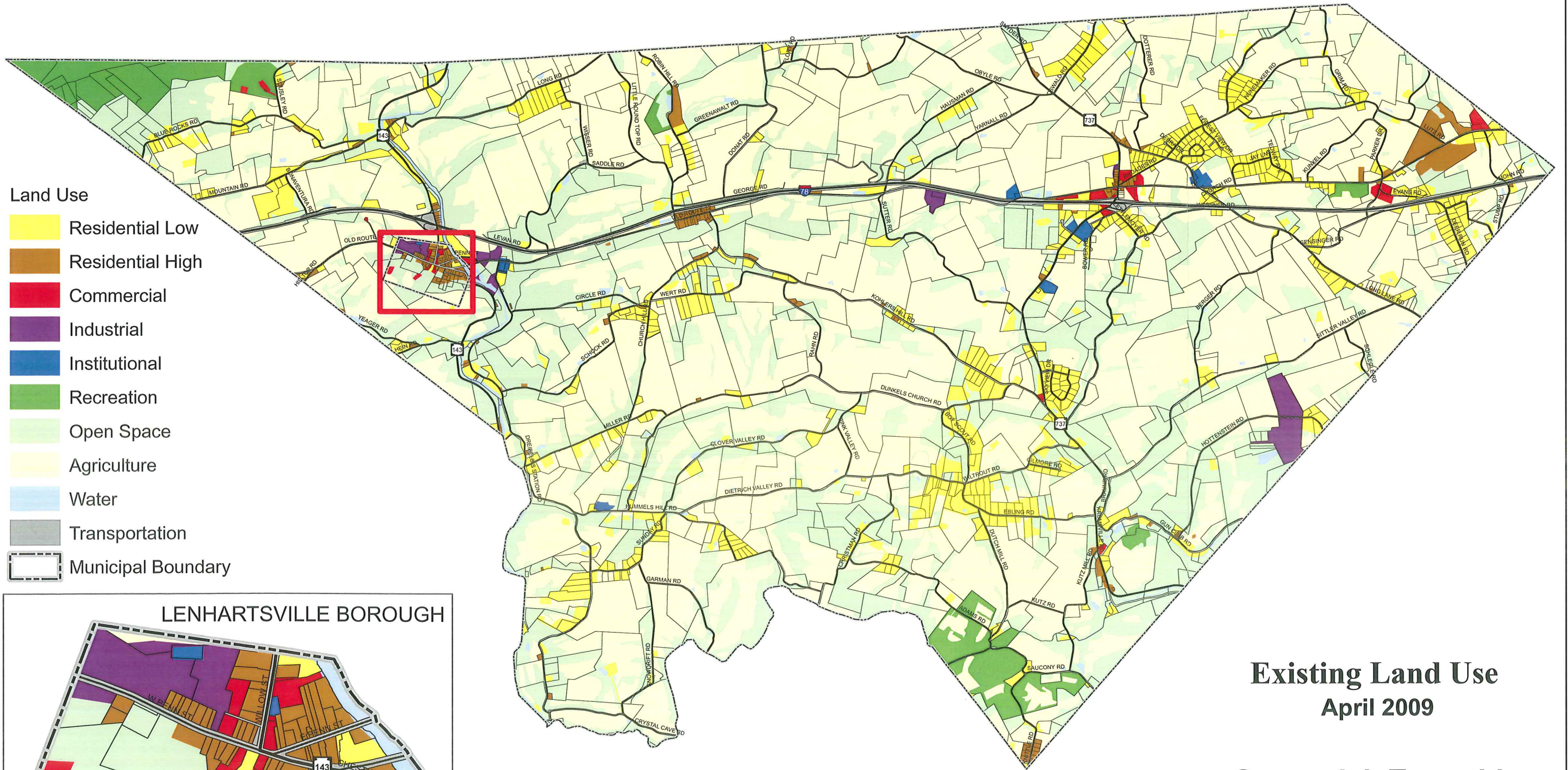
Agricultural and Other Undeveloped Land

Agricultural and other undeveloped lands comprise the largest proportion of land in both Greenwich and Lenhartsville. Greenwich has approximately 17,000 acres in this land use category, or about 88% of the Township. Lands in this category comprise approximately 32 acres in Lenhartsville, 50% of the Borough's total land.

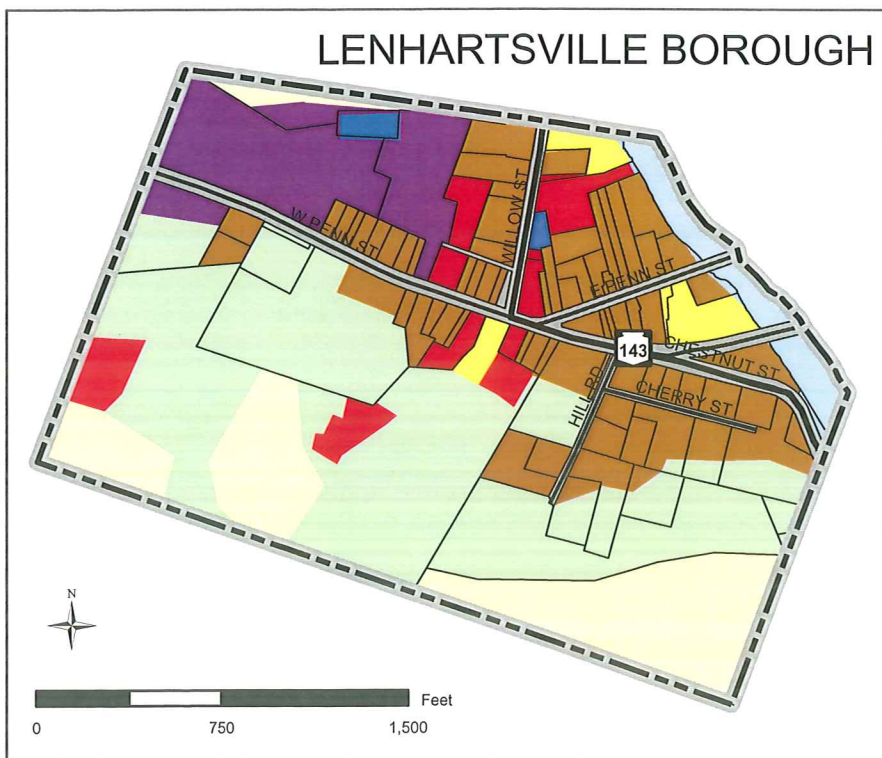
Undeveloped property in Greenwich Township includes wooded areas, steep slopes, floodprone land, farmland and assorted vacant parcels. Wooded areas, steep slopes and floodprone land are discussed in the Natural Features section of this plan. Farming is the predominant land use in the Township. Vast areas of contiguous farmland, consisting of both large and smaller properties, are found in every sector of Greenwich.

Greenwich Township has taken an important step to preserve farmland by establishing an Agricultural Security Area under State Act 43 of 1981. These areas, as shown on an accompanying map, encompass over 6,000 acres. Farms within the Agricultural Security Area are protected against certain regulations that constrain farming and are eligible to have Berks County purchase their development rights. Within Agricultural Security Areas, Township Supervisors agree to support agriculture by not passing laws which would restrict normal farming operations, limitations are placed on the municipality's ability to condemn farmland for schools, parks, roads, etc., and landowners can apply to sell conservation easements to the County.

Steeply sloped land not suited for construction comprises a large portion of the Borough south of West Penn Street/Chestnut Street. There are also sizeable vacant parcels in the Borough, as shown on the accompanying Existing Land Use Map.



- Land Use**
- Residential Low
 - Residential High
 - Commercial
 - Industrial
 - Institutional
 - Recreation
 - Open Space
 - Agriculture
 - Water
 - Transportation
 - Municipal Boundary



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.



**Existing Land Use
April 2009**

**Greenwich Township
& Lenhartsville Borough
Berks County, Pennsylvania**

COMMUNITY FACILITIES AND SERVICES

Municipalities and other community-orientated entities provide a wide variety of facilities and services, including for recreation, education, public utility and emergency service purposes.

Education

Greenwich and Lenhartsville belong to the Kutztown Area School District, which also includes Albany Township, Maxatawny Township, Lenhartsville Borough, Lyons Borough and Kutztown Borough. The Kutztown Area School District includes the schools described on the following table:

SCHOOLS IN THE KUTZTOWN AREA SCHOOL DISTRICT

NAME	LOCATION
Kutztown Area High School	Kutztown Borough
Kutztown Area Middle School	Kutztown Borough
Albany Elementary School	Albany Township
Greenwich Elementary School	Greenwich Township
Kutztown Elementary School	Kutztown Borough
Maxatawny Elementary School	Maxatawny Township

Unlike many neighboring school districts, the Kutztown Area School District has been experiencing decreases in enrollment in recent years. The total enrollment as of 2009 was approximately 1,609 students. This was a decrease of 200 students from 6 years previous. The Pennsylvania Department of Education projects small decreases in total enrollment over the next decade. However, actual enrollments can vary greatly depending upon housing construction rates, local employment levels and birth rates.

The School District as of 2009 was discussing changes in the grade alignments, which may possibly involve the closing of the Albany and Maxatawny Elementary Schools.

Local students attend a number of private and parochial schools that are located outside of the two municipalities.

Library

Residents are served by the Kutztown Public Library and the Reading Public Library Bookmobile. The Rohrbach Library of Kutztown University is also used by many residents, particularly for research.

Water and Sewer Services

Lenhartsville is served by a public sewage system, and individual wells. Greenwich Township is not served by public water or public sewage treatment. Residents in each municipality use private wells for their water and depend upon on-lot septic systems to treat wastewater, with one exception: the Highland Estates Mobile Home Park, which has private central water and private central sewage treatment systems. Problems with on-lot septic system failures have been concentrated on the smaller properties

prevalent in the Krumsville village and Klinesville village areas, particularly on properties with older systems.

Emergency Services

Police Protection

The Pennsylvania State Police (Hamburg Station) provide police service to Greenwich and Lenhartsville. Neither municipality has its own police.

Fire Companies

Three volunteer fire companies primarily provide fire protection and rescue services in the Greenwich-Lenhartsville area:

- Kempton Fire Company, Kempton
- Kutztown Fire Company, Kutztown
- Community Fire Company, Virginville

These three companies are assisted, as necessary, by the Union Fire Company No. 1 of Hamburg.

Emergency Medical Services

Three organizations provide ambulance services (Basic Life Support): Hamburg Area Ambulance Service, Fleetwood Fire Company Ambulance Service, and the Kutztown Area Transport Service. The latter service is a private, for-profit organization.

A paramedic unit from Northeastern Berks provides advanced life support services to the area. Emergency medical helicopters use the Kutztown Airport, but that location is in doubt because the airport property may be redeveloped into a new use.

Recreation and Open Space

A private resident owns and maintains Lenhartsville's 1.2-acre community park, the only publicly-accessible recreation area in the Borough. While no public parks are in Greenwich, three commercial campgrounds, a Boy Scout camp, a church-owned camp, a rod and gun club and one neighborhood-serving common open space exist in the Township. These privately-owned recreation areas are listed in the Existing Land Use section of this plan.

Recreation Programming

Recreation programs offered in adjacent communities serve the Greenwich-Lenhartsville area. The Kempton Recreation Center and the Kutztown Youth Athletic Association each offer baseball and softball programs for youth. The Kutztown Soccer Club provides soccer programs for area youth ages 8 to 18 years. The Optimist Club provides a variety of recreation programs, the most popular being the basketball league that is open to young Kutztown School District students. Kutztown Borough offers a summer recreation program at the Borough Park.

Regional Recreation Sites

A wide variety of regionally-serving public recreation sites exist within a 25-mile radius of the Greenwich-Lenhartsville area, including federal, state, county and other properties. Major facilities include Hawk Mountain Sanctuary and the Blue Marsh Lake Recreation Area.

CIRCULATION

- *Circulation refers to the movement of people and goods. The system of roads and the availability of public transportation are important to understand in planning for future land uses and other circulation improvements in Greenwich and Lenhartsville. The overall objective is to maintain a system that allows efficient circulation, while maintaining a high level of safety. In addition, we need to protect residential areas from higher speed traffic and auto/truck-related noise.*

Existing Roads

Interstate-78 is the major thoroughfare through the Greenwich-Lenhartsville area. Interstate 78 is a limited-access highway that connects New Jersey and the Lehigh Valley with Harrisburg. Interstate-78 has two complete interchanges within the Greenwich and Lenhartsville area, one to the north of Lenhartsville and the other in the village of Krumsville. The access provided to nearby employment centers brings significant commercial and "bedroom" residential development pressures to both communities. These development pressures will continue and increase as the highway becomes more traveled and employment centers expand toward the Greenwich-Lenhartsville area.

U.S. 222 south of the Greenwich-Lenhartsville area is connects the Allentown and Reading areas.

Three other major routes cross the Greenwich-Lenhartsville area: Old Route 22 (T975), Route 143 (SR0143) and Route 737 (SR0737). Old Route 22 runs parallel to Interstate 78 and provides good east-west access through the Greenwich-Lenhartsville area.

Route 143 is a major north-south route which runs along the west bank of the Maiden Creek, and passes through the center of Lenhartsville, connecting the Area to the north with Virginville.

Route 737 is the Area's other major north-south connector. Route 737 begins near Kempton and travels south into and through the eastern half of Greenwich Township, passing through Krumsville and continuing on to Kutztown.

Road Classifications

Roads have various functions; some roads are designed to expedite through traffic while others mainly provide access to local residential areas. Classifying roads by their intended function is important to decide how access onto a road should be allowed, including number of access points and how the access is designed. Functional classifications can also assist in prioritizing roads for future improvements. This functional classification of roads has other important implications as well. Rights-of-way should be wider and front yard setbacks greater on roads that carry higher traffic volumes. High volume roads should have more lanes and higher speed limits than local secondary streets. The Greenwich-

Lenhartsville area's roads can be classified as follows:

Major Arterial - Multi-laned limited access highways designed to rapidly connect distant regions, such as the Lehigh Valley and Harrisburg.

- Interstate 78

Arterials - Roads that provide a rapid connection between local population centers, such as between Lenhartsville and Kutztown.

- Old Route 22 (T975)
- Route 143 (SR0143)
- Route 737 (SR0737)

Collectors - Roads that collect traffic from local areas and funnel it onto arterials.

- Rhoades Road (T826)
- Long Lane (SR1024)
- Lutz Road (T802)
- Kohlers Hill Road (SR1015)

Locals - Roads that provide direct access to residential areas.

- All other roads in Greenwich and Lenhartsville

Greenwich has 113.6 miles of roads, second only to Exeter Township in number of miles of roadway in Berks County. This mileage is comprised of 33.2 miles of state-owned roads and 80.4 miles of Township-owned roads. State-owned roads in Greenwich include Interstate 78, Route 143, Route 737, Crystal Cave Road, Donat Road, Dunkels Church Road, Kohlers Hill Road, Long Lane and Mountain Road. Lenhartsville has 1.0 miles of roadway: .42 miles of state roads (Route 143) and .58 miles of borough roads.

Road Conditions

Road conditions are very different in Greenwich than those found in Lenhartsville. Greenwich's rural character and varying topography create many situations not prevalent in the Borough. For instance, the Township has 27 miles of unpaved roads. The following are concerns regarding to several of Greenwich's roads including both state-owned and township-owned roads.

- Areas of poor sight distance, with buildings, slopes, curves, fences, parked vehicles or trees obstructing views of on-coming traffic.
- Roads intersecting at awkward angles, which obstructs sight distance and may encourage drivers to not come to a complete stop at intersections.
- Areas of sharp curves, which limits sight distance and may cause a driver to lose control.
- Intersections that are not aligned on both sides of a road, causing confusion to drivers making turns.
- Areas of steep slope, which are especially slippery during rainy, snowy or icy weather.
- Areas of narrow roads and/or bridges, which may not be wide enough to accommodate two-way traffic.

Greenwich Township identifies and prioritizes improvements based on available funding. While PennDOT has been making improvements to Route 737, narrow bridges, poor sight distances and poor alignment issues still need to be addressed. PennDOT also has plans to upgrade the Interstate 78 and Route 737 intersection and access ramps.

Lenhartsville's traffic and roadway issues focus around Route 143 at the intersection of Willow Street and Old Route 22. Borough officials and other residents have indicated the need for a flashing light or traffic signal to reduce speeds in town and permit safer access from Willow Street onto Old Route 22. Other concerns reflect the current poor condition of the Penn Street Bridge over the Maiden Creek. While little traffic uses the bridge costly work will be needed in the future to keep the bridge open.

Proliferation of driveway curb cuts for individual residences and businesses along major routes create unsafe traffic movements and patterns in both the Borough and the Township. Limiting development and/or controlling access points through common drives are ways to help manage access points along these busy corridors.

