



Lehigh Township Draft Comprehensive Plan

December 2021



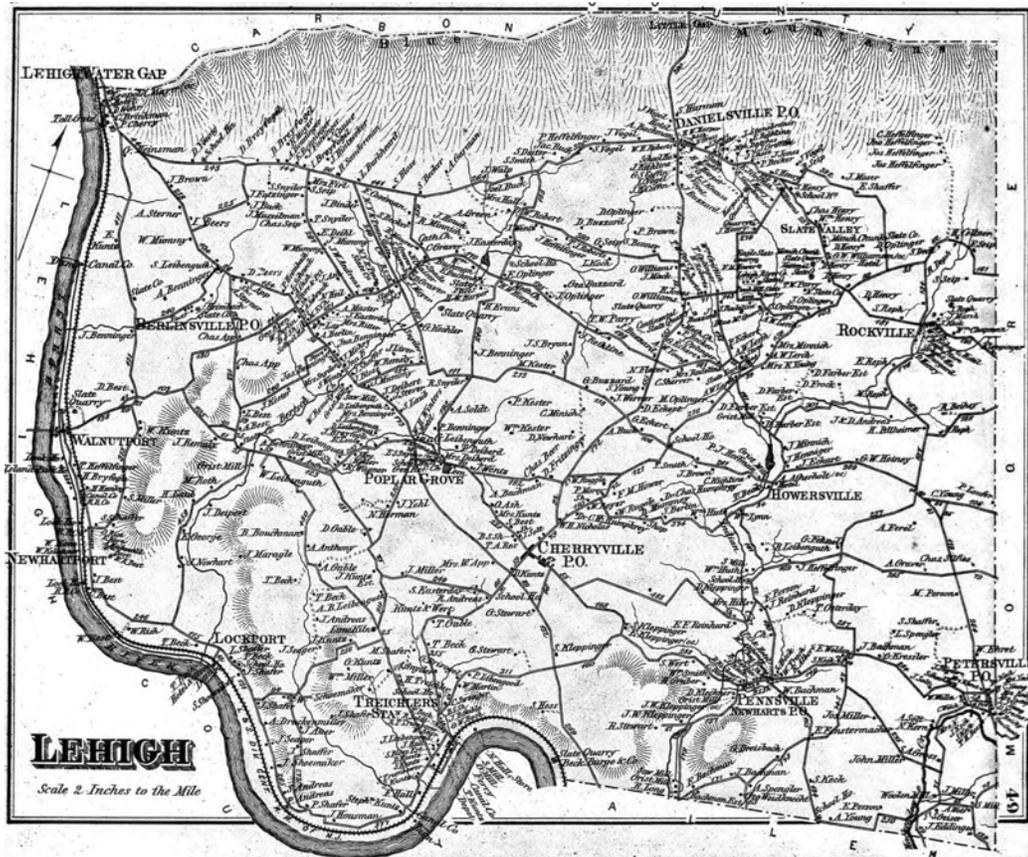
Draft

Lehigh Township

Comprehensive Plan

A Plan for the Development and Conservation
of Lehigh Township

Northampton County, Pennsylvania



Draft June 2021
With Minor Revisions December 2021

Community Planning Consultants

Urban Research & Development Corporation
Bethlehem, Pennsylvania

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INTRODUCTION

This Comprehensive Plan is an overall guide for the development and conservation of Lehigh Township over the next 10 to 15 years. It is not a regulation by itself, but is intended to provide the rationale for development regulations. The Comprehensive Plan includes background information about existing conditions and trends, mapping and a set of recommended policies. The Comprehensive Plan primarily addresses:

- Land Use and Housing
- Transportation
- Community Facilities and Services
- Natural Feature Conservation
- Ways to Carry Out the Plan

Major Benefits of the Comprehensive Plan

The Comprehensive Plan offers many benefits, including the following:

- Addressing land uses in coordination with transportation issues, to avoid future traffic problems;
- Avoiding conflicts between different types of development, such as not allowing intense business uses adjacent to a residential neighborhood;
- Considering development policies in a comprehensive and coordinated manner for an entire area, as opposed to piecemeal review of individual parcels or lots;
- Recommending ways that natural features should be preserved and conserved; and
- Suggesting improvements that should be the basis of future grant applications.

How Was This Plan Prepared?

This Plan was developed in draft form during monthly meetings of a Township Comprehensive Plan Committee with participation by Planning Commissioners, a Township Supervisor, and other Township officials. First, maps showing existing conditions were prepared, as well as summaries of previous plans and reports. Information was collected on existing conditions.

A set of Goals were then prepared to provide overall direction for the Plan. A set of recommendations was then prepared, discussed, and further revised.

Next, public meetings are being held by the Township Planning Commission and Board of Supervisors to obtain public input on the Plan.

Regional Setting

Lehigh Township is located in the northwestern corner of Northampton County, approximately ten miles north of the City of Allentown. The Township has a total area of 30.9 square miles consisting of various business uses, residential subdivisions, farmland, small villages, and woodland. It is bordered on the north by the Blue Mountain and Lower Towamensing Township, Carbon County, on the east by Moore Township, on the south by Allen Township and the Lehigh River, and on the west by the Borough of Walnutport and the Lehigh River.

Three major highways: (Routes 145, 248, and 946) provide access throughout the region. Route 145 enters the Township at Treichlers and extends along the west bank of the river toward the Lehigh Gap, where it meets Route 248, which extends northward to the Palmerton area and the Poconos. The road gives Lehigh Township direct access to the regional shopping facilities along MacArthur Road, downtown Allentown, and Route 22.

Route 248 ties Lehigh Township to Bath, Nazareth, and ultimately Easton. It extends diagonally through the center of the Township and is the most accessible road to the bulk of the Township population. Much of the Township's commercial development has occurred along or near Route 248. Route 946 parallels Route 248 through the northern portion of the Lehigh Township, along the base of the Blue Mountain. The road extends southeasterly to Route 512 in Moorestown, north of Bath. Route 946 connects to Route 987 which goes to Bath.

Blue Mountain Drive connects the villages of Cherryville and Danielsville and residential subdivisions along the road to Route 145 at Treichlers. It also provides access to recreation areas in Carbon County, causing it to serve both local and through traffic.

Lehigh Township was part of the "Slate Belt" area, a sub-region which extends across the northern part of the Lehigh Valley. Old quarry holes and slate residue piles can be found in Lehigh Township.

Lehigh Township is within a convenient commuting distance of many major employers. This accessibility coupled with a generally attractive rural environment has led to an in-migration of people who work in more urban areas but wish to live in a rural Township.



MAJOR GOALS

The following major goals are intended to provide the overall direction for this Plan.