Public Transportation

The Reading Regional Airport and the Lehigh Valley International Airport are the two major airports closest to the Greenwich-Lenhartsville area. The Kutztown Airport recently closed. No fixed route bus or passenger rail lines currently serve either Greenwich or Lenhartsville. Recreational excursion trips are provided by the Blue Mountain and Reading Railroad. The Berks Area Reading Transit Authority (BARTA) provides door to door van service, which is particularly important to serve older persons and persons with disabilities.

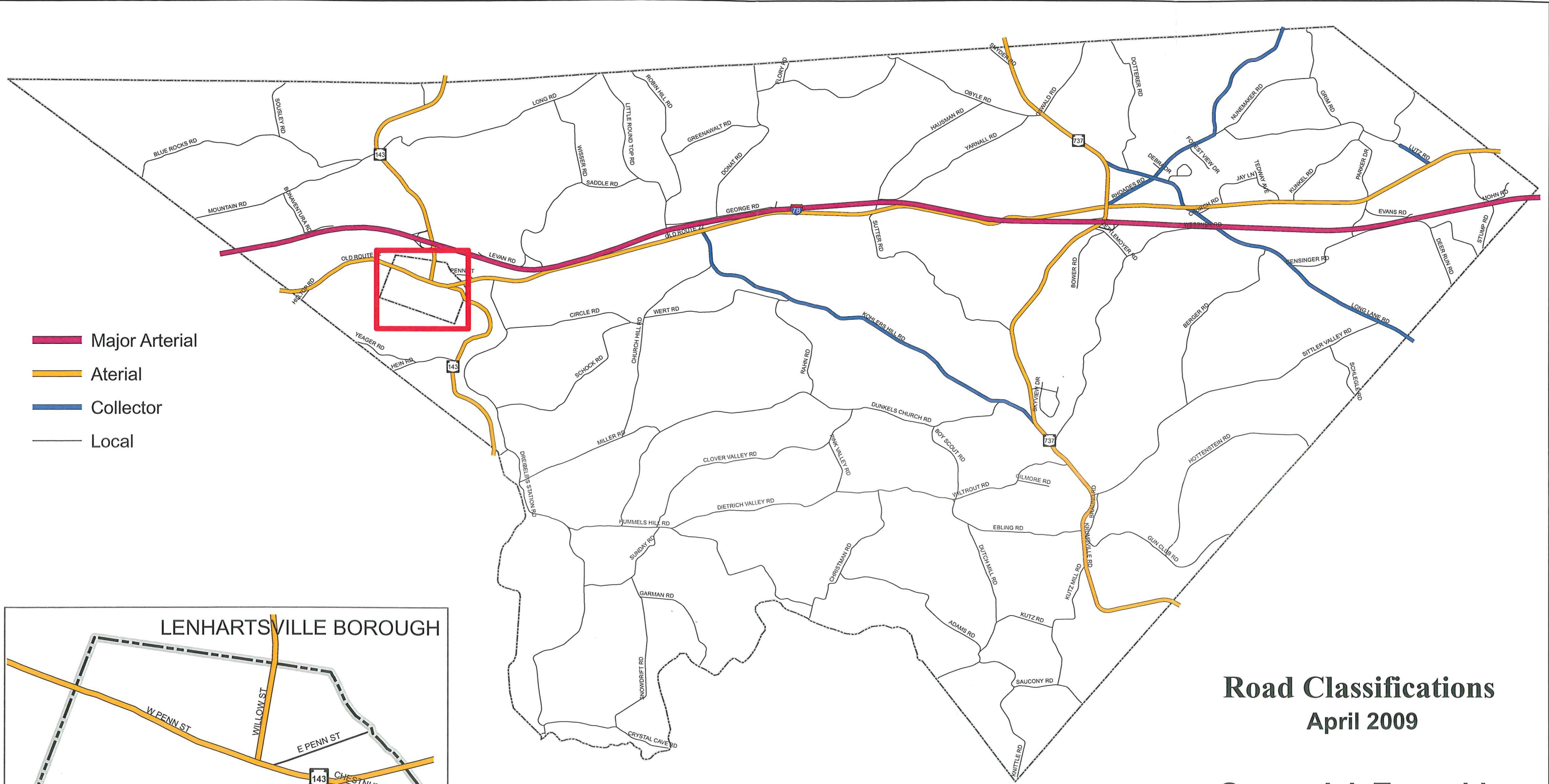
The services of the Commuter Services of Pennsylvania organization are discussed in the Transportation background section of this Plan.

Alternative Transportation

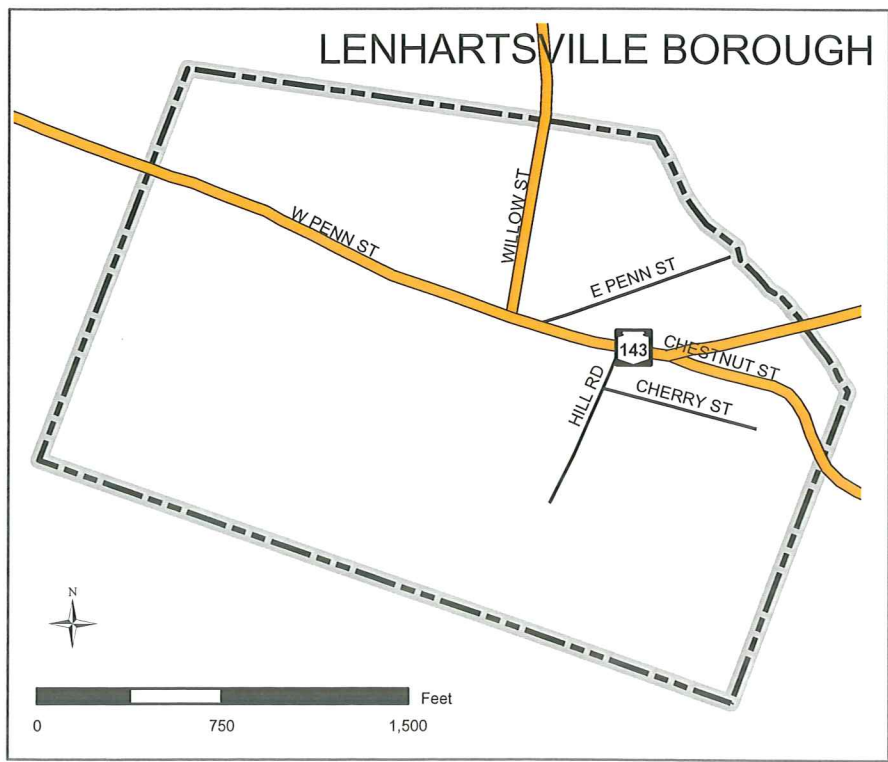
Alternatives to motorized transportation are limited within the Greenwich-Lenhartsville area. Within Lenhartsville a network of sidewalks exists along most streets. The Township contains only a few scattered segments of sidewalk. Gaps or missing links, poor conditions of certain segments and noncompliance with the American Disabilities Act (ADA) hinder maximum and efficient use of these sidewalks by pedestrians.

Informal pedestrian and bicycle trails do not exist within the Borough or Township except for a short section of the Appalachian Trail which crosses the northwest corner of Greenwich. Discussions have occurred over the years about the possibility of providing a recreation trail along portions of the Maiden Creek and Sacony Creek corridors.

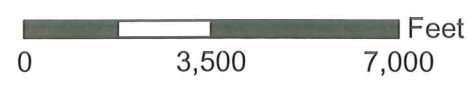
In 2009, Berks County became a partner in the Community Services of Pennsylvania organization. This organization provides assistance to businesses and individuals to help commuters find alternatives to driving alone. For example, the organization helps to match people together to share rides to work. The organization also promotes van-pooling, use of public transit, bicycling and walking. These efforts are intended to reduce traffic congestion, generate savings for individuals and improve air quality.



- Major Arterial
- Aterial
- Collector
- Local



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.



Road Classifications April 2009

Greenwich Township & Lenhartsville Borough Berks County, Pennsylvania

Source Data: Berks County Planning Commission, Urban Research & Development Corporation

EXISTING LAND USE POLICIES AND ZONING

In preparing this plan, Lenhartsville Borough and Greenwich Township considered comprehensive planning policies, zoning policies and development trends within their boundaries, adjacent municipalities and Berks County. The following section summarizes these planning and zoning policies.

Existing Zoning

The existing zoning of Lenhartsville is consistent with the policies described in the Land Use Plan section of this document, and the Comprehensive Plan Map. Greenwich Township's current development policies are reflected in the following zoning districts, as of the adoption date of this Plan:

AP Agricultural Preservation District - The AP District promotes agricultural preservation. It includes many areas with prime agricultural soils, particularly in the south-central and north-central parts of the Township. This district uses zoning to preserve agricultural land through limits on the number of homes allowed on a tract of land.

- a. A tract of up to 10 acres is currently allowed to be subdivided into a total of 2 lots (1 new plus one existing). A tract of 10 to 30 acres is allowed to be subdivided into a total of 3 lots. A tract of 30 to 60 acres can be subdivided into 4 lots, etc. Each residential lot has a minimum net lot area of 1 acre and a maximum lot area in most cases of 5 acres. The goal is usually to minimize the consumption of land by each new house, and to keep farmland in large tracts of land that hopefully can be efficiently farmed.

CONS Conservation District - This district includes portions of the Blue Mountain in the northwestern part of the Township, near the Pulpit, the Pinnacle and the Hamburg Reservoir.

- a. An average of one home is allowed for each 6 acres. A home can be placed on a 1 acre minimum lot, provided that the average density is met.
- b. A cluster option exists on tracts of over 50 acres. That option does not increase the overall density, but does allow lots as small as 12,000 square feet (1/4 acre) if there is central sewage service. Only 20 percent of the tract is required to be set aside in open space. An 18,000 square feet maximum lot size is required, which seems impractical in many cases. It is unlikely the Conservation District would be served by a central sewage system. The lot sizes and amount of open space in the cluster option should vary by zoning district, which is presently not the case.
- c. It is most defensible to base density upon the natural features of each tract of land. The Township's definition of net lot area deletes wetlands and stormwater and utility easements, but does not delete very steep slopes.

R Rural District - This is the largest zoning district in the Township.

- a. The current minimum lot size is one acre, provided that an average density is met of one home per 3 acres.
- b. A cluster option exists on tracts of over 50 acres. That option does not increase the overall density, but does allow lots as small as 12,000 square feet (1/4 acre) if there is central sewage service. Only 20 percent of the tract is required to be set aside in open space.

LDR Low Density Residential District

- a. This district currently allows single family detached houses on 20,000 square feet (one half acre) lots, if central water and central sewage services are provided. The minimum lot size is one net acre if central water and central sewage are not used.
- b. A cluster option exists on tracts of over 50 acres. That option does not increase the overall density, but does allow lots as small as 12,000 square feet (1/4 acre) if there is central sewage service. Only 20 percent of the tract is required to be set aside in open space.

HDR High Density Residential District

- a. This district includes the Highland Estates manufactured home park on both sides of Old Route 22. That development is served by private central sewage and water systems.
- b. This district mainly allows manufactured/mobile home parks. In addition, a mix of housing types are allowed at up to 4 homes per acre.

V Village District

This district includes Klinesville, areas between Lenhartsville and I-78, and areas east of Krumsville. The intent is to allow less intense types of businesses and various types of housing.

- a. Many of the commercial uses currently need special exception or conditional use approval.
- b. If central sewage and water services would be provided, then housing is possible at an average of 4 homes per acre.
- c. An extensive set of provisions were added for Planned Residential Developments in the Village District. A PRD typically involves a mix of housing types, some light commercial uses for local needs, and preserved open space.

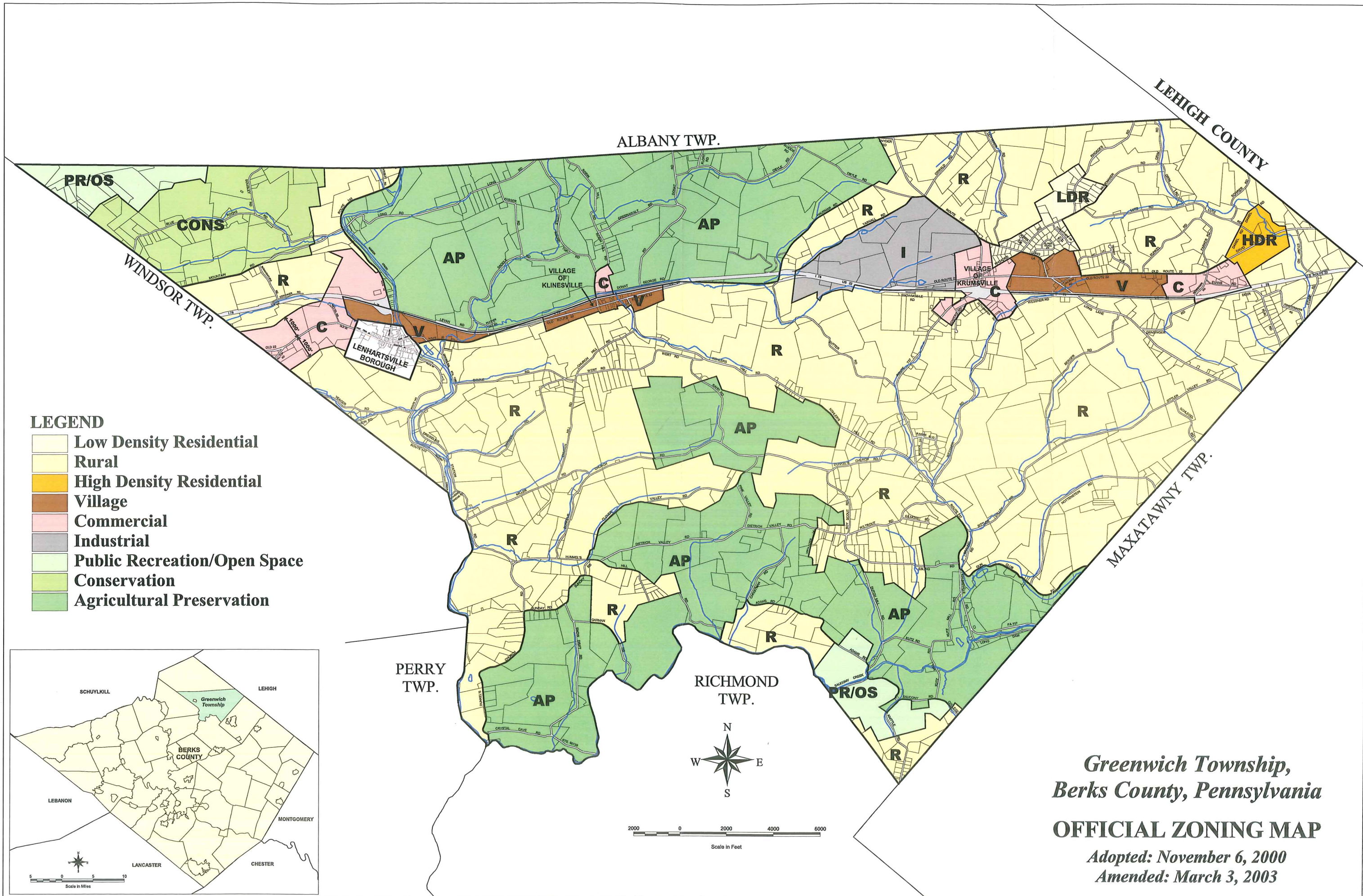
C Commercial District

- a. This district includes areas north and west of Lenhartsville, an area north of Klinesville north of I-78, Krumsville, an area of Route 737 near the Elementary School, and an area surrounding the campground south of Old Route 22.
- b. This district currently allows a wide variety of commercial businesses, including gas stations, restaurants (which may include drive-through service) and shopping centers. A few uses need conditional use approval, such as vehicle repair, manufacturing uses and motels.

I Industrial District

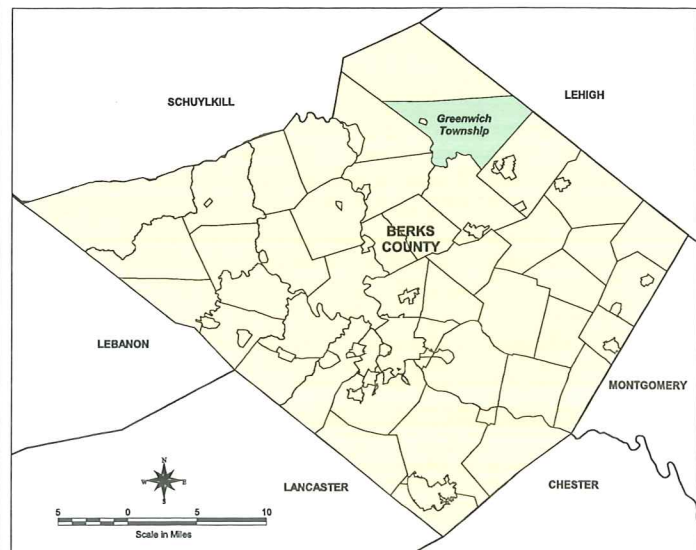
- a. This district is north of I-78, west of Krumsville and south of Route 737.
- b. This district allows all of the same uses as the Commercial district.
- c. In addition, this district allows airports, waste landfills, trash transfer stations, and mineral extraction with Supervisors or Zoning Hearing Board approval.