- Maintain the rural residential character of most of Lehigh Township.
- Protect the natural resources of the Township, particularly including the Blue Mountain and the Lehigh River, Bertsch Creek, Indian Creek and Hokendauqua Creek corridors.
- Limit development on steeply sloped lands and encourage proper management of woodlands.
- Promote a continuation of agricultural activities, and encourage additional permanent preservation of prime agricultural lands.
- Work to attract additional business activity to designated areas, to provide additional tax revenue to the Township and the School District, and to provide wider close-to-home employment opportunities.
- Attract additional businesses that will serve the everyday needs of local residents, to reduce the need to travel to other communities.
- Achieve compatible land use patterns that protect residential areas from incompatible development.
- Allow a range of different types of housing to meet the needs of various types of households, as well as older persons.
- Promote the preservation of landscaped common open spaces and trails in larger new residential developments, by offering an Open Space Development (clustering) option in selected areas.
- Direct most new development to locations where public water and sewage services can be efficiently provided, in order to minimize the amount of land consumed by new development.
- Promote the sensitive rehabilitation and reuse of historic buildings and barns.
- Work to improve safety for motorists, bicyclists and pedestrians.
- Properly manage driveway access along major roads to allow the roads to safely and efficiently carry traffic.
- Provide high quality cost-efficient community services, including fire protection, police and parks and recreation.
- Further expand cooperative efforts between Lehigh Township, adjacent municipalities, the county and regional organizations.

LAND USE AND HOUSING PLAN

Maps

On the following page, a map shows the areas with prime agricultural soils, and lands that have been permanently preserved in private ownership with agricultural easements (as described below).

An Existing Land Uses Map shows the existing uses of areas of land throughout the Township. The Existing Zoning Map shows the current Zoning Districts as of early 2021.

The Comprehensive Plan Map shows the proposed locations for the various future land use and housing categories, as described in the following sections. Then, a Draft Zoning Changes Map illustrates the areas of potential changes to the zoning map that are recommended to carry out the Comprehensive Plan Map.

Land Use and Housing Plan Categories

Blue Mountain Conservation Areas

The Blue Mountain Conservation areas includes the Blue Mountain, which forms the northern border of the Township. The majority of the Mountain in Lehigh Township is comprised of State Game Lands. However, there are still many privately owned lots in the southern part of the district.

The Appalachian Trail runs across the Lehigh River bridge, up the cliffs along the Lehigh Gap, and then along the top of the Blue Mountain. The Appalachian Trail Conference seeks to limit the number of new trails that interconnect into the Appalachian Trail.

Ideally, sensitive steep woodlands should continue to be added to the State Game Lands. This may involve partnerships between the State Game Commission, the Wildlands Conservancy and local sportsmen's organizations to provide the needed funding. The State makes funding available each year for the preservation of conservation areas, including one program that requires that a conservancy must apply for the funding.

These areas should continue to only allow for very low intensity development, including single family detached houses on large lots. The current zoning requires 10 acre minimum lot sizes.

A variety of low intensity outdoor recreation uses can also help to maintain land in privately owned open land. This could include horse riding stables, day camps for children, archery ranges and similar uses.

Uses that are incompatible with these sensitive natural lands should no longer be allowed, such as oil and gas wells. The total number of communications towers should be minimized by encouraging co-location of providers on a few towers. The Blue Mountain is not an appropriate location for wind turbines because of the importance of the ridge for migratory bird movements.

A/RR Agricultural/Rural Residential Areas

This land use category is proposed to include most of the Township, including most of the land in the eastern and southern parts of the Township. It relates to the current A/RR zoning district.

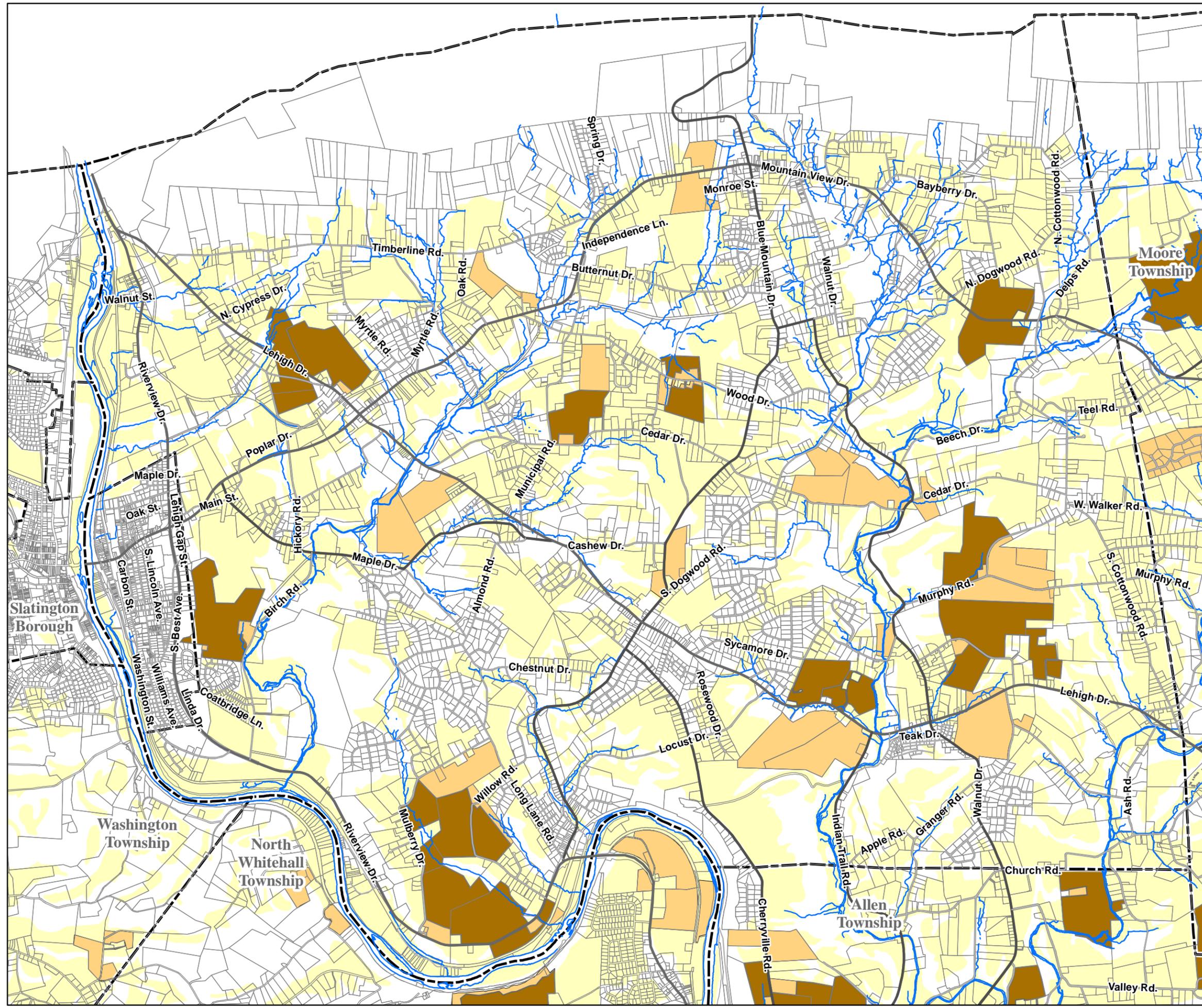
Ten farms have been permanently preserved in Lehigh Township through the County's agricultural easement program. These farms total 945 acres, and are identified on the Land Use Plan Map. The program encourages preservation of contiguous farmland, to increase the viability over the long-term of farming and to minimize conflicts with residential development. It may be desirable to require a setback for new homes from preserved farms. An Open Space Development (cluster) housing option (as described below) can also result in an open space buffer between new homes and active farms.

Lehigh Township NORTHAMPTON COUNTY

AGRICULTURAL SOILS & PRESERVED LANDS

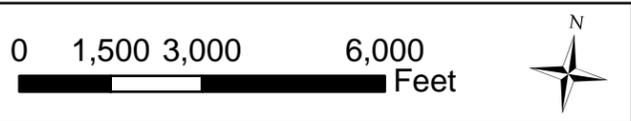
With Correction of Easement
December 8, 2021

-  Agricultural Easement (Permanently Preserved)
-  Agricultural Security Area
-  Prime Agricultural Soils (Class 1, 2 and 3)



February 2020

SOURCE:
Lehigh County Planning Commission, 2018,
ESRI and PASDA.



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Lehigh Township NORTHAMPTON COUNTY

EXISTING LAND USE

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December 8, 2021

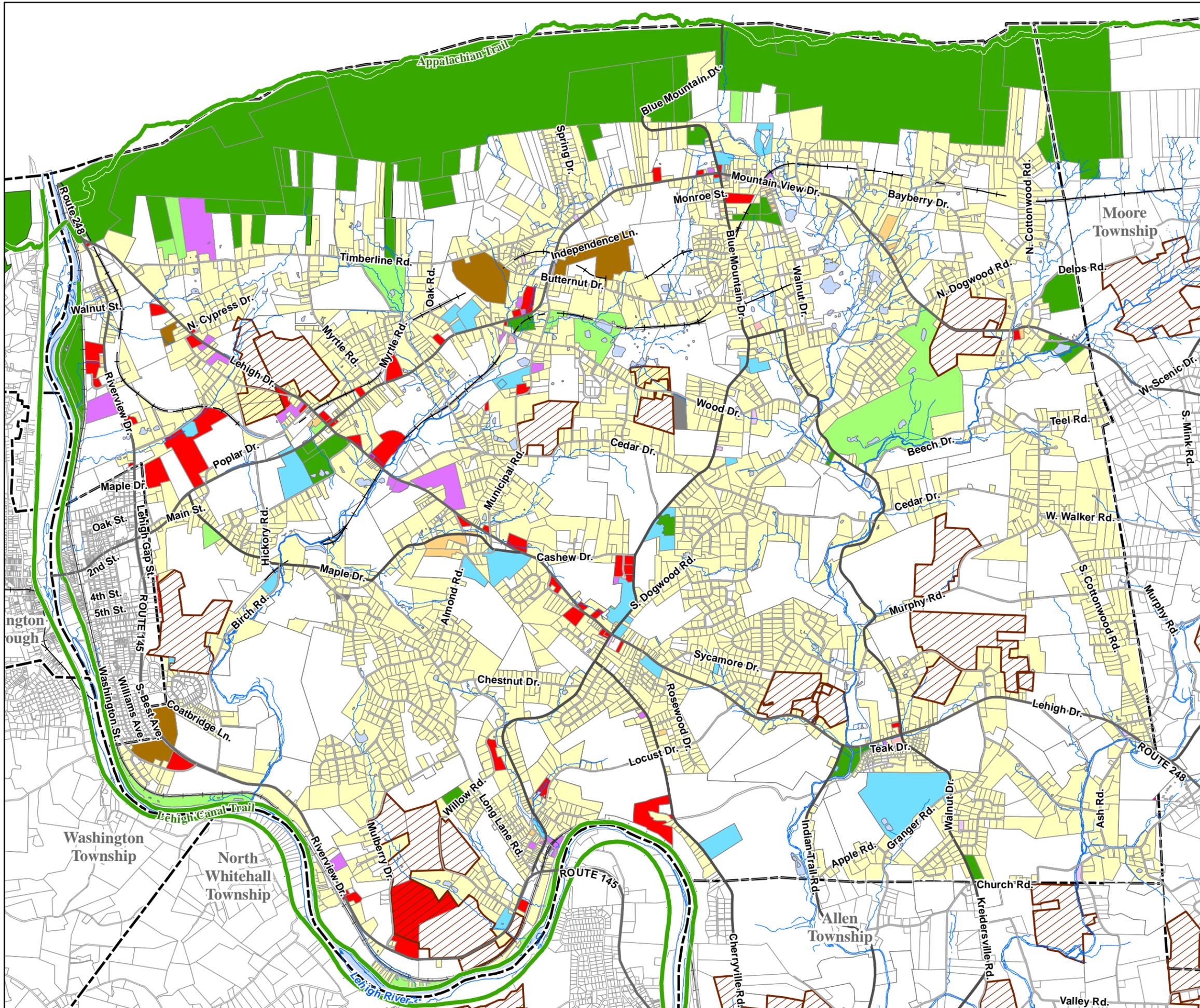
-  Agriculture/Undeveloped
-  Single Family Residential
-  Attached Residential
-  Mobile Home Park
-  Institutional/Public-Semi Public
-  Mixed Commercial & Residential
-  Commercial
-  Industrial
-  Public Utility
-  Private Recreation
-  Public Recreation & State Game Lands
-  Agricultural Easement (Permanently Preserved)

SOURCE:
Lehigh Valley Planning Commission, 2018,
ESRI and PASDA.

0 1,500 3,000 6,000
Feet



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Lehigh Township NORTHAMPTON COUNTY

UNOFFICIAL EXISTING ZONING

- BMC** Blue Mountain Conservation
- A/RR** Agricultural/Rural Residential
- VR** Village Residential
- PRCC** Planned Resort Residential Community Overlay
- RC** Resort Commercial
- NC** Neighborhood Commercial
- GC** General Commercial
- I** Industrial
- OB** Office/Business

NOTE : This is an unofficial copy. Please see the official version.