A map on the following page shows the locations of the existing zoning districts and boundaries for Greenwich Township.



LEGEND

- Low Density Residential
- Rural
- High Density Residential
- Village
- Commercial
- Industrial
- Public Recreation/Open Space
- Conservation
- Agricultural Preservation



ALBANY TWP.

LEHIGH COUNTY

WINDSOR TWP.

LENHARTSVILLE BOROUGH

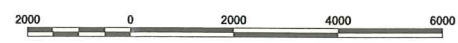
VILLAGE OF KLIMESVILLE

VILLAGE OF KRUMVILLE

MAXATAWNY TWP.

PERRY TWP.

RICHMOND TWP.



*Greenwich Township,
Berks County, Pennsylvania*
OFFICIAL ZONING MAP
*Adopted: November 6, 2000
Amended: March 3, 2003*

THE BERKS COUNTY COMPREHENSIVE PLAN

The Lenhartsville and Greenwich Township Joint Comprehensive Plan is consistent with the Goals and Land Use Objectives of the Berks County Comprehensive Plan.

The County Plan emphasizes the preservation of contiguous areas of prime farmland and the conservation of natural resources.

The County Plan seeks to direct most new development to locations with central water and sewage services. Because Lenhartsville is the only area in this region with central sewage services, this region is generally not recommended for intensive new development.

The County Plan seeks to strengthen existing older communities, as opposed to spurring sprawled development that consumes large amounts of farmland and forested areas. Therefore, other areas of the County outside of Lenhartsville and Greenwich are designated as being appropriate to receive most new development in the County.

The County Plan encourages the preservation of important historic buildings.

The County Plan also emphasizes opportunities for cooperation between municipalities, to more efficiently provide services and to coordinate development and road patterns.

The Berks County Comprehensive Plan recognizes Greenwich Township's development patterns and recommends preserving large areas of environmentally sensitive features and agricultural land, with limited growth directed toward the existing villages and the Lenhartsville area.

The County Plan is, by necessity, more generalized than the Lenhartsville Borough and Greenwich Township Plan. However, the more site-specific future land use designations in the Greenwich-Lenhartsville Plan are generally consistent with the overall direction of the County Plan.

SUMMARY OF ASSETS AND CONCERNS

The Greenwich-Lenhartsville area's strengths and weaknesses are the basis for preparing a plan to guide the area's future growth and preservation. The plan attempts to capitalize on each municipality's assets and identify ways to overcome or mitigate concerns. This is a logical approach to planning for the future.

The following summary of assets and concerns reflects the themes most frequently cited by the municipal officials, community leaders and other residents who participated in the citizen input initiatives undertaken for this plan. These initiatives include public meetings, survey forms and interviews with municipal officials and other community leaders.

Assets

- **Convenient Access to Lehigh Valley, Kutztown and Reading Area Employment Opportunities** is available to Greenwich-Lenhartsville area residents.

- **Quality of Life** is a genuine advantage due to the area's combination of scenic beauty, rural environment and small town, village character.
- **A Strong Sense of History**, particularly the area's Pennsylvania German heritage, is found throughout Greenwich and Lenhartsville.
- **An Active Farming Community** is a Source of pride and provides a livelihood for many area residents.
- **Affordable Housing** in the area, particularly in the Borough and Township's villages, supplies ample choice and opportunity to both prospective homeowners and renters.
- **Intergovernmental Cooperation** between Greenwich Township and Lenhartsville Borough is underway through this planning effort and will hopefully be carried on into other areas.

Concerns

- **Conserving Farmland and Other Open Space**, including sensitive natural areas such as steep slopes, woodlands and floodprone property, is recognized as an important aspect of preserving the area's unique character and natural resource based economy.
- The **Center of Lenhartsville** would benefit from additional small business activity to attract more investment, create jobs and enhance local tax revenues.
- **Encroaching Suburban Development** is both a long and short term threat to retaining the area's rural, small town atmosphere.
- **Community Services**, such as enhanced police coverage and more recreation opportunities may be requested in the future as the area continues to grow.
- Many of the **Roads in the Region** were not designed for the amount of traffic that they handle, including a number of curving, sloped and narrow roads. In particular, I-78 experiences serious accidents on a regular basis and Old Route 22 and Routes 143 and 737 cannot handle the traffic that results from detours.

ADJACENT ZONING

The following table describes the zoning policies that apply to land bordering Greenwich Township in adjacent municipalities. All land adjacent to Greenwich is zoned for agriculture, conservation or low density single family detached housing with the following exceptions:

- The Virginville area in Richmond Township is zoned for light commercial uses, in addition to dwellings.
- Land on each side of Old Route 22 in Windsor Township is zoned to permit twin homes in addition to single-family detached homes. 10,000 square foot single-family detached lots are also permitted in this zoning district, provided these lots have both central water and central

sewer.

Greenwich does not anticipate any conflict between Township land use policy and the planning or zoning policies governing adjacent lands located in neighboring municipalities.

ZONING ADJACENT TO GREENWICH TOWNSHIP

ADJACENT MUNICIPALITY	ADJACENT ZONING DISTRICT	MINIMUM LOT SIZE FOR A SINGLE FAMILY DETACHED HOME
Albany Township	AG Agriculture WC Woodland Conservation	2 acres (5 acre average per tract) 5 acres
Maxatawny Township	A-1 Agricultural Residential A-2 Agricultural Low Density Residential	1 acre 1 acre
Perry Township	R-A Rural Agricultural	2 acres (sliding scale minimum lot size of 1 to 1.2 acres if subdividing a farm)
Richmond Township	R-A2 Rural Agriculture WC Woodland Conservation R-1 Low Density Residential C-1 Neighborhood Commercial	1.5 acres 1.5 acres 0.5 acres with central water and sewer; otherwise 1.5 acres; 50% lot size reduction permitted in single family home cluster developments Light commercial and single family detached houses; 10,000 square foot minimum lot size with central utilities
Weisenberg Township	R Rural	1 acre (3 acres within designated environmentally sensitive areas)
Windsor Township	A Agriculture A-C Agricultural Conservation R-2 Medium Density Residential	1 acre 5 acres 1 acre (10,000 square feet with central water and sewer; 20,000 square feet with central sewer and private water). Two-family detached homes (twins) also permitted with same minimum lot sizes per dwelling unit

THE OVERALL VISION

While change is inevitable, if managed wisely, change may benefit both communities. However, Greenwich Township and Lenhartsville Borough are different places and problems can arise when changes are allowed to occur with little or no consideration of the impacts on the Township, Borough and their citizens, collectively. This Plan is intended to help manage the forces of change in order to achieve the desired vision for the future, as well as protect the rights and interests of the municipalities' residents.

As we look to the future, we envision the traditional development pattern of villages surrounded by farmland, open space and woodland. Lenhartsville, Klimesville and Krumsville will serve as community focal points and centers for services. Scattered intense suburban development throughout the Township would be avoided. Instead, development will mainly occur within and adjacent to existing villages. New development would reflect traditional building patterns and the design of new buildings would compliment existing buildings. Street trees, landscaping, carefully designed signs and facade improvements will enhance the appearance and character of Lenhartsville and the other villages.

Preservation of historic structures and sites within the Township and the Borough will be emphasized. Preservation has an economic development tool will be encouraged throughout the area.

Greenwich's agricultural areas will continue to be viable and productive, with minimal conflicts with housing. Farm based businesses will provide a supplemental source of income and create employment opportunities so that family farms remain viable.

Important natural resources, such as woodlands, ridge tops, stream valleys and other sensitive natural areas will be preserved. The quality of ground water and surface waters will be excellent.

An economy based on the area's natural features, history and rural character will emerge to provide new job opportunities. Tourism, bed and breakfasts, family agricultural based businesses, campgrounds, and other natural resource based businesses will grow and thrive.

GOALS OF THIS PLAN

The following goals and objectives provide overall guidance and direction for the growth and preservation of the Greenwich-Lenhartsville Area.

Land Use Goal - To Encourage A Rational Land Use Pattern that Provides for a Variety of Uses and Ensures Compatibility Between Uses, While Respecting the Area's Unique Resources and Existing Land Use Patterns.

Objectives

- a. Provide land for well regulated residential and non-residential development that will be compatible with the rural character, agricultural setting and overall low-density development pattern of the area.
- b. Accommodate residential and non-residential uses that will help revitalize Lenhartsville's Center.

- c. Encourage clustering and placement of development on the most suitable portion of a tract to preserve agricultural lands and open space.
- d. Ensure the Township and Borough meet their legal obligation to provide land for all types of uses.
- e. Direct development toward existing villages and to areas with adequate access and infrastructure and utilities.
- f. Locate growth areas where the new development could increase the cost-effectiveness of providing central sewage and water service to serve concentrations of existing homes with failing septic systems.
- g. Discourage the proximity of incompatible land uses, including across municipal borders.
- h. Protect the residents' right to enjoy clean air and pure water, as guaranteed by the Constitution of the Commonwealth of Pennsylvania.

Housing Goal - *To Provide Opportunities for a Variety of Safe, Well-Maintained and Affordable Housing.*

Objectives

- a. Allow a variety of housing types and densities, while encouraging innovative development layouts that preserve the important features of the site.
- b. Concentrate housing in areas containing suitable road access, natural features and utilities.
- c. Preserve and enhance concentrations of older housing through proper maintenance and rehabilitation.
- d. Encourage preservation and adaptive reuse of historic older buildings.

Natural Resource Conservation Goal - *To Conserve the Overall Rural and Natural Landscape of the Area, While Protecting Sensitive Environmental Resources.*

Objectives

- a. Preserve natural and scenic resources using a combination of regulations and voluntary initiatives.
- b. Continue to implement policies on zoning and public water and sewer extensions to direct growth towards areas most suited physically to accommodate development and away from environmentally sensitive areas.
- c. Ensure permanent open space is established in conjunction with future development.
- d. Look for short- and long-term opportunities to initiate a linked network of publicly accessible open spaces in the area.
- e. Raise public awareness about the need to conserve the area's unique natural environment.

Agricultural Preservation Goal - *To Protect and Preserve Agricultural Areas for Agricultural Use.*

Objectives

- a. Maximize the preservation of concentrations of productive farmland by promoting agricultural security areas, purchase of development rights, agricultural zoning and other agricultural preservation techniques.

- b. Minimize non-farm activities near agricultural areas that could cause conflicts with normal farming practices.
- c. Avoid new central water and sewage systems where there are concentrations of prime agricultural soils outside of Growth Areas..
- d. Provide for a wide range of farm-based business opportunities, including promoting ways that farmers can capture a higher percentage of the retail value of their products.

Historic and Cultural Resource Conservation Goal - *To Preserve and Enhance the Physical Integrity of the Area's Historic and Cultural Resources.*

Objectives

- a. Increase public awareness about opportunities to preserve properties that are vital connections to the area's unique heritage.
- b. Protect the character of Lenhartsville and other villages, encouraging new development in these areas to reflect existing styles and development patterns.
- c. Ensure Township and Borough ordinances facilitate, rather than discourage preservation of historic and cultural landmarks.
- d. Preserve historic resources using incentives, controls on land uses likely to spur demolition, and selected regulations.
- e. Continue to support the efforts of local and regional historic interest groups to identify and protect historic resources in the Township and Borough.

Community Services and Facilities Goal - *To Continue to Provide Necessary Community Services in a Cost-Effective Manner.*

Objectives

- a. Assist the School District in ensuring that adequate school facilities are available to meet growing enrollments and other changing needs.
- b. Support the most modern, cost-effective methods of providing police, fire emergency and rescue services to area residents.
- c. Expand and diversify the recreation lands, facilities and programs available to area residents, including library services.
- d. Ensure all areas of the Township and Borough receive adequate road maintenance and other public works services.

Transportation Goal - *To Provide for the Safe, Efficient and Convenient Movement of People and Goods Throughout the Area.*

Objectives

- a. Work with PennDOT and local developers to ensure local roads retain the capacity to safely accommodate increasing traffic volumes.
- b. Work with PennDOT and others to alleviate existing safety concerns such as improper road alignments, inappropriate speed limits and hazardous access points.
- c. Raise public awareness about the need to carpool and consider other alternative means of commuting.
- d. Improve coordination between the area's land use and transportation planning.

- e. Encourage the development of a network of trails and pathways within new developments to promote pedestrian and bicycle travel.

Encourage Development Goal - *To Create Jobs and Enhance Tax Revenues by Attracting Appropriate Types of Businesses to Various Types of Commercial and Industrial Areas.*

Objectives

- a. Encourage adaptive reuse of vacant or underutilized properties.
- b. Ensure current Township and Borough policies encourage existing employers to remain in the area rather than relocating elsewhere.
- c. Work with regional economic development entities to ensure they adequately promote the locational advantages of the area.
- d. Work with local business and area educational authorities to ensure local training courses are addressing local business needs.
- e. Make sure local codes and land regulatory ordinances do not discourage responsible local business enterprises in designated growth areas.
- f. Promote the areas' historic, agricultural and natural resources for tourism and encourage businesses which rely on and enhance these same resources.
- g. Promote and encourage small service oriented business within the village centers.

Intermunicipal Cooperation Goal - *To Explore Opportunities to Cooperate with Neighboring Municipalities in Order to More Efficiently Provide Governmental Services.*

Objectives

- a. Analyze ways to reduce municipal costs through shared services, shared equipment and joint purchasing, as feasible.
- b. Investigate State grant incentives available to municipalities that practice intermunicipal cooperation.
- c. Continue joint comprehensive planning as initiated during preparation of this Comprehensive Plan.

PLAN INTERRELATIONSHIPS

The Joint Comprehensive Plan addresses eight major topics:

- Land Use and Housing
- Agricultural and Natural Resources Conservation
- Historic Preservation
- Community Services and Facilities
- Transportation
- Economic Development
- Energy Conservation

These planning components are interrelated. Planning and capital programming actions taken in any one of these areas are likely to affect one or more of the other planning components. For instance, land use decisions often affect circulation patterns and community services, such as public utilities and recreation needs.

TIMING OF DEVELOPMENT

The timing of development in the Greenwich-Lenhartsville Area will largely depend upon the market for development (which is closely related to interest rates and the strength of the region's economy) and the availability of centralized public sewer and water systems.

This Joint Comprehensive Plan is intended to address major development patterns for the next 10 to 15 years. After that time, the Plan should be revised. Major changes to the Zoning Map should be made after careful review of how they would relate to the Joint Comprehensive Plan.

LAND USE AND HOUSING PLAN FOR GREENWICH TOWNSHIP

The Land Use and Housing Plan recommends appropriate types and densities of residential and non-residential uses that should be encouraged in each municipality.

Agricultural Preservation Areas (Correspond to the AP District)

The Agricultural Preservation areas include many areas with prime agricultural soils, particularly in the south-central and north-central parts of the Township. After considering input from many property owners, this Plan recommends that the Agricultural Preservation areas be expanded into additional land areas. In most cases, these expansions build upon an existing area that is zoned Agricultural Preservation.

These areas correspond to the AP zoning district, which uses zoning to preserve agricultural land through limits on the number of homes allowed on a tract of land. A tract of up to 10 acres is currently allowed to be subdivided into a total of 2 lots (1 new plus one existing). A tract of 10 to 30 acres is allowed to be subdivided into a total of 3 lots. A tract of 30 to 60 acres can be subdivided into 4 lots, etc. Each residential lot has a minimum net lot area of 1 acre.

The Township prefers limiting most new lots to including less than 1.5 acres of prime agricultural soils. The current zoning has a maximum net lot area of 5 acres, and a statement saying that homes shall be placed on the least productive land. However, a new home could still take up 5 acres of prime agricultural soil, which would be a waste of land.

(Note - The zoning ordinance should still need to have exceptions if a larger lot area is needed for well or septic purposes. For example, State nitrate regulations often require a larger lot size).

On lots of over 10 acres, the Township should consider requiring that a minimum of 50% of prime agricultural soils has to be kept in one productive farmland lot.

It is desirable to allow farmers to operate various accessory uses to generate additional income to help them afford to maintain the open land. Many farmers need other sources of income. The Township already allows "farm related businesses" in the Agricultural Preservation District. A minimum lot area of 10 acres is currently required and no more than 4 persons may be employed. For example, an owner of a farmland tract could be allowed to do small engine repair (such as lawnmowers) or to store recreational vehicles for other persons. The section allows the leasing of a barn to another person to operate a use, if the property is owner occupied. That leasing can also help fund the preservation of barns.

- These uses are currently limited to 2,000 square feet of building floor area. This Plan recommends that this limit only apply to new construction, but that existing buildings of any size could also be used for these accessory uses.

The current zoning allows Mineral Extraction as a special exception use (needing Zoning Hearing Board approval) in the AP district. That use must be allowed somewhere, but can consume much farmland and cause nuisances, hazards and overloading of the road system. As a result, this Plan recommends that this use be removed from the AP district and added to the I district as a special exception use.