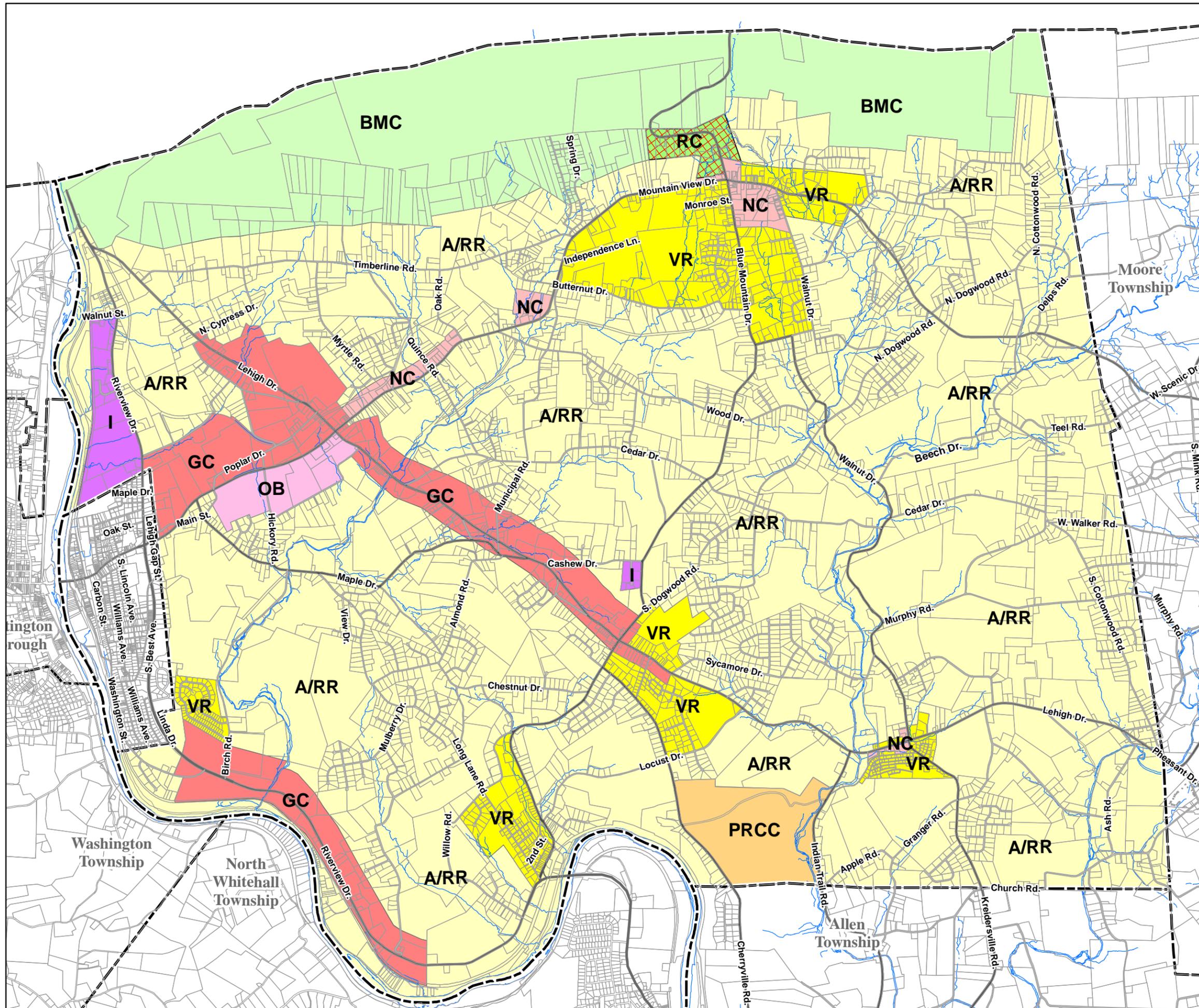
Corrected October 2020

SOURCE:
Lehigh County Planning Commission, 2018,
ESRI and PASDA.

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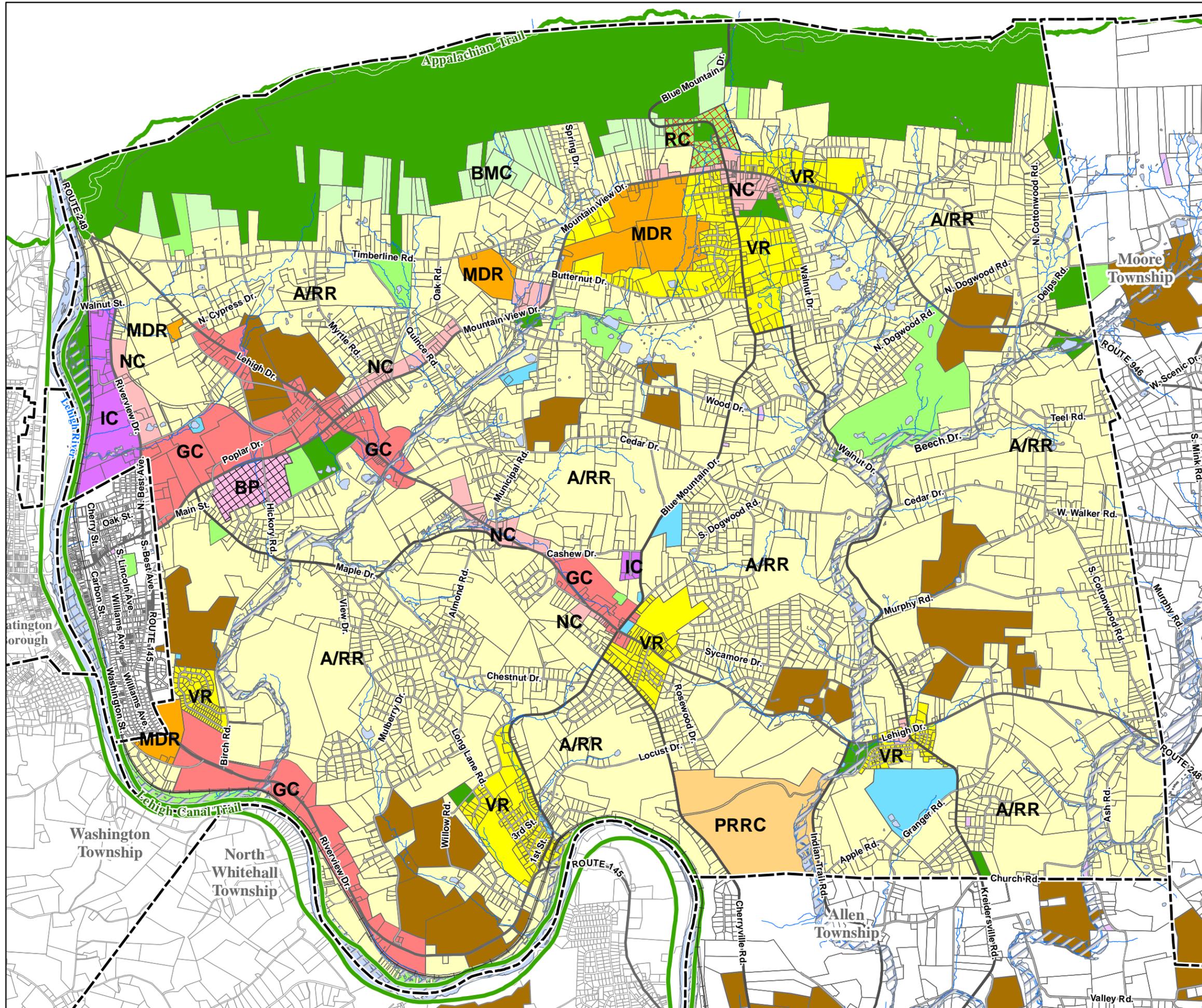