Intensive Livestock - Livestock and poultry are measured in animal equivalent units, with one AEU equal to approximately 1,000 pounds. In general, the current ordinance limits uses with more than five AEU per acre (such as more than five dairy cows per acre) to a tract of more than 25 acres. A higher intensity is still allowed if conditional use approval is granted by the Supervisors.

Larger setbacks between an intensive livestock use and a residential district are recommended. Moreover, larger setbacks between a proposed new home and an existing adjacent agricultural use are also recommended.

Open Space Development

The goal of Open Space Development is to have substantial areas of open space permanently preserved within any new development. New homes would have to be located in a manner that protects important natural features. Special attention would be paid towards protecting sensitive lands such as wetlands, clusters of mature trees and stream corridors. In comparison, conventional subdivisions usually result in little or no preserved open space because the entire tract is subdivided into building lots. Often most of the building lots in a conventional subdivision are virtually the same size and shape—hence the nickname “Cookie Cutter Subdivisions.”

The goal is to encourage subdivision design that places homes on the most suitable portions of a tract, with the important natural areas being preserved, such as lands along creeks. The open space development option allows developers more flexibility in site layout. For example, developers can make better use of site topography and avoid soils that are not suitable for septic systems. Open Space development also permit the developer to cluster building lots thereby reducing road lengths, grading and utility extensions - each of which saves on construction and maintenance costs.

Open space development can help to maintain the scenic character of the Township by preserving landscaped open areas between developments. Preserved open space can often increase values of adjacent homes. Open space development also can avoid stormwater and sinkhole problems by reducing alterations to the environment.

A "Yield Plan" could be required. This would be a layout plan showing the number of homes that would be possible under conventional development. The layout plan would not be required to be fully engineered, but would need to accurately show natural features. The Open Space Development could then allow a percentage increase above that density, such as a 25 percent increase. The goal is to make sure that the Open Space option does not result in a dramatic increase in density, particularly for sites with large unbuildable areas.

Several alternatives exist for long term maintenance of the preserved open space, including ownership by a legally-binding homeowners association, the Township, the County, or a land conservancy. In most cases, the preserved open space would be low-maintenance areas that are planted to eventually become reforested, and that would be owned by homeowner associations. However, in some cases, it may be suitable to seek Township parkland. If there are not other alternatives to manage the open space, then the Township could allow the open space to be part of one very large private lot, with conservation easements to make sure that the vast majority of that lot will remain preserved.

Wherever feasible, open space should be provided in locations that can connect to existing public or semi-public open spaces or preserve land along a creek valley or the river. Opportunities should be also sought for trails that will connect with neighborhoods and public lands. In some cases, the open space could remain in an agricultural use or a horse farm. One open space development in Chester County was built around a horse stable and horse riding areas and many of the homebuyers have a horse boarded in the stable.

There needs to be careful standards on the types of land that are allowed to be counted towards the open space requirement. For example, at least half of the required open space could be in one contiguous lot, and areas of less than 50 feet in width could not count as open space. Proper standards are needed to make sure that the preserved open space is well-located and improved so that it serves important public functions.

Open space development should also minimize the disturbance of natural features. This includes carefully reviewing all SALDO standards to make sure they do not require unnecessary amounts of grading, tree removal and paving.

The current Zoning Ordinance has provisions for cluster development in the Conservation, Rural and Low Density Residential districts. However, this Plan recommends they be replaced with Open Space Development provisions that will be more effective in preserving substantial areas of open space that will serve important public purposes. Those provisions are discussed under each zoning district/land use category below.

The following four steps are an effective approach towards more conservation-oriented design of new development:

- *Identify Primary and Secondary Conservation Areas* - Identify primary conservation areas such as sensitive natural areas: steep slopes over 25%, 100-year floodplains, streams and their buffers, and habitats of rare, threatened and endangered species. Secondary conservation areas may include scenic views, locally important vegetation, unique geologic features and wet soils among other areas.
- *Identify Locations for Development* - Locate potential development areas which include the remaining land left over after the primary and secondary conservation areas are identified. Carefully consider siting new homes with views of the open space areas. Reduce the lot sizes to accommodate for the number of homes that would have been originally provided under conventional development.

- *Lay Out Roads and Trails* - Show a road alignment that would most efficiently access all new homes. Also consider developing trails that would potentially link residents with each other and with the open space areas.
- *Delineate Lot Lines* - The final step simply involves delineating the boundaries of each lot.

Conservation Areas (Corresponds to the CONS District)

The CONS district includes portions of the Blue Mountain in the northwestern part of the Township, near the Pulpit, the Pinnacle and the Hamburg Reservoir. An average of one home is allowed for each 6 acres. A home can be placed on a 1 acre minimum lot, provided that the average density is met. This is known as Lot Averaging. The intent was to have all lands be privately owned and privately maintained as part of individual lots, while controlling overall density. This lot averaging provision is proposed to continue.

A cluster option exists in the current zoning ordinance, but it includes many features that make it difficult to use or impractical.

This Plan recommends that the current cluster option be replaced with an Open Space Development Option. The Open Space Development Option would allow a slightly higher overall density than is possible through Lot Averaging, in order to encourage the permanent preservation of at least 50 percent of the land in open space. Smaller lots are not recommended in the Conservation district. This incentive would help make sure the land was permanently preserved regardless of whether the zoning would be changed in the future.

That type of preservation would be valuable to add land to the State Game Lands or the Hawk Mountain Sanctuary. The Open Space option, in some but not all cases, would allow public access to the open space. For example, if the land would be maintained by a homeowner association, then the residents of that development at a minimum would have access to the open space.

However, there is an intent to avoid isolated fragmented open spaces that are unlikely to be able to connected to other open spaces in the future. In particular, there are concerns about trespassing by all terrain vehicles and the resulting noise.

For the Open Space Option, the majority of the required open space would need to be maintained as part of one interconnected land area. The Open Space could be maintained as one productive agricultural use, as homeowner association open space, or other approved uses.

Rural Areas (Corresponds to the R District)

This is the largest zoning district in the Township. It provides for single-family detached homes in a manner that is compatible with Greenwich's many natural features. The current minimum lot size is one acre, provided that a maximum average density of one home per 3 acres must also be met. Careful siting of new homes to protect the sensitive natural features is recommended.

A cluster option exists on tracts of over 50 acres. That option does not increase the overall density, but does allow lots as small as 12,000 square feet (1/4 acre) if there is central sewage service. Only 20 percent of the tract is required to be set aside in open space. An 18,000 square feet maximum lot size is required, which seems impractical in many cases. It is unlikely this district would be served by a central sewage system.

This Plan recommends replacing the cluster option with the Open Space Development option suggested above. The Open Space Development Option would allow a slightly higher overall density than is possible through Lot Averaging, in order to encourage the permanent preservation of at least 50 percent of the land in open space. A minimum of 50 percent of the tract would need to be preserved in Township-approved open space. This option would allow clustering without encouraging new central water and sewage systems. There are major concerns that smaller isolated private water and sewage systems may not be viable over the long-term. This is particularly true because there might not be enough customers to pay for the future major repair or upgrade of the system.

It would be appropriate to vary the minimum lot area based upon the slope of the proposed building site. That type of requirement helps to push the building sites to the less steep portions of a tract.

The current zoning allows Mineral Extraction as a special exception use (needing Zoning Hearing Board approval) in the Rural district. That use must be allowed somewhere, but can consume much farmland and cause nuisances, hazards and overloading of the road system. As a result, this Plan recommends that this use be removed from the R district and added to the I district as a special exception

Low Density Residential Areas (Corresponds to the LDR District)

This district currently allows single family detached houses on 20,000 square feet (one half acre) lots, if central water and central sewage services are provided. The minimum lot size is one net acre if central water and central sewage are not used.

Under the current zoning, a cluster option exists on tracts of over 50 acres. The 50 acre tract does not reflect the limited undeveloped land available in this district. That cluster option does not increase the overall density, but does allow lots as small as 12,000 square feet (1/4 acre) if there is central sewage service. Only 20 percent of the tract is required to be set aside in open space.

This Plan recommends that the current cluster option be replaced with an Open Space Development Option, if central water and sewage services would be provided and greater percentage of open space is preserved.

High Density Residential Areas (Corresponds to the HDR District)

This area is almost completely developed as part of Highland Estates, and no changes are recommended. That development is served by private central sewage and water systems. This district mainly allows manufactured/mobile home parks. In addition, a mix of housing types are allowed at up to 4 homes per acre.

There are no plans to expand this zoning district, because the Township has provided more than its fair share of this type of housing.

Village Areas (Corresponds to the V District)

These areas are proposed to include Klinesville, areas northeast of Lenhartsville, and areas north of Old Route 22 east of Krumsville, and areas west of Lenhartsville north of Old Route 22. The intent is to allow less intense types of businesses and various types of housing. The Village areas should continue to not allow drive-through restaurants, truck stops or gasoline sales. Currently, a retail store cannot exceed 10,000 square feet of building floor area.

If central sewage and water services would be provided, then housing should be possible at an average of 3 to 4 homes per acre, after the deletion of unbuildable areas. A minimum percentage of the tract should be required to be set aside as open space for the residents, particularly if a development will include townhouses or apartments.

If central water and sewage services are not provided, then housing should be limited to single family detached houses and the maximum density should be one dwelling unit per acre.

Limited Commercial Areas (Would be a new LC Zoning District)

The area along the south side of Old Route 22 east of Krumsville is proposed to be the location for a new Limited Commercial zoning district.

These Limited Commercial areas would provide for less intense types of commercial uses, such as self-storage warehouses, retail stores, local tradespersons, offices, small retail stores and personal service uses. These areas are proposed to not allow for uses that would be likely to generate significant tractor-trailer traffic, such as warehousing, distribution and truck stops.

The Limited Commercial Areas should include zoning provisions that are intended to protect nearby residential areas that are as extensive as the current Village district or more restrictive. Any commercial outdoor storage that may be allowed (such as within a self-storage development) should be required to be screened for views of roads and homes by dense landscaping.

Unlike the Village areas, these areas are proposed to provide for only limited housing, such as single family detached houses on 2 acre minimum lots.

These Limited Commercial areas are intended to be compatible with the relatively low densities of most adjacent areas, and the need to provide compatibility with nearby homes. These areas also recognize the traffic limitations along Old Route 22, particularly when a detour occurs along I-78, which has become increasingly frequent. A related objective is to avoid increased amounts of tractor-trailer traffic and other heavy truck traffic from passing through areas that are primarily residential.

Commercial Areas (Corresponds to the C District)

These areas are proposed to include areas north of Klinesville north of I-78, areas around the center of Krumsville, an area of Route 737 near the Elementary School, and an area surrounding the campground south of Old Route 22. These areas should allow a wide variety of commercial businesses, including gas stations, restaurants (which may include drive-through service) and shopping centers. A few uses should continue to need conditional use approval from the Supervisors, such as vehicle repair.

Attention is needed regarding truck stop uses and large truck repair uses. Those uses may create conflicts if there are homes nearby. Also, the ramps at both exits of I-78 are not suitable for large amounts of additional heavy truck traffic.

This Plan recommends changing areas west of Lenhartsville to the Village zoning district. This change would help protect the residential character of Lenhartsville by avoiding heavy truck-related uses that could draw additional truck traffic through the center of the Borough. Any new Village development should be designed to build upon the character of the center of Lenhartsville. This change would be particularly effective to prohibit truck stops and other large and intensive commercial uses, such as uses that might operate 24 hours a day.

The south side of Old Route 22 west of Lenhartsville is too steep to be suitable for commercial development or dense residential development. A curve in Old Route 22 in this area also makes the area unsuitable for commercial development on both sides of the road. There are concerns that uses involving heavy truck traffic west of Lenhartsville could overwhelm the roads through Lenhartsville and create conflicts with homes. Therefore, the current Commercial zoning district west of Lenhartsville south of Old Route 22 is proposed to be changed to the Rural zoning district.

Industrial Areas (Corresponds to the I District)

The Industrial land use areas are proposed to mainly include:

- a) an area that is mostly north of I-78, west of Krumsville and south of Route 737, and
- b) an area northwest of the Rt. 143 interchange of I-78 (which is currently zoned Commercial).

Some commercial uses are appropriate in an industrial area. The current Industrial zoning district allows all of the same uses as the Commercial district. In addition, the Industrial district currently allows airports, adult uses (such as strip clubs, with a 500 foot setback from residential districts and churches), waste landfills, trash transfer stations, and mineral extraction with Supervisors or Zoning Hearing Board approval.

The Industrially zoned area east of Yarnall and west of Rt. 737 currently includes 450 acres of land, including 35 acres south of I-78. There are concerns that there could be difficulties at the Rt. 737 interchange in handling the tractor trailer truck traffic that could result. Although some ramp improvements have been discussed by PennDOT (particularly on the south side of I-78), many other needed ramp improvements would be almost impossible to complete. The bridge at Hausman Road and I-78 is not suitable for truck traffic. There may be some truck traffic in that direction if the western end of this area would be developed industrially. Much of this industrially zoned land includes prime agricultural soils and some steep slopes, particularly on the western side.

To avoid conflicts with industry and to make sure that land remains available for new employers, it is recommended that new housing not be allowed in the Industrial district. An exception may be appropriate for a single family home on a large lot that includes natural features that are not well-suited for businesses.

The Township should strictly regulate junkyards to avoid nuisances and hazards. This could include adoption of a separate junkyard ordinance that could also control non-conforming junkyards. For example, a separate ordinance could address fencing and emergency vehicle access.

The Township should strictly regulate and limit nuisances within the Township, such as excessive noise at residential property-lines and controls on excessive lighting. Most lighting should be carefully directed downward using “full-cutoff light fixtures” and the lighting of businesses after closing hours should be limited to the amount necessary for security.

Billboards of 300 square feet each are currently allowed in all commercial and industrial districts. The I district in particular includes a very long stretch of I-78. There is a 2,000 feet separation distance between billboards, which is appropriate. This Plan recommends that this 300 square feet limit continue to apply, vs. the 674 square foot maximum size that is in place in most townships.

Community Facilities

These facilities include the four churches, three cemeteries, the Greenwich-Lenhartsville Elementary School, Greenwich Township Municipal Building and related lands, and the PennDOT salt and stone storage area.

Public Recreation and Open Space

These areas include lands of the Hamburg Reservoir, State Gamelands and Greenwich-Lenhartsville Elementary School Playground.

Floodprone Areas

These areas are susceptible to flooding. The area shown is the 100-year floodplain which includes floodprone lands along the Maiden Creek, Sacony Creek, Furnace Creek and Mill Creek.

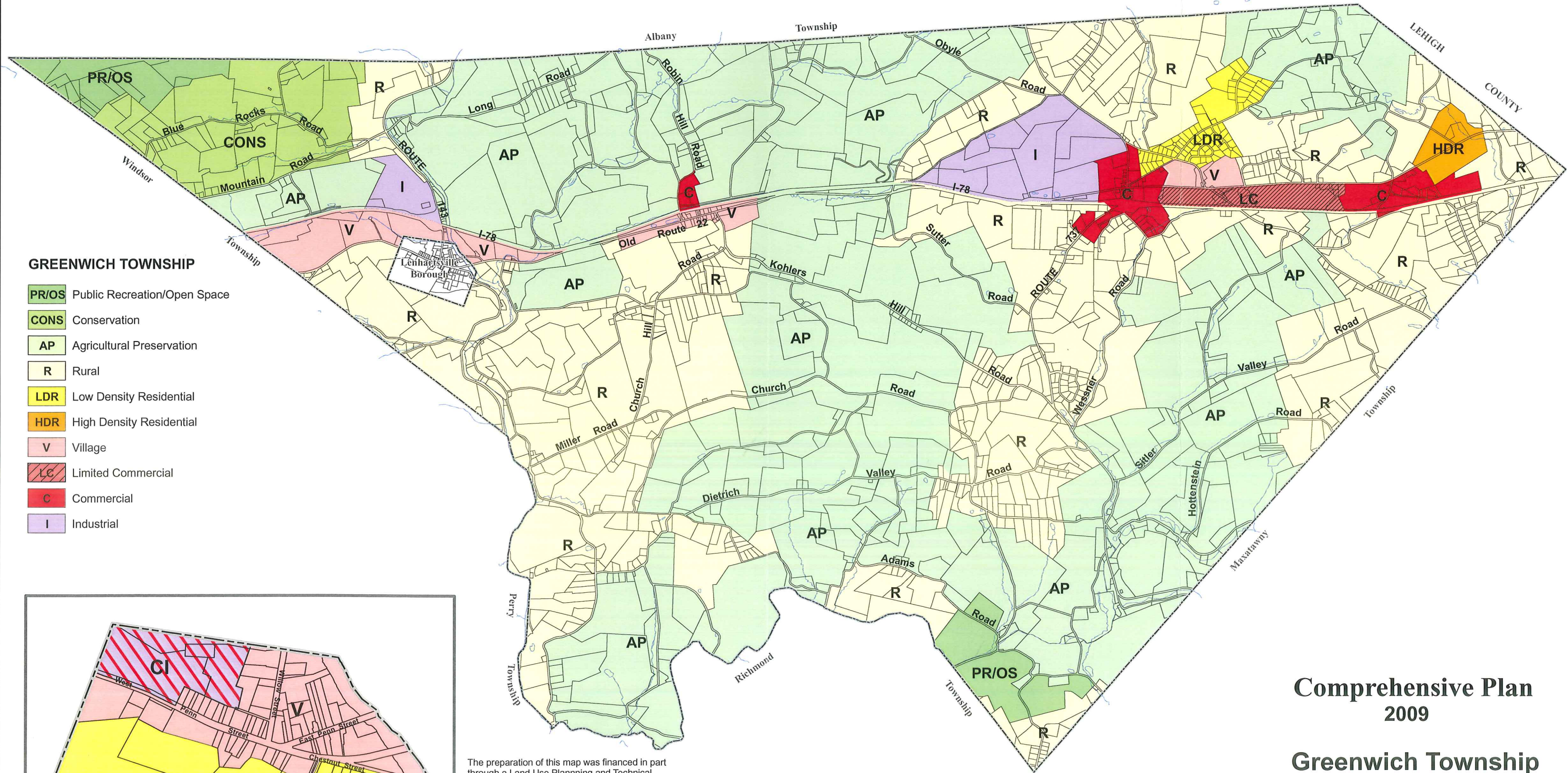
Land Use Plan Map

The Township should revise the Zoning Ordinance and Subdivision and Land Development Ordinance (SALDO) to carry out this Joint Comprehensive Plan.

Existing Buildings

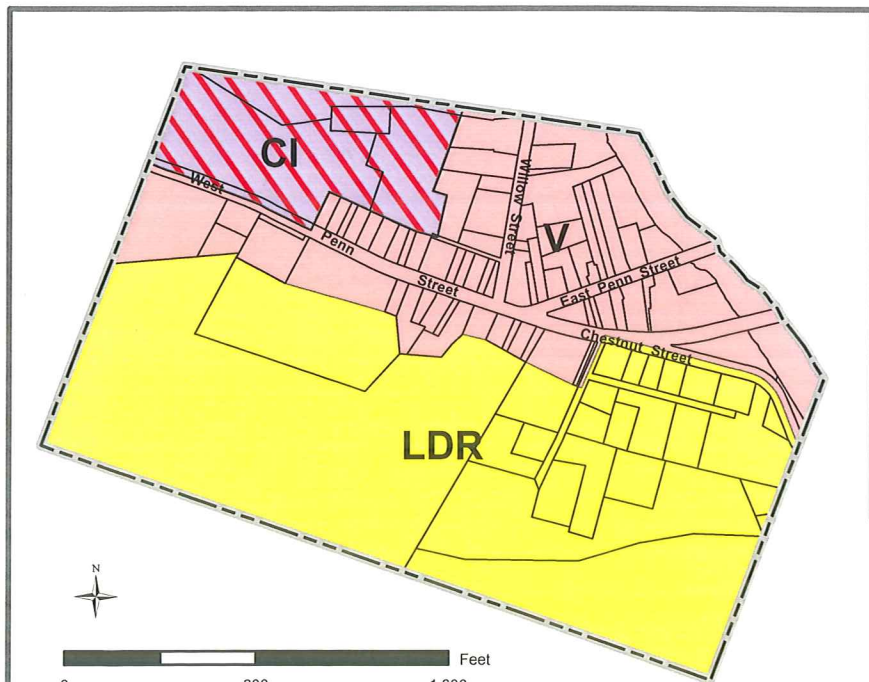
The Township and Borough should consider adopting part or all of an Existing Property Maintenance Code. A Property Maintenance Code requires minimal repair of existing buildings. In comparison, a Building Code mainly regulates new construction. The Township would not need to adopt the entire model code, but instead could enact sections that are important to require repair or demolition of deteriorated buildings. For example, Greenwich’s Code could exempt agricultural buildings and could be less restrictive regarding unlicensed vehicles.

The municipalities should work with County agencies to encourage them to offer affordable financing for rehabilitation of older properties.



GREENWICH TOWNSHIP

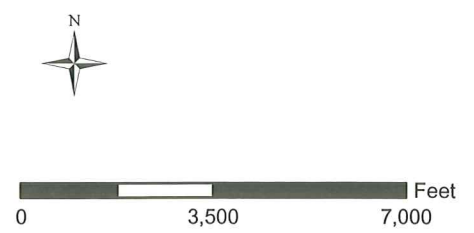
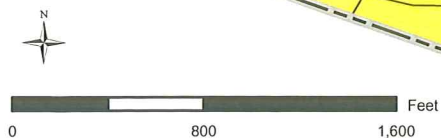
- PR/OS Public Recreation/Open Space
- CONS Conservation
- AP Agricultural Preservation
- R Rural
- LDR Low Density Residential
- HDR High Density Residential
- V Village
- LC Limited Commercial
- C Commercial
- I Industrial



The preparation of this map was financed in part through a Land Use Planning and Technical Assistance Grant from the Department of Community and Economic Development, as administered by the Governor's Center for Local Government Services, Pennsylvania Department of Community and Economic Development.

LENHARTSVILLE BOROUGH

- LDR Low Density Residential
- V Village
- CI Commercial-Industrial



**Comprehensive Plan
2009**

**Greenwich Township
& Lenhartsville Borough
Berks County, Pennsylvania**

LAND USE AND HOUSING PLAN FOR LENHARTSVILLE

This Plan recommends a continuation of the policies that were put into place by Lenhartsville in their current Zoning Ordinance.

These Land Use Plan categories for Lenhartsville are shown on the accompanying Future Land Use Map and described in the following text.

Low Density Residential Areas (corresponds to LDR Zoning District) - These areas should continue to mainly include homes along Cherry St. and in the eastern part of the Borough along Route 143, along Hill St. and along the hill south of Penn St. This District mainly provides for single family detached homes. The minimum lot size is proposed to continue to be 1/3 acre (15,000 square feet) if there is central water and central sewage service and if the building is not placed on slopes over 15 percent. Otherwise, a 1 acre minimum lot size should be required.

Village Areas (corresponds to the V Zoning District) - These areas include the older areas of Lenhartsville and the majority of existing homes and businesses - particularly along Penn and Willow Streets. This District provides for a mix of light commercial and residential uses. The commercial uses are intended to be types that would be compatible with adjacent homes and the historic character of the town - including restaurants, offices, personal services, and retail stores.

- The goal is to have new construction fit in well with existing buildings. Therefore, buildings should be encouraged close to the street, with parking to the rear or side. An emphasis should be placed upon having buildings setback a distance from the street that is similar to neighboring buildings.
- Single family detached houses should continue to be allowed. In addition, twin homes, townhouses and apartments would be allowed if they have approved central water and sewage systems.
- The density should continue to be one home or business per acre with a well and septic system, 3/4 acre with central water or sewage service, and up to 5 homes per acre with approved central water and sewage service.

Commercial-Industrial Areas (corresponds to the C-I District) - This category should continue to apply to the northwest corner of the Borough, including Peters Trucking and Peters Foods. This district permits a mix of all types of commercial uses and most types of industrial uses. The heaviest industrial uses (such as hazardous chemical plants and landfills) would not be appropriate because of the proximity of homes and the limited amount of land available.

Community Facilities include the Borough Hall and Post Office.

Public Recreation and Open Space is limited to the playground on Hill Road.

Floodprone Areas are areas susceptible to flooding. The area shown is the 100-year floodplain which includes floodprone lands along the Maiden Creek and Furnace Creek.

NATURAL FEATURES PLAN

The area's scenic rural character includes the many natural features in the area, such as wooded hillsides, ridges, creek valleys, and the variety of local flora and fauna. Protection of sensitive natural resources, such as the areas water supply was also expressed. Open spaces warrant protection because of their many essential functions:

- Maintaining the natural environmental processes and balances, including ensuring adequate groundwater and high water quality,
- Providing an important aesthetic relief from built-up areas,
- Preserving areas of scenic beauty,
- Preserving lands that are not naturally suited for development,
- Providing land for active and passive recreation, both presently and in the distant future,
- Preserving habitats for birds, fish and wildlife, and
- Retaining area for farms and woodlands.

The land itself varies greatly in the amount and density of development it can support. Some areas of land, such as flood-prone and very steeply-sloped land, should remain undeveloped as open space. Other lands are physically suitable for moderate or more intense development. This Plan allows development in a manner which carefully respects the natural features and resources of the area. Recommendations to protect sensitive natural features and resources in each community are listed below:

- Preserve the area's rural character and scenic beauty through carefully thought-out development layouts and techniques.
- Encourage businesses which utilize and help encourage the conservation of natural resources, such as low-intensity camps, campgrounds and clubs.
- Encourage the acquisition of land through ownership and easements by working closely with the Berks County Conservancy and others.
- Preserve the area's natural and scenic resources as outlined in the following table.

GUIDELINES FOR PROTECTING IMPORTANT NATURAL FEATURES

Natural Features (Type & Description)	Potential Problems If Not Protected	Strategies for Protection
<p><u>Steep Slopes</u> - Steep slopes of 15% have 15 feet of vertical change for every 100 feet of horizontal distance. Very steep slopes of 25% rise vertically 25 feet for every 100 feet. Steep slopes are sometimes wooded and found along creeks. Both Greenwich and Lenhartsville have significant steeply sloped areas. Steep slopes are found throughout the Township and south of Penn Street in the Borough.</p>	<ul style="list-style-type: none"> • Difficulty of maintaining and snowplowing steep roads. • Higher costs of buildings. • High rate of septic system failures. • Increased erosion and runoff. • Winter driving hazards from steep roads and driveways. • Disturbance of scenic areas. • Increased costs to extend public water and sewer lines. 	<ul style="list-style-type: none"> • Use special precautions during building. • Site houses on the most suitable land, while keeping steep slopes in open space. • Keep natural vegetation intact. • Enforce municipal regulations that protect steep slopes. • Require larger lot sizes in steep areas. • Limit building on steep slopes of 15% to 25% and prohibit building on very steep slopes of 25% and above. • Required open space acreage shall not include steep slopes.
<p><u>Groundwater</u> - Groundwater is stored underground after entering through the soil or seeping from creeks. Maintaining the quality of this water is important because both private wells and public water systems are dependent upon groundwater.</p>	<ul style="list-style-type: none"> • Polluted groundwater. • Dry wells. 	<ul style="list-style-type: none"> • Continue to control the percentage of lots covered by buildings and paving. • Make sure remaining septic systems are designed and operated properly. • Monitor underground storage tanks for leaks. • Avoid polluted stormwater runoff. • Avoid high volume withdrawals of groundwater.
<p><u>Floodplains</u> - Areas that are prone to flooding. These include not only the legally designated floodplain, but also areas along drainage channels. 100-year floodplains lie along the Maiden Creek, Sacony Creek, Furnace Creek, Mill Creek and many unnamed tributaries.</p>	<ul style="list-style-type: none"> • Increased flooding in other areas. • Loss of potential public recreation area. • Threats to important wildlife and bird habitats. 	<ul style="list-style-type: none"> • Prohibit construction of new structures within the 100-year floodway (which is the actual main flood channel) and along the adjacent 100-year flood-fringe. Prohibit construction within 100 feet of the centerline of a stream or significant drainageway where 100-year floodplains are not delineated. • Seek to preserve natural vegetation immediately adjacent to creeks and drainageways. • Seek to preserve more land along local streams and drainageways.

Natural Features (Type & Description)	Potential Problems If Not Protected	Strategies for Protection
<p>Wooded Areas - Areas with numerous mature trees. Lenhartsville's woodlands lie primarily on steep slopes and along creek banks; Greenwich contains significant woodlands throughout the Township, particularly on its steep slopes.</p>	<ul style="list-style-type: none"> • Loss of important bird and wildlife habitats. • Loss of hunting areas. • Loss of air purification. • Increased erosion and runoff. • Loss of scenic resources. • Noise and incompatible development may become more noticeable. 	<ul style="list-style-type: none"> • Restrict cutting of trees during building. • Seek to preserve tree stands in public or private open space. • Seek replanting of woods that must be disturbed. • Adopt strategies to qualify for financial allocations associated with the Berks County Natural Land, Farmland and Open Space Conservation Program and other grant programs
<p>Shallow Depth to Bedrock - Areas with shallow soils, with bedrock close to the surface.</p>	<ul style="list-style-type: none"> • Expensive building. 	<ul style="list-style-type: none"> • Avoid building in these areas.
<p>Creeks/Drainageways - The Maiden Creek and the Sacony Creek are the Greenwich-Lenhartsville area's two main drainageways. Smaller tributaries also help drain the area.</p>	<ul style="list-style-type: none"> • Loss of potential public recreation areas. • Threats to important bird, fish and wildlife habitats. • Increased erosion and flooding. 	<ul style="list-style-type: none"> • Prevent soil erosion to avoid sedimentation of creeks and drainageways. • Consider areas along creeks and drainageways for public greenways. • Prevent runoff from polluting creeks and drainageways with pesticides, grease, industrial wastes and other pollutants. • Prevent runoff that is heated by parking lots in the summer from harming aquatic life. • Require buildings and paving to be setback from creek banks and significant drainageways. • Control the peak rates of stormwater runoff from development to avoid increased flooding.
<p>Natural Drainage Channels - Channels that carry stormwater to creeks during heavy storms.</p>	<ul style="list-style-type: none"> • Increased flooding. • Erosion of soil. 	<ul style="list-style-type: none"> • Preserve adequate width along channels in open space. • Prevent erosion.
<p>Hydric Soils - Hydric soils have a shallow depth to the seasonally high water table.</p>	<ul style="list-style-type: none"> • Flooded basements. • Disturbance of natural drainage and groundwater recharge. • Poor foundation stability. • Failed on-lot septic systems. 	<ul style="list-style-type: none"> • Continue to enforce the state and federal wetland regulations. • Place on-lot septic systems and buildings outside these areas. • Where building cannot be avoided, waterproof basements.

Currently, in the Township, new buildings are prohibited on very steep slopes (over 25 percent). It may be appropriate to require a 2 or 3 acre minimum lot size if a home would be built on moderately steep areas (such as 15 to 24 percent slopes). That type of requirement helps to push the building sites to the less steep portions of a tract. Otherwise, it may be possible to develop a home on a one acre or smaller lot that is mostly 24% slopes.

It may be appropriate to delete very steep slopes from counting towards the allowed density for a new subdivision. For example, if a one acre minimum lot size applied, and the lot included one half acre of more than 25 percent slope, then the lot would need to be 1.5 acres in size.

It is most defensible to base density upon the natural features of each tract of land. The Township's definition of net lot area deletes wetlands and stormwater and utility easements, but does not delete very steep slopes. This Plan recommends that easements not be deleted, except possibly for overhead high voltage electric transmission lines.

Consideration should be given to completely prohibiting all new buildings in the 100 year floodplain. Currently, buildings are allowed in the outer parts of the floodplain (called the "flood fringe") if they are floodproofed.

Reasonable controls should be added on forestry, as well upon tree cutting as part of development. In most cases, large areas of clear cut forestry should be avoided. Forestry can be carefully limited on very steep slopes and near creeks.

The current Township zoning ordinance requires a 50 feet building and paving setback from the bank of a stream, lake or pond. This distance is 75 feet from the Maiden Creek in the Borough Zoning Ordinance. The goal is to maintain conservation buffers of thick vegetation along creeks. Thick vegetation helps to screen eroded soil and other pollutants from stormwater runoff before they enter creeks. These green corridors also help to maintain quality habitats for fish and provide corridors for movement of wildlife.

The Township also could require that trees and other vegetation along a creek be replaced with plantings of the same ecological value if they are removed as part of a development.

AGRICULTURAL PRESERVATION PLAN

In addition to the Land Use Plan policies, the following policies are recommended to encourage continuation of a strong agricultural economy:

- Encourage businesses which utilize local farm produce and products. Making farming profitable will be key to encouraging the conservation of agriculture and the rural character of the surrounding area.
- Ensure the Township's ordinances do not overly regulate normal farming practices, and allow agricultural activities sufficient flexibility to respond to changing markets.
- Encourage the purchase of development rights and donation of conservation easements by working closely with the local land owners, the Berks County Planning Commission, the Berks County

Agricultural Land Preservation Board and the Berks County Conservancy. This will provide permanent protection of these resources.

- Continue to encourage property owners to voluntarily join Greenwich's Agricultural Security Area.
- Discourage centralized water and sewage services within the Agricultural Preservation and Conservation land use areas.
- Provide additional setback and buffer requirements within residential subdivisions constructed adjacent to active farms. This will help reduce conflicts between farms and adjacent residential areas.
- Encourage the clustering of development for single family detached residential homes, within the Agricultural, Conservation and Rural land use areas.
- Permit a reasonable variety of farm-based businesses on larger tracts of land, provided these farm-based businesses are not large volume, heavy traffic generating uses. These businesses can offer important supplemental sources of income to farmers.