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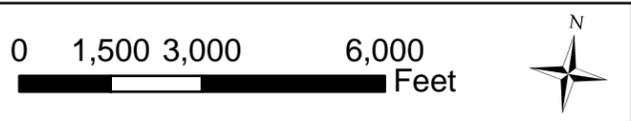
Lehigh Township NORTHAMPTON COUNTY

**DRAFT
Comprehensive Plan**
May 25, 2021 - Revised October 25, 2021
With Correction of Easement
December 8, 2021



- BMC** Blue Mountain Conservation
- A/RR** Agricultural/Rural Residential
- VR** Village Residential
- MDR** Medium Density Residential
- PRRC** Planned Resort Residential Community Overlay
- RC** Resort Commercial
- NC** Neighborhood Commercial
- BP** Business Park
- GC** General Commercial
- IC** Industrial/Commercial
- Major Community Facilities
- Agricultural Easements (Permanently Preserved)
- Private Recreation
- Public Recreation & State Game Lands
- 100 Year Floodplain

SOURCE OF BASE INFORMATION:
Lehigh Valley Planning Commission, 2018,
ESRI and PASDA.



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Lehigh Township NORTHAMPTON COUNTY

Changes Between Draft Comprehensive Plan and Existing Zoning

May 25, 2021 - Revised October 25, 2021
With Correction of Easement
December 8, 2021

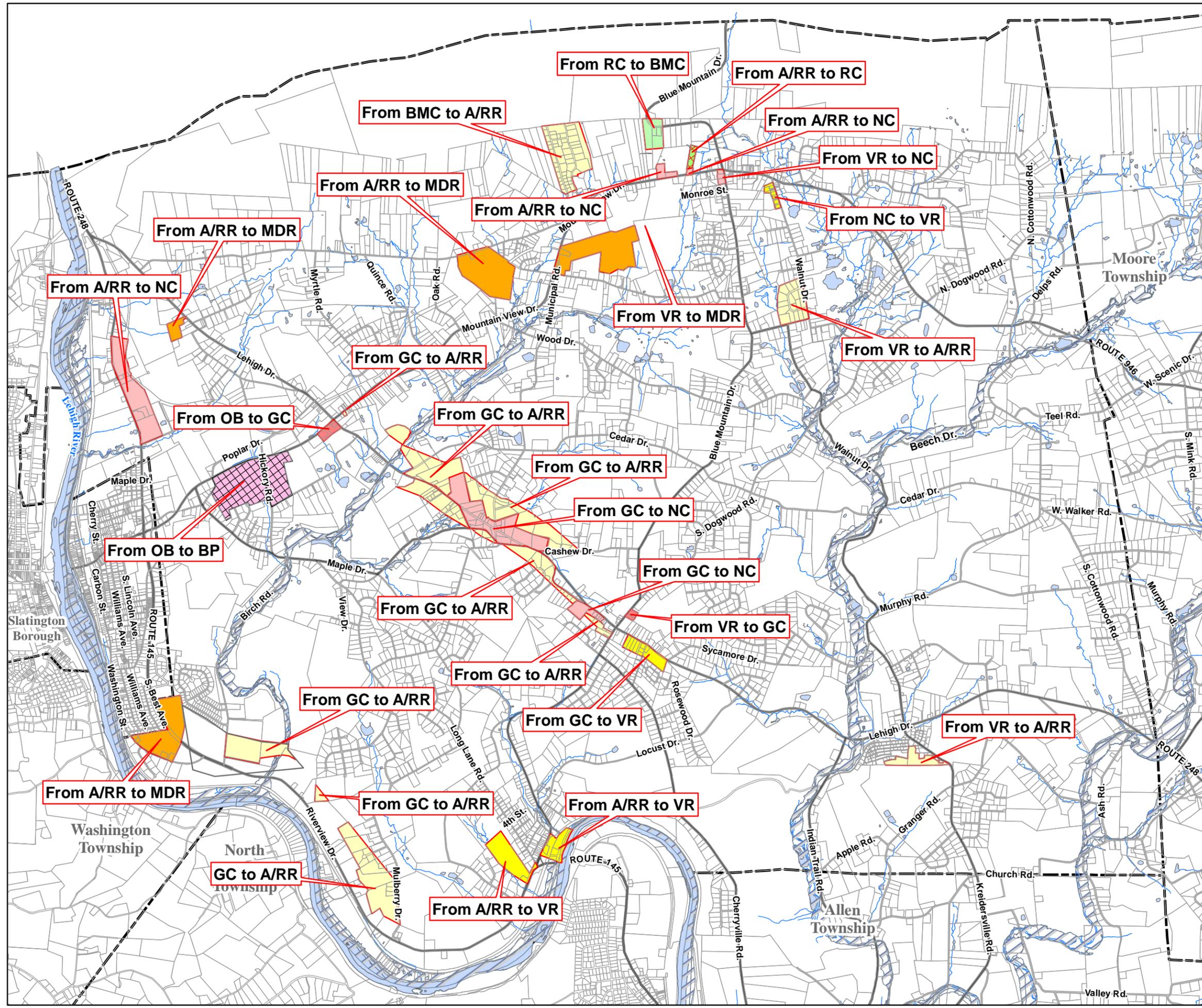
- BMC** Blue Mountain Conservation
- A/RR** Agricultural/Rural Residential
- VR** Village Residential
- MDR** Medium Density Residential
- RC** Resort Commercial
- NC** Neighborhood Commercial
- BP** Business Park
- GC** General Commercial
- IC** Industrial/Commercial

Colors show the Draft Comprehensive Plan categories.

SOURCE OF BASE INFORMATION:
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These Agricultural/Rural Residential areas are intended to continue to allow for various types of agricultural and recreational uses, as well as single family detached dwellings on one acre minimum lots.

Consideration should be given to providing a modest incentive for developers to provide public water service. For example, the zoning could allow a 0.9 acre lot if public water service is extended, while using an on-lot septic system, versus 1.0 acre with a well and septic system. Alternatively, the minimum lot size could be 1.0 acre with public water and 1.1 acre without public water service. There currently is no reduction in lot size if central water and/or sewage services are provided in the Agricultural/Rural Residential areas, unless the Open Space/Cluster Development option is used.