HISTORIC PRESERVATION PLAN

The goal is to make productive use of historic buildings to ensure their proper maintenance, while being sensitive to the architectural characteristics of the exterior of the building and site.

Six properties located within the Township are on the National Register of Historic Places. These are sites that are formally certified as having national historic significance. Many other National Register eligible sites, locally important sites and concentrations of historic buildings are located within the Borough and Township.

The State Planning Code now states that zoning ordinances "shall" protect historic buildings. The background section of this Plan includes a list and map of historic buildings.

It may be appropriate to require zoning approval before significant historic buildings could be demolished. This could involve requiring conditional use approval by the Board of Supervisors or special exception approval from the Zoning Hearing Board. These types of regulations could apply to a list of buildings with significant architecture, or could apply to all buildings built before 1945 in certain land areas.

This type of regulation would not require approval of minor changes to historic buildings, such as replacement of doors and windows. As a result, this type of regulation would not be an intrusion upon the average building owner. Instead, this provision would be targeted to the actual demolition of the main building on the lot. A partial demolition should also be regulated, such as a removal of a front porch.

There also can be some incentives for rehabilitation of historic buildings. Some additional uses are allowed in historic buildings, including offices, a restaurant and a conversion into apartments. Additional uses could be allowed and the provisions could be expanded to other zoning districts.

Local historical groups should be encouraged to compile a more detailed inventory of historic resources and seek official recognition of historic properties.

The municipalities should consider seeking grant funding for a facade improvement program in Lenhartsville and the villages. This could include matching grants and/or low interest loans.

The municipalities should encourage conservation easements and historic facade easements to preserve key historic structures.

The municipalities should apply for placement of historic signs under Pennsylvania's Blue Marker Program.

The municipalities should consider sign requirements to compliment and enhance the historic character. Signs which are overly large, internally lit, constructed of plastic or cover unique architectural features are not appropriate. Modest sized wood signs that are scaled to pedestrians are most appropriated and reflect the quality of the businesses within.

The municipalities should install historic style welcome signs at key gateways to the Borough and Township.

For historic areas, it would be desirable to create a concise design guidelines pamphlet to educate the public so they may voluntarily make the right decisions. Such a pamphlet could be easily distributed to local residents.

Future public improvements such as lighting should reflect the historic qualities of the Borough.

The following guidelines should be promoted to encourage historic preservation and rehabilitation.

- New construction on highly visible sites should reflect the scale, proportions, spacing, setbacks and materials traditionally found in existing older buildings.
- Retain the exterior features visible from a street that give a building its historic character.
 - These features include windows, dormers, doors, porches, porch roofs and trim, moldings and other details at the juncture of front walls and roofs.
 - Special attention is needed to avoid covering brick or trim with siding. If features are deteriorated beyond repair or were removed in the past, they should be replaced with features that are similar in appearance.
- Maintain the scale, spacing, proportions, setbacks and materials of older buildings in any new construction visible from a public street.
 - Scale and proportions are especially important concerning rooflines and the spacing and sizes of windows, dormers and doors. For example, the spacing and sizes of window frames should be consistent with the historic style of the building and/or adjacent buildings.
 - Front doors should be constructed of wood. If modern storm doors are used, they should be primarily constructed of glass or plexiglass to allow views of the front door.
 - Modern-style bay windows should be avoided.

- Windows (other than first floors of storefronts) should appear to be separated into sashes and/or panes.
- Material type, color and texture of older buildings should be used in new construction.
- Retain changes that have occurred over time that are compatible with and add to a building's character.
 - Modern materials may be suitable if they appear the same as older materials.
- Seek that new additions are compatible with historic buildings and that a) the addition does not destroy historic features, b) similar proportions and scale are used, c) the site of the addition is carefully planned and d) compatible materials are used.
 - Wherever possible, additions should be placed on the rear of the building. If additions are placed on the side of the building, they should be setback from the street.
 - Modern alterations (such as wood decks, satellite antennae, skylights, sliding doors, garage doors and sunrooms) should be kept to the rear of buildings.
- Encourage colors that were common during the period of construction, including using color to highlight attractive trim and other details.
- Clean brick and other masonry with water, brushes, mild detergents and/or steam cleaning. Avoid use of sandblasting or use of harsh chemicals to avoid deterioration of the bricks over time.
- Repoint brick joints with mortar as needed and joints of other materials should be regularly caulked to ensure stability and waterproofing.
- Remove signs that are too high, too large, internally lit, constructed of plastic or that cover attractive features of the building.
 - Modest-sized signs that are scaled to the pedestrian and in proper proportion to the walls to which they are attached should be added.

COMMUNITY FACILITY AND SERVICES PLAN

Borough Hall – The Borough should continue to renovate the Borough Hall, as funds are available.

Schools – The municipalities should maintain close communications with the School District, particularly to make them aware of new housing proposals (including their timing) and to identify safety hazards for buses.

Police Protection – Police protection is currently provided by the State Police, based in Hamburg. If local police protection is determined in the future to be needed, it should be provided cooperatively with two or more municipalities. That would be the most cost-effective method of providing 24 hour coverage with adequate professional supervision.

Fire Protection – Work with local fire companies, fire police and emergency medical squads to make sure that they have the resources to serve the public. These services are particularly stressed by the

high number of accidents along Interstate 78. Detours of traffic from I-78 during accidents also create burdens upon the Fire Police.

Volunteer emergency services throughout the State are having difficulty attracting sufficient numbers of trained volunteers. Shortages of staff often arise during weekdays, when many local volunteers are working outside of the area.

Cooperation with all emergency service providers throughout the area is important to make sure that sufficient staff and specialized equipment are available.

Parks, Recreation and Open Space – Currently, most organized active recreation programs are conducted at the public schools, particularly in Kutztown..

There is a one acre privately owned playground in Lenhartsville, on Hill Road. The Borough should seek grants to purchase and improve this playground or to develop a playground on another site.

There currently is a private playground within the Highland Estates manufactured home park in the eastern part of the Township.

A corridor of trees and thick vegetation should be maintained along the Maiden Creek to protect the water quality of the creek. Where practical, in cooperation with landowners, a nature trail should be considered along portions of the creek. Under the State Trails Act, a landowner is protected from most legal liability if they allow free use of a trail.

Landowners along creeks should be encouraged to sell or donate conservation easements. A conservation easement makes sure that the land is preserved, but does not by itself allow any public access. With a conservation easement, the land remains privately-owned.

The current densities of development in Greenwich do not create very strong demand for public parks. However, this situation may change as additional development occurs. Greenwich Township currently owns approximately 47 acres of mostly open land adjacent to the Township Building north of Old Route 22. Some of this land is steep, while other areas are leased for farming. Over the long term, this land should be “land banked” and reserved for future recreation use. The Township may be able to lease some of the land to a local youth athletic organization to improve the land with recreation facilities. Another option over the long-run would be to seek to acquire land next to the Elementary School that could be combined into a joint township-school recreation area. That can allow efficient shared use of parking, security and utilities.

State matching grants are available for the purchase of recreation land, for making improvements to the land and for constructing recreation trails.

Greenwich Township should require developers to provide recreation land within their development or to pay a fee to the Township for the Township to provide recreation land and facilities. (Note - This may include the Township acquiring land and then non-profit recreation groups constructing and maintaining facilities). This matter should be addressed in the Township's Subdivision and Land Development Ordinance (SALDO).

The resulting fees could be used for the following, as examples:

- to add land to the Elementary School,
- to provide trails using easements on privately-owned land,
- to buy land to add to State Game Lands, or
- purchase land that would be improved and maintained by a non-profit.

There is no limit that the money needs to be spent within Greenwich Township, and therefore could be spent on a joint park, pool or recreation center with another municipality. Section 503(11) of the State Municipalities Planning Code includes some limits on recreation land and fees. For example, a Township can only require public recreation land to start. Then, with MUTUAL consent of the developer and the Township, homeowner association recreation land could be required instead, or fees paid for recreation, or some other arrangement to meet the recreation needs. For example, in other municipalities, developers have constructed recreation facilities on their own land or on township land to meet this type of recreation.

The amount of recreation land can vary based upon how suitable it is for active recreation. If a developer offered land that is not prime for active recreation, then twice as much land could be required.

Central Sewage and Water Facilities – A new central sewage system was completed in Lenhartsville. The system was mainly designed to serve existing homes and businesses, and has a treatment capacity of only 42,300 gallons per day. That is equivalent to serving the sewage from 140 housing units. That leaves very little or no capacity to serve areas outside of the Borough's borders.

The Highland Estates manufactured home park includes 330 home sites. It includes a private wastewater treatment plant and a private water system with 5 wells.

A new development on the south side of Old Route 22 east of Krumsville is proposed to include new private central water and sewage systems.

The municipalities should participate in regional efforts to protect the ground water supply of the area and the water quality of the region.

The Borough should consider conducting a joint feasibility study with the Township to examine the long-range feasibility of providing central water service for the Lenhartsville area to:

- determine recommended service areas,
- estimate projected capital costs,
- identify potential funding sources

The Township should investigate whether there is a long-term need to provide central water and/or sewer services for the Klinesville and Krumsville areas. The State would pay 50 percent of the cost of water testing of wells and surveys to ask residents and businesses about septic system and well problems. That would be the first step in a new Sewage Facilities Plan for the Township.

Other Community Facilities – As of 2008, Lenhartsville is working on a program to improve sidewalks in the Borough. Many are in poor condition because of their age. That program is likely to utilize a CDBG grant through Berks County.

TRANSPORTATION PLAN

Over the long-term, traffic signals may be needed at the intersection of West Penn and Willow Streets in Lenhartsville. There currently is a three-way stop at the intersection. As traffic increases, the need for a signal should be periodically evaluated. However, under current PennDOT policies, the costs to install and maintain a traffic signal would likely be the responsibility of the Borough, which would be a financial burden.

Interstate 78 needs safety improvements to handle the current traffic volumes, particularly the high numbers of tractor-trailers. The segment of I-78 east of the Route 143 interchange is proposed to be improved by PennDOT, including the addition of a third lane for trucks on uphill segments and the reconstruction of the Route 737 interchange. The interchanges at Route 737 and Route 143 are not designed to handle large numbers of tractor-trailer trucks. The ramps and the length of Old Route 22 also needs improvements to be able to handle the traffic that results from detours when there is an accident.

Many rural roads have curves and limited sight distances. These roads are suitable for low volumes of traffic, but would need major improvements in order to handle higher volumes or larger trucks. Also, higher volumes of traffic on rural roads would cause conflicts with farm equipment - particularly since most roads do not have wide shoulders.

It is essential to carefully control new driveways onto Old Route 22, so that the road can efficiently serve through-traffic. The Township currently has a Subdivision Ordinance requirement that requires a development of more than 10 lots to use new interior roads, as opposed to driveways on existing roads. Additional "access management" ordinance provisions should be considered.

A number of bridges in the area need attention. PennDOT reports that 7 out of 12 bridges owned by Greenwich Township are structurally deficient. Six of these bridges are also rated as "functionally obsolete," which typically means they are too narrow to meet modern standards.

Among State-owned bridges, the Hausman Road bridge under I-78 is considered structurally deficient and functionally obsolete. It has a somewhat narrow underpass of limited height. The I-78 Bridge over Long Lane is considered to be structurally deficient. The Rt. 737 bridge over I-78 is considered to be functionally obsolete. A 1937 bridge on Rt. 143 that is one-half mile south of Lenhartsville is considered to be structurally deficient and functionally obsolete. Two bridges along Rt. 737 are considered to be functionally obsolete, at Wessner Rd. and Wilttrout Rd. A 1930 bridge on Rt. 143 south of I-78 is considered structurally deficient. The 1922 Penn Av. bridge on the east side of Lenhartsville is considered to be functionally obsolete and structurally deficient.

As of 2009, PennDOT is proposing to completely replace the Saddle Road and Little Round Top Road bridges over I-78.

As part of a subdivision or land development, the municipalities have the authority to require a developer to improve an immediately adjacent segment of road. This authority is particularly important to widen roads, improve intersections, increase sight distances, and reduce the sharpness of curves.

A Commonwealth Court decision upheld the authority of municipalities to offer a fee in lieu of road widening. For example, a developer might ordinarily be required to add 10 feet of pavement along the entire length of road adjacent to the development. The Township could offer an option of allowing a

more narrow widening or no widening at all in return for the developer paying a road fee to the Township. This fee could then be directed to where the improvements are most needed. For example, instead of widening 300 feet of road by 10 feet, it may be possible to widen 600 feet of road by 5 feet. That type of improvement also avoids greatly varying road widths.

Traffic safety along major roads could be improved by painting white lines along the sides of the cartway. These white lines are particularly valuable to make the edge of the road visible during heavy rains, ice or foggy conditions. Where there is a shoulder, the white lines can also help separate vehicles from bicyclists.

The Township should consider varying requirements for new roads based upon the road's ultimate total amount of traffic. For instance narrower roads without curbing that do not serve through traffic may be allowed in lower density areas. This would eliminate the overdesigning of roads and ensure new roads meet the needs and compliment the rural character of these land use areas.

The Borough should seek grant funding to upgrade the Penn Street Bridge over the Maiden Creek. Also, the Borough is currently working to obtain grant funding to improve sidewalks in the Borough.

Public Transportation

No fixed route bus or passenger rail service exists in Greenwich or Lenhartsville, and there is not any realistic prospect of gaining these services in the foreseeable future. The Berks Area Reading Transportation Authority (BARTA) provides door-to-door van service to anyone physically unable to use regular bus service, which is particularly valuable for persons with disabilities, older persons and persons on public medical assistance. The availability of this service should be publicized among residents.

ECONOMIC DEVELOPMENT PLAN

Local planning should support the growth of local business in appropriate areas. New jobs and enhanced tax revenues from business development and farming are important ingredients in a healthy local economy.

- Work with the Berks County Chamber of Commerce to concentrate more promotional resources on the Greenwich-Lenhartsville area.
- Consider ways in which to better utilize vacant or underused buildings and land.
- Encourage businesses which use and support the conservation of agriculture and natural features as well as the preservation of the rural and village character of the area.

ENERGY CONSERVATION PLAN

To reduce energy consumption, the two municipalities should encourage developers to utilize the following techniques:

- Site homes on an east-west axis to maximize solar access and minimize heating costs.
- Use landforms such as steep slopes to deflect winter winds.

- Site homes on south and southeast facing slopes, with large windows on southern exposures, to maximize solar heating.
- Use summer awnings to shade windows.
- Favor deciduous trees over evergreens on southern exposures, to provide more shade in summer and more sun in winter. Use evergreens adjacent to northern exposures and other areas where winter winds should be buffered.

These techniques respect the two basic principles of energy conservation: proper orientation to the sun and protection from the extremes of summer and winter weather. The municipalities should investigate updating heating, ventilating, indoor lighting and any outdoor street lighting systems and building insulation to determine whether it would be cost-effective over the long-run by increasing energy efficiency.

ACTION PROGRAM

The goals and recommendations in this plan should be frequently reviewed and updated as necessary. As part of its continuing planning process, Greenwich and Lenhartsville should cooperate with Berks County and their neighboring municipalities to ensure future planning has a regional outlook, not just a local perspective. This comprehensive plan is valuable because it makes recommendations on land use and natural resource preservation, among other topics. This comprehensive plan contains recommendations for guiding future development and for preserving the historic, natural and cultural resources. But, it is not a legislative document. There are three basic tools needed to help implement this plan: 1) the zoning ordinances, 2) the subdivision and land development ordinances, and 3) any capital improvement program.

Zoning Regulations

The zoning ordinance is a legal tool to regulate the use of land. Its regulations apply to: 1) the permitted use of land, 2) the height and bulk of structures, 3) the percentage of a lot that may be occupied by buildings and other impervious surfaces, 4) yard setbacks, 5) the density of development, and 6) the height and size of signs. The zoning ordinance has two parts -- 1) the zoning map which delineates zoning districts, and 2) the text which sets forth the regulations that apply in each district along with general information regarding administration of the ordinance.

Lenhartsville adopted a new Zoning Ordinance in 2000, which continues to be appropriate. Greenwich Township should revise its current zoning ordinance to reflect the recommendations in this Plan.

Subdivision and Land Development Regulations

Subdivision and land development ordinances (SALDO) include regulations to control the layout of streets; the planning of lots; and the provision of utilities. The objectives of a subdivision and land development ordinance are to:

- coordinate street patterns;
- assure adequate utilities and other improvements are provided in a manner that will not pollute streams, wells and/or soils;
- reduce traffic congestion; and
- provide sound design standards as a guide to developers, the planning commission and other municipal officials.

Lenhartsville should continue to utilize the Berks County SALDO. Borough Council should have a role in providing suggestions to Berks County in the administration of the SALDO, such as recommending whether the County should grant a requested modification or not. Greenwich Township should update its SALDO to meet current planning goals and to be consistent with the updated zoning ordinance. Greenwich should also continue to periodically review its subdivision and land development ordinance to bring it up to date as necessary.

Capital Improvement Programming

Capital improvements relate to roads, stormwater systems, water distribution, public works garages and other major public facilities. These projects, which involve the expenditure of funds beyond those needed for normal operations and maintenance, should be prioritized in the form of a multi-year capital improvements program.

The capital improvements program should include a capital budget which identifies the highest priority projects recommended for funding in the next annual budget. The program should then be revised periodically as projects are completed, new needs arise and priorities change. A capital improvements program has many benefits, including the following, among others:

- It helps assure that projects are based on the ability to pay and on a schedule of priorities determined in advance.
- It helps assure capital improvements are viewed comprehensively.
- It promotes financial stability by scheduling projects at proper intervals.
- It facilitates proper allocation of community financial resources.

Role of the Township Planning Commission

The Greenwich Township Planning Commission has a lead role to assure that this comprehensive plan is implemented and updated as needed. The planning commission should periodically review the plan and recommend any changes to reflect current conditions and priorities. The Pennsylvania Municipalities Planning Code also gives the planning commission the responsibility to review proposed changes to development regulations and to review proposed developments.

Role of the Supervisors and Council

The Greenwich Township Board of Supervisors and the Lenhartsville Borough Council must also play vital roles in implementing this comprehensive plan. These two governing bodies have the final decision on any action that requires an ordinance or expenditure of funds within their respective municipalities. The Supervisors should maintain a continued relationship of trust and confidence with its planning commission, built upon a good flow of information back and forth.

Prioritizing Plan Recommendations

In the following table, phasing and responsibilities are discussed for recommendations of this Plan. Suggested timing of the phases are as follows: begin the *Immediate Phase* recommendations in the first year after Plan adoption, the *Short-Range Phase* recommendations in two to four years, and the *Longer-Range Phase* recommendations in the fifth year and beyond.

**GREENWICH TOWNSHIP / LENHARTSVILLE BOROUGH
JOINT COMPREHENSIVE PLAN
ACTION PROGRAM**

RECOMMENDATION	IMMEDIATE (1st Year)	SHORT-RANGE (2nd through 4th Year)	LONGER- RANGE (5th Year & Beyond)	RESPONSIBILITY (in addition to Township Board of Supervisors/ Borough Council and/or Municipal Manager/Secretary)
LAND USE AND HOUSING PLAN				
1. Revise the Township's Zoning Ordinance to reflect the Comprehensive Plan.	X	-	-	Twp. Planning Commission and Supervisors
2. Revise the Township's Subdivision and Land Development Ordinance to reflect the Comprehensive Plan to be consistent with Zoning Ordinance.	-	X	-	Twp. Planning Commission and Supervisors
3. Review and update this Plan periodically, at least once every 10 years.	Ongoing			Borough Council and Twp. Planning Commission
4. Review Zoning Ordinance and Subdivision & Land Development Ordinance periodically and update ordinances as needed to meet planning goals.	Ongoing			Borough Council, Twp. Planning Commission, Zoning Officer
5. Consider adopting a basic Property Maintenance Code.	-	X	-	Borough Council, Township Supervisors
6. Work with the County to promote use of existing building rehabilitation funding programs.	X	-	-	Borough Council, Twp. Staff

RECOMMENDATION	IMMEDIATE (1st Year)	SHORT-RANGE (2nd through 4th Year)	LONGER- RANGE (5th Year & Beyond)	RESPONSIBILITY (in addition to Township Board of Supervisors/ Borough Council and/or Municipal Manager/Secretary)
NATURAL RESOURCES PLAN				
1. Adopt Zoning Ordinance amendments to strengthen natural resource protection regulations protecting steep slopes, groundwater, floodplains, woodlands, creeks and drainageways, hydric soils and others.	X	-	-	Twp. Planning Commission
2. Encourage businesses that are environmentally clean and are good neighbors for nearby residents.	Ongoing			All municipal officials, business leaders and Berks Co. Economic Development
3. Encourage acquisition of development rights and conservation easements to protect sensitive natural areas and maintain the areas' rural character.	Ongoing			Township Planning Commission, Berks County Conservancy, Berks Agricultural Preservation Staff
4. Utilize creative and innovative development layouts to preserve Greenwich's rural character.	Ongoing			Developers and Township Planning Commission
5. Update mandatory dedication and fees-in-lieu of land dedication provisions in the Subdivision & Land Development Ordinance.	X	-	-	Township Planning Commission
6. Encourage the use of the open space design principles noted in the Plan.	Ongoing			Township Planning Commission

RECOMMENDATION	IMMEDIATE (1st Year)	SHORT-RANGE (2nd through 4th Year)	LONGER- RANGE (5th Year & Beyond)	RESPONSIBILITY (in addition to Township Board of Supervisors/ Borough Council and/or Municipal Manager/Secretary)
AGRICULTURAL PRESERVATION PLAN				
1. Encourage retail sale of local farm products.	Ongoing			All municipal officials, business leaders, farmers
2. Continue to provide effective agricultural zoning within the Township.	X	-	-	Twp. Planning Commission and Supervisors
3. Ensure ordinances protect and do not hinder agricultural uses.	Ongoing			Township Planning Commission
4. Encourage the purchase of development rights and donation of conservation easements.	Ongoing			Township Planning Commission, Berks Co. Planning Commission, Berks Co. Agricultural Land Preservation Board and Berks Co. Conservancy
5. Encourage the preservation of agricultural land through voluntary methods and promoting use of tax incentives.	Ongoing			All municipal officials
6. Discourage centralized water and sewage in the agricultural, conservation and rural land use areas.	Ongoing			Township Planning Commission
7. Provide additional setback and buffer requirements between active farms and new residential development.	X	-	-	Township Planning Commission
8. Encourage clustering and other creative development layouts when new development occurs.	Ongoing			Township Planning Commission

RECOMMENDATION	IMMEDIATE (1st Year)	SHORT-RANGE (2nd through 4th Year)	LONGER- RANGE (5th Year & Beyond)	RESPONSIBILITY (in addition to Township Board of Supervisors/ Borough Council and/or Municipal Manager/Secretary)
9. Permit some farm-based business on larger tracts.	Ongoing			Township Planning Commission
HISTORIC RESOURCES PLAN				
1. Update the list of locally important historic resources.	X	-	-	Local historians and Berks County Conservancy
2. Work with County agencies to create a facade improvement and housing rehabilitation program.	X	-	-	Ad-hoc Committee
3. Actively participate in Pennsylvania's Blue Marker Program and install local historic markers.	Ongoing			Ad-hoc Committee
4. Install historic style welcome signs at key entrances.	-	X	-	Ad-Hoc Committee
5. Encourage productive use of historic buildings, possibly using zoning incentives.	Ongoing			Planning Commission
6. Connect owners of historic buildings with information and resources on the proper rehabilitation of historic buildings.	X	-	-	Ad-Hoc Committee, Berks Co. Conservancy
7. Work with property-owners to find alternatives to proposed demolition of historic buildings.	Ongoing			Berks Co. Conservancy
8. Retain the historic architectural character of existing buildings and encourage the design of compatible additions and new construction.	Ongoing			Ad-Hoc Committee

RECOMMENDATION	IMMEDIATE (1st Year)	SHORT-RANGE (2nd through 4th Year)	LONGER- RANGE (5th Year & Beyond)	RESPONSIBILITY (in addition to Township Board of Supervisors/ Borough Council and/or Municipal Manager/Secretary)
9. Ensure future public improvements (such as street lights) reflect the historic qualities of the Borough.	-	-	X	Ad-Hoc Committee
COMMUNITY FACILITIES AND SERVICES PLAN				
1. Continue to upgrade, maintain and evaluate new improvements to Borough Hall.	Ongoing			All municipal officials
2. Investigate future uses of Township-owned land around the Township Building.	-	X	-	All municipal officials
3. Evaluate the need for a regional police in the future.	-	-	X	Other regional municipalities
4. Continue to support and help fund local fire companies and emergency medical services.	Ongoing			
5. Work with and maintain close communications with the School District.	Ongoing			All municipal officials
6. Promote use and support local library facilities and programs.	Ongoing			
7. Protect area groundwater supplies.	Ongoing			All municipal officials
8. Consider conducting a joint feasibility study to examine central water service in the Lenhartsville area.	-	X	-	All municipal officials
9. Participate in regional efforts to protect and improve water quality.	Ongoing			Township Commission and Berks Co. Planning Commission

RECOMMENDATION	IMMEDIATE (1st Year)	SHORT-RANGE (2nd through 4th Year)	LONGER- RANGE (5th Year & Beyond)	RESPONSIBILITY (in addition to Township Board of Supervisors/ Borough Council and/or Municipal Manager/Secretary)
PARK AND RECREATION PLAN				
1. Update Township mandatory dedication and fee-in-lieu of land dedication provisions.	X	-	-	Twp. Planning Commission
2. Promote land preservation along the Maiden Creek.	Ongoing			Township Planning Commission, Berks Co. Conservancy
3. Evaluate purchasing the Hill Road playground to ensure the Borough meets its long-term recreation needs.	X	-	-	Ad-Hoc Committee
4. Periodically evaluate the need for a Township Community Park.	Ongoing			Township Planning Commission
5. Maximize and use available funding for recreation improvements.	Ongoing			Township Planning Commission
6. Support and promote existing area recreation programs.	Ongoing			
TRANSPORTATION PLAN				
1. Continue to work with PennDOT to address area road needs, particularly during detour conditions along I-78.	Ongoing			Borough Solicitor and Borough Engineer
2. As traffic increases in the future, investigate the possible need for a traffic signal at West Penn and Willow Streets.	X	-	-	Borough Engineer
3. Improve sidewalks within the Borough.	Ongoing			

RECOMMENDATION	IMMEDIATE (1st Year)	SHORT-RANGE (2nd through 4th Year)	LONGER- RANGE (5th Year & Beyond)	RESPONSIBILITY (in addition to Township Board of Supervisors/ Borough Council and/or Municipal Manager/Secretary)
4. Annually update a road maintenance and improvement schedule.	Ongoing			Supervisors
5. Minimize driveway cuts along major roads.	Ongoing			
ECONOMIC DEVELOPMENT				
1. Work with Berks County Economic Development to promote the Greenwich-Lenhartsville area for environmentally clean types of businesses.	Ongoing			County Economic Development Office
2. Promote appropriate types of home-based and farm-based businesses.	Ongoing			Planning Commission
3. Encourage businesses which use and support the conservation of local agriculture and natural features.	Ongoing			All municipal officials, Berks Co. Economic Development

APPENDIX

MAJOR FUNDING SOURCES FOR COMMUNITY DEVELOPMENT

There are hundreds of funding sources available from federal government, state government, private organizations and foundations, for a variety of activities. The following list summarizes the most commonly used funding sources, including grants and loans, that can help fund community development, economic development, recreation, housing, water and sewer, and stormwater management and other activities.

Name of Program	General Description of Program	Administering Agency
Community Development Block Grant (CDBG)	Offers grants for a wide variety of activities, provided the applicant proves by survey or census that the project will benefit 51% low and moderate income persons or handicapped persons or eliminate "blighted" conditions in officially designated areas. For example, funds can be used for water and sewage improvements, storm drainage, handicapped accessibility, housing rehabilitation, parks and recreation, street and sidewalk improvements, code enforcement, community planning, and historic rehabilitation.	Berks County Community Development
Berks County Conservation Zoning Program	Offers grants to municipalities to update their development regulations to protect natural features, following County models and standards. Funding is provided after adoption..	Berks County Planning Commission
Berks County Natural Areas Program	Offers grants to municipalities to preserve or acquire open space and natural areas. A municipality must first have County-approved natural feature conservation zoning provisions in place. Several rounds of funding are proposed.	Berks County Planning Commission
Home Town Streets	Offers funding for streetscape improvements (such as sidewalks, benches, street lights), for pedestrian improvements (such as crosswalks and other pedestrian crossings), for traffic calming measures and for bicycle trails and bicycle lanes. This program is primarily aimed towards improving State roads that serve as main streets for older communities and villages. Requires a 20 percent match from other sources (such as local funds or other grants).	PennDOT
Safe Routes to Schools	Offers funding for pedestrian and bicycle improvements to make it safer for students to travel to schools. This program is primarily aimed towards improvements in downtowns, older commercial areas and other areas near schools. Municipalities, school districts or non-profits can apply. Requires a 20 percent match from other sources (such as local funds or other grants).	PennDOT
Conservation Corps, PA.	Provides funding for work crews for community projects, such as trail improvements.	PA DCNR
Housing and Redevelopment Assistance	Provides grants to municipalities, redevelopment authorities and housing authorities for community revitalization, economic development, and low-income housing development and rehabilitation.	PA DCED

Name of Program	General Description of Program	Administering Agency
Community Development Bank, PA.	Provides capital and capacity building grants to "Community Development Financial Institutions" (CDFIs). The CDFIs are then allowed to assist with small scale business expansions, new business starts, non-profit facilities and very small businesses.	PA DCED
Community Facilities Loan Program, Federal	Offers low-interest loans to construct, enlarge or improve essential community facilities for public use in rural areas and towns with population less than 50,000. Also offers guarantees of loans by private lenders.	U.S. Dept. of Ag. Rural Housing Service
Community Revitalization Program	Very broad grant program. Officially intended to promote community stability, increase tax bases and improve quality of life. Applications may be made by municipalities, authorities, economic development organizations and non-profit corporations. Public/non-profit/profit partnerships are encouraged. Generally can be used for infrastructure, community revitalization, building rehabilitation, demolition of blighted structures, public safety, and crime prevention.	PA DCED, Governor's Office and Local Legislators
Customized Job Training	Provides grants to businesses (other than retail) to train new employees, and retrain and upgrade existing employees. Up to 100% of eligible costs may be paid for new job creations, and up to 70% for other eligible training.	PA DCED Businesses apply through a State-licensed Educ. Agency.
Keystone Innovation Zone Program	Provides funds to projects to foster economic and job growth on property near colleges and universities.	DCED
Land Use Planning Technical Assistance Program	Known as LUPTAP. Assists local governments and counties to prepare comprehensive plans, downtown plans, special community development studies and development regulations. Typically provides 50% of the eligible costs. Typically requires participation by two or more municipalities.	PA. DCED
Elm Street Program	Provides competitive grants to revitalize older residential neighborhoods, particularly areas that are near downtowns. Offers funding for a staff person to coordinate revitalization efforts, as well as funding for planning and physical improvements. A municipality must first be designated as an "Elm Street Community."	PA. DCED
Economic Development Administration Loan Guarantees	Guarantees business loans made through private lenders. Available for up to 80% of project cost. Primarily intended for manufacturers, but commercial businesses may qualify. A equity contribution is required by business. Must show job creation.	U.S. EDA Philadelphia Office
Economic Development Administration Economic Adjustment Grants	Provides grants to design and implement strategies to adjust to serious job losses to a local economy, such as natural disasters and defense spending reductions.	U.S. EDA Philadelphia Office

Name of Program	General Description of Program	Administering Agency
Environmental Protection Agency Brown-fields Program	Grants for a very limited number of pilot demonstration projects for cleanup of contaminated underused industrial sites.	U.S. EPA Philadelphia Office
Emergency Services Loan Program	Provides low-interest loans to fire and ambulance companies to acquire vehicles, or to renovate or acquire buildings to house vehicles.	PA Emergency Management Agency
Keystone Opportunity Zone	State program provides a range of benefits to locally-nominated, State-designated areas that are financially distressed. One major benefit involves greatly reduced local real estate taxes for an initial set of years.	PA DCED
Enterprise Zone Program, PA	Encourages investment in "enterprise zones" that are distressed areas designated by the State. The main benefits include: low-interest loan pools (mainly for building acquisition, construction, renovation and machinery), local technical assistance in connecting with financing and technical resources, and preferences in certain State grant and loan programs. A priority is placed upon assistance to industrial businesses. Grants are also available for the initial planning of proposed enterprise zones, and for program administration. See also "E.Z. Tax Credits" below. (This program is completely separate from the Federal Empowerment Zone/Enterprise Community program.)	PA DCED
Enterprise Zone Tax Credits	Provides State tax credits to businesses located within State-designated Enterprise Zones for new building construction and rehabilitation of existing buildings.	PA DCED
Flood Control - Army Corps and NRCS Watershed Programs	Various types of projects to manage flooding. Typically, the Army Corps is involved in larger watersheds, while NRCS has primary responsibility for smaller watersheds.	U.S. Army Corps of Engineers, U.S. Natural Resources Conservation Service
Flood Hazard Mitigation Grant Program	Provides 75% funding to relieve imminent hazards from flooding, such as voluntary buy-outs and demolitions of highly flood-prone properties.	Federal Emergency Management Agency
Flood Protection Program, PA	Offers design and construction of flood protection projects. The project must be deemed economically justifiable under the state capital budget process.	PA DEP Bureau of Waterways Engineering
Historic Preservation Tax Credits	Offers Federal income tax credits for a percentage of the qualified capital costs to rehabilitate a certified historic buildings, provided the exterior is restored. The program is generally limited to income-producing properties.	National Park Service
Historic Preservation - Certified Local Government Grants	Provides modest-sized matching grants to provide technical assistance to municipalities that have official historic districts and meet other criteria to be "certified."	Federal, administered by PA Historical and Museum Commission