In many cases in practice, a lot size larger than one acre is needed in order to accommodate a well site, an approved primary septic system, an approved alternative drain field site. Stormwater infiltration areas (such as for roof drains) or vegetated rain gardens can also result in larger lot sizes to meet State and Township stormwater requirements. The Township's steep slope regulations also may require a larger lot size.

It is desirable to avoid the development of new private sewage package treatment plants and new private water systems because they may prove to not be financially viable over the long-term, particularly as the systems age and need replacement. It is not cost-effective to operate a central water and sewage system with only a limited number of customers (such as less than 50 homes). As a result, any lots of less than 0.9 acre should only be developed by extending existing central sewage systems. There may be opportunities to develop a wastewater treatment plant that then involves the treated effluent being spread onto a field by spray irrigation or drip irrigation. That method helps to maintain open lands, but they cannot be farmed for human consumption.

Open Space Development/Cluster Housing involves allowing homes to be placed on smaller lots than are normally required, in return for permanent preservation of a substantial percentage of the land.

Currently, the Open Space Development/Cluster Housing option needs a 30 acre minimum tract size, which limits where it can be applied. The density can be limited to a maximum of 30 percent higher than the density that is achievable with conventional (one acre minimum) lots. With a cluster development, it could be appropriate to allow 12,000 square foot single family detached house lots, if 60 percent of the total tract is preserved in permanent open space, or 15,000 square foot single family lots with 45 percent of the tract preserved.

Under these suggested policies, if a 30 acre property of buildable land would be proposed for development, it could be subdivided into 25 one acre minimum lots. Under an open space option, it could include 35 single family detached homes on 12,000 square foot minimum lots with 18 acres of open space, or 35 single family homes on 15,000 square foot minimum lots with 13.5 acres of open space. While the developer would be able to build additional homes, they also would have substantial added expenses to extend central water and sewage services and to pay connection fees.

As part of any Open Space/Cluster Housing development, the developer should be required to prove that the open space will serve an important public purpose, and not just be leftover fragments of land. The preserved open space in most cases would be maintained by a homeowner association as well-landscaped recreation areas or as woodlands with trails. If the Township and developer mutually agree, the open space could be dedicated as a Township Park. Clustering can also result in a wide open space buffer alongside an adjacent farm, which can reduce conflicts between the homes and the agricultural activities.

The preserved open space should be landscaped and improved with trails, unless it will be used for an agricultural purpose. Ideally, the project would be designed with homes being adjacent to much of the open space, as opposed to having all of the open space in one corner of the tract. The open space should be integrated with stormwater facilities that have a more naturalistic appearance and that can be used for recreation during dry periods.

Mineral extraction and gas wells should not longer be allowed in the Agricultural/Rural Residential areas. Instead, these uses (other than small temporary quarry operations for fill) should be limited to industrial districts.

Every new lot with a septic system should be required to have a suitable area for a replacement drain field, which must be kept open and uncompacted.

All livestock and poultry operations are currently permitted by right in these areas. It would be desirable to have the most intensive concentrated operations be required to have a hearing before the Zoning Hearing Board approval and be required to have larger setbacks, especially from residential districts.

There is an increased demand for large solar farms. Solar farms are best placed soils that are not prime for crop farming and are not steep. It is recommended that the amount of prime farmland soils that are covered by solar farms be limited. Also, mature woodlands should also not be removed for solar farms. There should be a streamlined process to install solar panels on building roofs, over parking areas, and a maximum percentage of a back yard.

The Woodstone Country Club is located between Route 946 and Walnut Drive. Many golf courses have closed because of a declining interesting in golfing. To promote the continuation of the golf course as open space, some additional flexibility should be be considered. If most of the land would be permanently preserved in some form of open space, then rental cottages, a hotel or similar resort/events facilities could be allowed on a portion of the land.

Traditional Neighborhood Development (TND) Option

The Township could promote new development in selected areas that recreates the best features of an historic village. “Traditional Neighborhood Development” can involve entirely new development, or can involve infill construction within an older area, such as within the existing villages.

Traditional neighborhood development typically allows singles, twins, townhouses and apartments. It also typically allows banks, beauty salons, offices, small retail stores and day care centers.

TND standards usually promote walkability, provision of front porches, architectural features and other standards to provide a village character, as seen in the photos below.

A minimum of 20 percent of the tract typically must be placed in common open space, but the open space typically is more integrated into the development than a cluster development. The goal is to have centrally located well-landscaped green areas, with housing facing onto the green space.

There could be density, lot width, coverage and setback incentives to promote traditional neighborhood styles of development in the Village Residential areas, if there would be public sewage and water services.

If variations are allowed to the standard street standards as part of a TND, such as more narrow streets, then the streets should be required to be maintained as part of a homeowner association.



VR Village Residential District

This district consists of mostly residential areas around Cherryville, Treichlers, Pennsville and Danielsville.

If there is on-lot well and on-lot septic service, then construction should continue to require a one acre minimum lot size. A 0.9 acre lot may be possible with public water service. If central water and sewage services are available, it would be appropriate to allow a mix of housing types at up to 4 homes per acre.

Standards should be reviewed for townhouses. The goal is to avoid the construction of new townhouses in which almost the entire front facade consists of garage doors and almost the entire front yard consists of driveways. That arrangement is not only unattractive, but it also leaves no room for on-street parking. Incentives can also be used to promote townhouse designs that keep most of the front yards green and minimize conflicts along sidewalks with turning cars.

The widths of townhouses are important. The townhouse widths should vary by whether there will be parking and garage doors in the front yard. For example, if there are garage doors for 2 vehicles in the front, a minimum width should be established, such as 24 feet. If there is only a one car garage or no garage in front, then the minimum townhouse width could be more narrow, such as 18 feet. Parking courts can be one alternative to two car garages on the front of townhouses, and those parking courts could include carports.

Density bonuses make sense for housing that is limited to persons age 55 and older, with no residents under age 18. Age-restricted housing has a very positive financial impact upon the school district. Age-restricted housing bonuses can also be justified because statistically it generates less traffic, less need for parking, less water use, less sewage use and less crime than other types of housing.

The Pennsville area includes narrow roads, some of which are steep. The Township should limit the density of development that can occur on these narrow roads, unless the roads would be improved to handle two-way traffic. Existing lots should be allowed to be built upon for single family detached houses, but apartments and denser housing would not be suitable along a one lane road.

MDR Medium Density Residential Area

These areas include the larger manufactured home developments in the Township. The intent is to allow a mix of housing types at up to 5 or 6 homes per acre. The zoning ordinance should encourage the upgrade of existing older manufactured homes with newer homes. Because the newer homes are often longer and wider, that may require some flexibility regarding dimensional standards.

NC Neighborhood Commercial Residential Areas

The Neighborhood Commercial areas are intended to only allow types of commercial uses that would be good neighbors for nearby residents. These include banks, retail sales, offices, personal service uses, day care, and restaurants without drive-through service, as well as single family detached houses.

The Neighborhood Commercial areas include most of Danielsville and an area along Mountain View Drive east of Route 248. Additional areas that are mostly residential are proposed to be changed from the General Commercial to the Neighborhood Commercial zoning district, including along Route 248 northwest of Cashew Drive. A new area of Neighborhood Commercial development is proposed along the east side of Route 145, north of Alder Drive.

GC General Commercial Areas

The General Commercial Areas are intended to allow for a wide range of commercial uses, including retail stores, personal services, gasoline stations, convenience stores, auto repair shops, and car washes.

The current GC zoning district includes extensive commercial areas along most of the Route 248 corridor. The GC district also includes land along the north side of West Mountain View Drive and along Route 145 south of Walnutport. This Plan recommends that commercial areas that are close to existing residential areas or that involve a mix of residential and scattered commercial uses be changed to the Neighborhood Commercial zoning district. The intent is to limit commercial areas near homes to uses that would make a good neighbor for homes. Where there are steep hills, limited sight distances and few existing businesses, consideration should be given to removing commercial zoning. That includes an area on the southwest side of Route 248 northwest of Maple Drive.

The draft plan proposes to revise the commercial areas so that they follow roads or lot lines, instead of a distance from each road. A substantial area of land along both sides of Route 248 northwest of Berlinsville has been permanently preserved as farmland, and therefore can be removed from the General Commercial category.

It will be a challenge to find a new retail occupant for the K-Mart building on Route 145, because few large retailers are expanding. The building could be divided into multiple different business spaces or be redeveloped for health care uses. It would be physically possible to connect the property to properties to the east without excessive re-grading, if the connection is made on the north side of the property.

Outdoor storage of junk and junk vehicles should be required to be screened by landscaping along roads and residential lots.

BP Business Park

There currently is an “Office/Business” zoning district west of Route 248 and south of West Mountain Drive. Because of the limited demand for office space, this area might be better positioned as a Business Park district, to allow a wider range of light businesses. The intent is to allow clean light manufacturing uses such as food processing, offices, hotels, service businesses and flex space buildings.

There has been strong demand in the region for very large warehouse/distribution buildings, which are not recommended in the Business Park area. These projects can generate tremendous amounts of tractor-trailer traffic over 24 hours a day. Many distribution centers are being built along two lane roads that are far from expressways. Care is needed to make sure that a large distribution center is not built in a location where the road system cannot handle the truck traffic and where there may be conflicts between nearby homes and the 24 hour operations.

This area west of Route 248 and south of West Mountain Drive has the potential of having sewage and water services extended from Walnutport. A sewage extension would be efficient because the area flows by gravity towards Walnutport.

I Industrial/Commercial Area

The Industrial/Commercial area includes land west of Route 145 north of Walnutport. These areas are intended to allow for most types of industrial and manufacturing uses, as well as most commercial uses. It would be desirable to generate additional tax revenue from the Industrial/Commercial and General Commercial areas by encouraging the construction of buildings instead of open storage.

RC Resort Commercial Area

The Resort Commercial zoning district currently includes an area along Blue Mountain Drive north of Danielsville, which is a route over the Mountain to the Blue Mountain Ski Area. The current zoning district mainly allows retail sales, motels, restaurants and commercial recreation uses. It was intended to take advantage of traffic headed to the Ski Area, which is developing into an all-season resort.

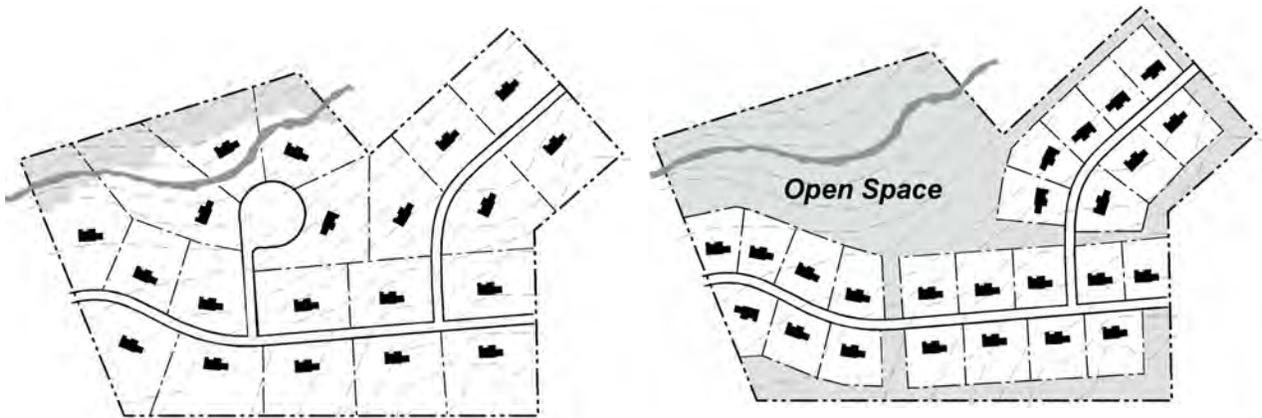
PRCC Planned Resort Residential Community

This area includes property around the former Mary Immaculate Seminary between Cherryville Road and Indian Trail Road. The intent is to provide for a mix of single family detached houses, townhouses, apartments, offices and outdoor recreation. A portion of the site, including the former Seminary building, is intended to allow for a hotel, offices, personal care residences, restaurants, retail and taverns. A minimum of 50 percent of the tract is currently required to be permanently preserved. The area is intended to be served by the Pennsville wastewater treatment plant.



Open Space Development (Cluster Housing)

“Open Space Development” is also known as “cluster development” or “conservation development.”



Example of Conventional Development

Example of Open Space Development

The goal is to have substantial areas of open space permanently preserved within any new development. New homes have to be located on the most suitable portions of a tract, in a manner that protects important natural features, including maintaining natural 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 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 Subdivisions 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 ridgelines, creek valleys and woodlands. These green spaces then provide visual relief between developments. Preserved open space can often increase values of adjacent homes. Open Space development also can avoid stormwater problems by reducing alterations to the environment.

Stronger zoning standards are needed to make sure that the open space serves a public purpose, as opposed to simply being fragments of “leftover” lands with little development or recreation value. The areas of the tract that are to be preserved as open space should be determined very early in the site design process, and not as an afterthought. Narrow and unusable lands should not count towards the required open space. Greater attention needs to be focused on intensive landscaping of the preserved open spaces, and selecting open space locations that are more visible to the public and to residents.