Name of Program	General Description of Program	Administering Agency
Historic Preservation Survey and Planning Grants	Matching grants for historic surveys, historic preservation planning and National Register nominations. Available to municipalities and non-profit organizations. Cannot be used for construction.	Federal, administered by PA Historical and Museum Commission
Heritage Parks Program	Provides grants up to 75% of costs for projects within State-designated "Heritage Parks" to preserve and interpret the significant contribution that certain areas made upon the industrial heritage of the state and nation. Funds may be used for four types of projects: Feasibility studies, a Management Action Plan, Special purpose studies, and Implementation projects. Projects are intended to conserve natural, historic and recreational resources relating to industrial heritage to stimulate regional tourism.	PA DCNR
Housing Programs - mainly including Federal HOME Program (Home Investment Partnerships Program)	Provides grants, low-interest loans and loan guarantees to for-profits and non-profits for the construction or rehabilitation of housing for low and/or moderate income persons. Most cities receive HOME funds that they then allocate among eligible applicants. Funds are also provided to local community-based housing development organizations to develop housing. Funds are also provided through private lenders to assist with down payment and closing costs for low income and disabled persons to purchase a home for their own occupancy. The HOPE Homeownership Program subsidizes home ownership of public housing, multi-family units and single family units. Funding can be used for rehab of owner-occupied and rental housing. Other Federally funded housing programs include: Emergency Shelter Grants, Supportive Housing for the Elderly (Section 202), Single Room Occupancy Housing Program, Supportive Housing for Persons with Disabilities, and Housing Opportunities for Persons With AIDS. See also HOME Partnerships below.	PA Housing Finance Agency and PA DCED
Housing Closing Cost Assistance Program	Provides loans to income-eligible, first-time homebuyers for assistance with closing costs.	County Community Development Office
HOME Investment Partnership	Provides grants for expanding the supply of housing for low-income persons, including new construction, acquisition and rehabilitation. Local governments may apply, which may be on behalf of public agencies or for-profit or non-profit developers. PHFA administers Federal HOME funds for financing 5 or more units. These projects are usually coordinated with Federal Low Income Housing Tax Credits.	Federal HOME funds, administered by PA DCED and PA Housing Finance Agency
PA. Business in Our Sites Program	Provides planning grants to promote development of key sites by businesses. Also provides grants and low-interest loans for cleanup and remediation of environmental contamination of sites to promote redevelopment. Also provides funding for environmental assessments to address environmental contamination.	PA. DCED

Name of Program	General Description of Program	Administering Agency
PA Industrial Development Authority Financing (PIDA)	Provides low interest loans for construction, renovation and site preparation of buildings for new employers. Primarily funds industrial projects.	PIDA and PA DCED
Industrial Sites Reuse Program, PA ("Brownfields")	Provides grants of up to 75% and low interest loans for assessment of environmental contamination and remediation work at former industrial sites. Available to private companies, non-profit economic development agencies or authorities that own the land. Mainly targeted towards cities. Financing is not available to the company that caused the contamination.	PA DCED in cooperation with PA DEP
Infrastructure Development Program, PA.	Provides grants and low interest loans for public and private infrastructure improvements needed for a business to locate or expand at a specific site. Financing is also available for infrastructure to redevelop industrial sites that have been idle more than 6 months, such as acquisition and demolition. Primarily available for industries, research facilities, company headquarters and business park developments. A 2:1 private to public match is typically required. A commitment is required to create jobs as a condition of funding. Generally applicants must be municipalities or economic development organizations.	PA DCED
PA. Community Economic Development Loan Program	Provides low-interest loans for small businesses to provide services or products to communities that were previously underserved. Limited to businesses with less than 100 employees that provide services to the public, including retail and service businesses.	PA. DCED
Federal Transportation Enhancements Program	Provides grants of up to 80% for: facilities for pedestrians and bicycles, acquisition of scenic easements and scenic or historic sites, development of scenic or historic route programs, landscaping and other scenic beautification along highways, historic preservation, restoration of historic transportation facilities (such as canals), preservation of rail corridors (particularly for bicycle/walking routes), control and removal of outdoor advertising, archeological research, and mitigation of water pollution due to highway runoff. All projects must have a direct relationship to transportation.	U.S. DOT funds administered by PennDOT
Intermunicipal Projects Grants	Promotes cooperation between neighboring municipalities so as to foster increased efficiency and effectiveness in the delivery of municipal services at the local level.	PA DCED
Job Creation Tax Credits, PA	Provides State tax credits to businesses that commit to create new jobs in PA within the next 3 years. Must create 25 new jobs or 20% of the existing work force. The jobs must pay over a certain minimum income. The business must explain how it exhibits leadership in technological applications.	PA DCED
Historic Preservation Funds	Provides 50% matching grants to fund analysis, acquisition or rehabilitation of historic sites. The site must be on the National Register of Historic Places, or officially determined to be eligible for listing. The site must be accessible to the public after funding. The grants can be made to public agencies or non-profit organizations.	PA Historical and Museum Commission

Name of Program	General Description of Program	Administering Agency
Community Conservation Partnership - Land Trust Grants	Grants to well-established non-profit land trusts and conservancies to plan for and acquire critical natural areas. Land that is acquired must be open to the public.	PA DCNR
Community Conservation Partnership - Planning, Development and Acquisition Grants	<p>Provides competitive 50% matching grants to municipalities and other eligible organizations to fund: overall planning for parks and recreation, master plans for individual parks, acquisition of parkland and nature preserves, countywide natural area inventories, and rehabilitation and improvements to public recreation areas.</p> <p>A Peer-to-Peer program provides small grants that allow an expert working with one municipality or agency to provide advice to another municipality or agency.</p> <p>A Circuit Rider program provides grants for a parks and recreation staff-person who works in more than one municipality.</p>	PA DCNR Regional Offices
Local Government Capital Projects Loan Program	Provides low interest loans to municipalities with populations of 12,000 or less for the purchase of equipment and the purchase, construction, renovation or rehabilitation of municipal facilities. Priorities are given to projects that are necessary for public health and safety or involve intergovernmental cooperation.	PA DCED
Low Income Housing Tax Credit, Federal	Offers Federal income tax credits to non-profit and for-profit developers of housing for low-income persons. Non-profits can then sell their credits to investors.	PA Housing Finance Agency
Main Street Program/ "New Communities Program"/Anchor or Building	In the downtowns of designated "Main Street Communities," provides initial planning grants and administrative grants over a 3 year period to pay a large share of the costs of a professional manager to coordinate downtown revitalization efforts. May receive matching grants for facade restoration and other design improvements. Usually limited to municipalities of 5,000 to 50,000 persons. The Downtown Reinvestment and Anchor Building components use business district strategies to support commercial-related projects in a central or neighborhood business district.	PA DCED
Machinery and Equipment Loan Fund	Provides low-interest loans to acquire or upgrade machinery and equipment and related engineering and installation for industrial, agricultural, processing and mining businesses. The business must agree to create or preserve jobs as a condition of the financing.	PA DCED
Minority Business Development Authority, PA	Provides low-interest loans for businesses owned and operated by minorities. Can generally be used for industrial, international trade, franchise, retail and commercial uses. Can be used for site acquisition, building construction and renovation, machinery and working capital.	PA Minority Business Development Authority & PA DCED
Municipalities Financial Recovery Act, PA	Provides technical advice and grants for special purposes (such as studies to improve service efficiency) within municipalities that have been officially designated as financially distressed. After application and designation, the municipality must follow a Financial Recovery Plan.	PA DCED

Name of Program	General Description of Program	Administering Agency
Neighborhood Assistance (Tax Credit) Program	Authorizes State corporate income tax credits to private companies who donate funds or services to low-income persons or impoverished neighborhoods. The services typically include neighborhood revitalization, job training, education, social programs to reduce welfare dependency or crime prevention. The tax credit usually equals 50 to 70% of the eligible donation. Partnerships are required between the business and a neighborhood organization. The donations must be consistent with a revitalization plan.	PA DCED
On-Lot Septic System Program	Offers low-interest loans to limited income households to repair failing on-lot septic systems.	PennVest and PA Housing Finance Agency
Opportunity Grant Program	Offers grants to create or preserve very substantial numbers of jobs. May be used for job training, infrastructure, land and building improvements, machinery and equipment, working capital, or environmental assessment and cleanup.	DCED
PA. Economic Development Financing Authority (PEDFA) Financing	Provides low-interest rate financing of business growth. Projects that can be funded with bonds that are exempt from Federal income tax have a lower interest rate than other types of projects. The lower rate financing is limited to activities such as site acquisition, building construction and rehabilitation and new equipment - for manufacturing and certain transportation and utility uses. The higher rate is available to a broader range of businesses and a much wider variety of expenditures. Funding can be used for manufacturing uses, non-profit uses, energy uses, solid waste disposal facilities, wastewater treatment facilities, transportation facilities or assisted living housing facilities.	PA Economic Financing Authority-- Applications are made through a local Industrial Development Corp. or Authority
PA. Capital Assistance Program (PennCAP)	Provides a guarantee of loans to businesses made by participating banks. Funds can be used for land, building, equipment or working capital.	DCED-- Apply through a participating bank
PENNVEST	Offers low interest loans for construction and improvement of drinking water and wastewater systems. Outright grants may be available for highly distressed communities. Mainly intended for public systems, but some private systems may be approved. Water projects are funded through the Drinking Water Revolving Loan Fund. Sewage projects are funded through the Clean Water Revolving Fund. In addition, PennVest is authorized to provide loans for projects to control existing stormwater problems, such as separating stormwater from sanitary sewage. The "Advance Funding Program" provides low-interest loans for feasibility studies and engineering of systems if the utility cannot fund such work itself.	PA Infrastructure Investment Authority and PA DEP Bureau of Water Supply Management-- Involves both U.S. EPA and State funds

Name of Program	General Description of Program	Administering Agency
PIDA - PA Industrial Development Authority (PIDA) Programs	Makes available low-interest financing to businesses and industrial development agencies to create or retain business jobs. Can be used for industrial, research, agricultural processing and major office uses. Can be used for site acquisition, building construction or renovation, multi-tenant spec buildings and industrial park development. A lower interest rate is available for advanced technology projects and in enterprise zones and areas of high unemployment.	PIDA and PA DCED Applications are typically made through a local Industrial Development Corp. or Authority
Nutrient Management Plan Development Incentive Program	Grants are available to farmers to cover up to 75% of the cost of preparing nutrient management plans. Low interest loans are also available through the State to assist in implementing nutrient management-related best management practices.	Carbon County Conservation District
Recreation Trails	Uses Federal and State funds to provides grants for feasibility studies, master site plans, acquisition and improvement of former railroad lines for recreation trails. A 50% local match is required. Open to municipalities, authorities and non-profits. Funds are also available for all-terrain vehicle trails.	PA DCNR Field Offices
Rural Economic and Community Development Programs, U.S.	<p>Federal programs available in rural areas:</p> <p>Business & Industrial Guaranteed Loan Program - Provides partial guarantees of loans by lenders for working capital, machinery, buildings, land and certain types of debt refinancing. Loans can be made to businesses, municipalities or non-profit organizations.</p> <p>Intermediary Re-lending Loans - provides very low-interest loans to non-profit organizations to reloan for businesses and community development projects.</p> <p>Rural Business Enterprise Grants (former Ind. Dev. Grants) - provides grants for acquisition of land and construction of buildings and utilities to facilitate development of small businesses.</p> <p>Home Ownership Loans - aid low- and moderate-income rural residents or buy, build or repair their dwelling.</p> <p>Rural Rental Housing Loans - assist individuals or organizations to build or rehab rental units for low-income and moderate-income residents in rural areas.</p> <p>Home Improvement and Repair Loans and Grants - assist very low-income rural homeowners to remove health and safety hazards in their homes or to improve handicap accessibility.</p> <p>Rural Housing Site Loans - assist in purchasing sites for housing development by private, public or non-profit organizations.</p> <p>Housing Preservation Grants - assist non-profits and public agencies with grant funds to assist low-income owner-occupants and owners of low-income apartments with repairing homes in rural areas.</p>	U.S. Dept. of Agriculture Rural Development Administration (former Farmers Home Admin.)
Recycling Market Development Loan Fund	Provides low-interest loans to businesses to purchase recycling source-separating equipment.	PA DEP

Name of Program	General Description of Program	Administering Agency
Recycling Grants	Grants for up to 90% of municipal costs to develop and implement recycling programs, such as the purchase of recycling bins and composting equipment. Grants are also available to counties for a recycling coordinator, waste management plans and pollution prevention education.	PA DEP Bureau of Land Recycling and Waste Manage- ment
Rivers Conservation Program, PA	Offers 50% grants to conserve and enhance river resources. Typically, funding is first provided for a conservation plan for a waterway. Then after the plan is approved, grants are possible to carry out the plan. Available to municipalities, authorities and non-profits.	PA DCNR
Rural Utilities Service Financing	Offers low-interest loans for drinking water and sewage projects for rural areas and small towns. The "Water and Water Disposal Loan Program" provides loans for water supply, wastewater disposal, solid waste disposal and stormwater management systems for rural areas and towns with a population less than 10,000 persons. Available to municipalities, authorities and non-profit corps. Grants up to 75% of project costs may be available for highly distressed areas. Also guarantee loans by private lenders. Also provides grants to non-profit organs. to provide technical assistance to rural communities or for a circuit rider to serve several rural water systems. Also offers emergency grants to communities that have experienced a significant decline in quantity or quality of drinking water.	U.S. Dept. of Agriculture Rural Utilities Service
Shared Municipal Services	Provides modest-sized 50/50 matching grants to promote cooperation among municipalities, in order to increase the efficiency of public services. Two or more municipalities may apply, or a council of governments. A special program emphasizes joint code enforcement among municipalities. Another program emphasizes start-up costs for regional police services.	PA DCED
Small Business First	Provides low-interest loans for projects by businesses that generally have less than 100 employees. Generally, the funding can be used for site acquisition, building construction, machinery, working capital, environmental compliance, defense-cutback impacts, recycling, technology, export and computer activities. This is also one of the few sources of funding that can be used for restaurants, hotels and motels. The recipient must agree to create or preserve jobs.	PA DCED An application can be made through an "Area Loan Organization"
Small Business Incubator Program	Provides loans and grants for facilities in which a number of new businesses operate under one roof with affordable rents, sharing services and equipment and having equal access to a wide range of professional, technical, and financial programs.	PA DCED
SBA Financing	Offers low-interest financing for smaller businesses, including: - microloans and microenterprise grants - Section 7(a) Guaranteed Business Loans - Section 504 Loans to allow certified development organizations to make long-term loans for real estate and other fixed assets	U.S. Small Business Administration
Sewage Facility Planning Grants	Grants to pay up to 50% of the costs to prepare a new sewage facilities plan or update an existing plan, under State Act 537 of 1966.	PA DEP

Name of Program	General Description of Program	Administering Agency
Small Communities Planning Assistance Program (SCPAP)	Provides grants up to 100% of the costs to eligible municipalities to prepare comprehensive plans, development regulations and special strategies for development. Generally, 51% of the municipality's residents must be low or moderate income, according to the census or a survey. Limited to municipalities under 10,000 population.	Federal CDBG administered by PA DCED
Small Water System Regionalization Grants	Provides grants for feasibility studies concerning the merger of small drinking water systems.	PA DEP Bureau of Water Supply
Solid Waste Facility Programs	Programs provide grants for municipalities to review proposed solid waste facilities within their borders. Programs also provide funding for municipal inspectors of facilities and for host fees from operators.	PA DEP Bureau Land Recycling and Waste Management
Stormwater Management Grants (Under State Act 167 of 1978)	Grants for cooperative efforts at the watershed level among municipalities for stormwater planning and ordinances. Grants are typically made to counties, but may be made to municipalities.	PA DEP Bureau of Watershed Conservation
Stream Improvement Program	Provides design and construction assistance to eliminate imminent threats to flooding and streambank erosion.	PA DEP Bureau of Waterways Engineering
Tire Pile Cleanup Grant	Grants to municipalities to provide reimbursement for costs of cleaning up large piles of used tires.	PA DEP
Urban Forestry Grants	Provides grants for tree planting projects. Is also a Federal "America the Beautiful" grant program for tree planting.	PA DCNR
Water Supply Plan & Well-Head Protection Grants	Provides grants to counties to plan for water supplies at the county level and to implement programs to protect the wellheads of public wells.	PA DEP Bureau of Water Supply

Sources: Publications and internet sites of various agencies.

Abbreviations: DCED = PA. Dept. of Community and Economic Development
 HUD = U.S. Dept. of Housing and Urban Development
 NRCS = U.S. Natural Resource Conservation Service
 DCNR = PA. Dept. of Conservation and Natural Resources
 DEP = PA. Dept. of Environmental Protection