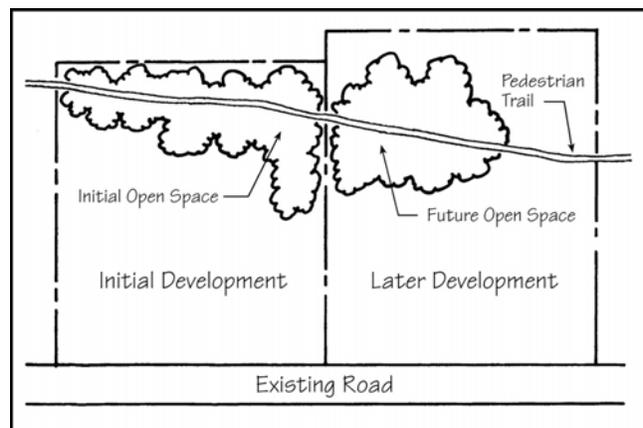
Portions of the required open spaces should be located in central “greens” with houses that surround and face onto the open space, as opposed to open space that is entirely located at less visible locations.

The following photos show examples of how houses can be designed to face onto landscaped common open space, and how the appearance of a development can be improved with design features.



Wherever feasible, open space should be provided in locations that can connect to existing public or semi-public open spaces or preserve land along creeks, the Lehigh River or the Blue Mountain. Open spaces should include trails that will connect with neighborhoods and public lands.

The sketch to the right shows how preserved open space from one development can be placed along the edge of an undeveloped lot so that it can eventually be interconnected with future open space when the adjacent lot is developed.



It is important to make sure that allowing Open Space Development does not greatly increase the number of homes that are allowed on a tract. Therefore, the density of an Open Space Development should continue to be based upon a "Yield Plan." This sketch plan shows how many homes would have been permitted on the tract if it had been development under the conventional development regulations. Once the Township accepts this Yield Plan, then the Open Space Development allows an incentive in most cases of 30 percent more homes than would have been allowed under the conventional development.

Advantages of Open Space Developments – The following are some of the major advantages of properly designed Open Space Developments:

- Open Space Development can result in homes being clustered so they are further away from adjacent active farmland.
- Houses can be located further away from highways, industrial uses, and pipelines. This is because a developer will not lose any housing units if they move the houses further away from those facilities. The Open Space Development option would be particularly valuable to provide space to maintain or plant substantial numbers of trees a major road, with larger setbacks for new homes from the highway. This buffer area would not only be valuable to preserve woodlands and make the corridor more attractive, but it also would increase the livability and market values of homes by avoiding noise conflicts.
- Important natural features can be preserved, particularly along creek and river valleys. Open Space Developments should include standards that direct buildings away from steep slopes, wetlands, waterways and other important natural features. As a result, homes are placed on portions of the tract that are most environmentally suitable for development—as opposed to being evenly spread across the land. Large contiguous areas can remain in woods. Thick natural vegetation can be preserved along creeks—which is essential to filter out eroded soil and other pollutants from runoff before it enters the creek.
- With open space preservation, stormwater runoff can be managed in a more natural and attractive manner that encourages recharge into the groundwater.
- Scenic features can be preserved. Open Space Developments can place homes on less visible portions of a tract, while maintaining scenic views. For example, many open space subdivisions setback homes from main through-roads and limit placement of homes on major ridgelines. As a result, the main angle of vision along major roads involves green space.
- Recreational opportunities can be increased. Open Space Developments can include attractive areas for walking, jogging, bicycling, cross-country skiing and nature study.
- Developers can achieve lower costs for grading, lengths of roads, lengths of utilities and other improvements. Developers may also be able to save time and money by avoiding wetland alterations and waterway crossings. Open Space Developments can provide the flexibility in layout to move homes off of steep slopes, which are more expensive to build upon.
- The Township and utilities can save on maintenance costs, because there are shorter lengths of roads, utilities, curbing and other improvements.
- Developers can often achieve higher sales prices. More and more developments are stressing in their advertising that homes are adjacent to preserved open spaces.

The Chester County Planning Commission has prepared the Cluster Subdivision Design Guide. That publication (which is available for free on the CCPC website), includes many examples of successful cluster housing developments in Chester County. It also describes lessons that have been learned

from various projects.

The Design Guide reported that there have been disappointments with clustered housing developments that included open space that was too fragmented or that was located where it was not highly visible to the public. The most successful projects often preserve an aspect of community character, such as a historic house, a farmstead, scenic views or mature woods.

The Design Guide also describes how cluster ordinance provisions can be written to assist in preserving historic buildings, and to provide context around a preserved building. For example, a farmstead with a barn can be preserved with sufficient land around it to make it practical to allow new uses of the barn.

Conservation easements involve a legal tool that is used to make sure the open space could never be subdivided or developed in buildings. 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 could be low-maintenance woods that would be owned by homeowner associations. However, in some cases, it may be suitable to seek Township parkland. The ordinance could also allow a golf course to count as open space. 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.

COMMUNITY FACILITIES AND SERVICES PLAN

Sewage and Water Services

Currently, portions of the Township are served by two public sewage treatment plants, which are operated by the Lehigh Township Municipal Authority (LTMAP). The Danielsville area plant is currently operating at 38 percent of its rated capacity of 325,000 gallons per day. The Pennsville plant is much smaller with a capacity of 60,000 gallons per day. The remaining capacity in the Pennsville plant is proposed to be used for the first phase of the development of the former Mary Immaculate Seminary property. Later phases of that development are proposed to be served by a replacement plant that would be built next to the current treatment plant.

Eventually, it would be desirable to have public sewage service in the Cherryville, Berlinsville and Treichlers areas. If new development occurs close to existing development, it may fund much of the cost of constructing a new sewage treatment plant, and thereby make it affordable for existing homes and businesses to connect into the system. For that reason, an expansion of the Village Residential area has been proposed in Treichlers.

Walnutport is served by the Slatington sewage treatment plant. Many nearby areas of Lehigh Township could potentially connect to the Walnutport sewage lines, particularly areas that naturally flow by gravity to Walnutport. That includes areas north of Walnutport along Route 145, areas east of Walnutport along Mountain View Drive, and additional areas southeast of Walnutport along the Route 145 corridor. However, Lehigh Township would need to negotiate with Slatington to obtain additional wastewater treatment capacity allocations.

There also are developments with private sewage treatment plants, including the Becker Mobile Home Park south of Walnutport along Route 145. The Becker Park also has its own water system.

The LTMA also provides water service to parts of Cherryville and Treichlers, using a well on Blue Mountain Drive, a well in Treichlers and a storage tank on Route 248 in Cherryville. The typical yield of the Cherryville well (144,000 gallons per day) is eight times the current usage. Ideally, it would be valuable to have a connection to a backup well or to the Bethlehem water system, in case of contamination. Water is being extended to additional parts of the Cherryville area as part of the development of a new convenience store.

The Walnutport water system uses five wells, including four wells located east of Walnutport in Lehigh Township. The Walnutport water system could potentially be expanded into adjacent parts of Lehigh Township.

The City of Bethlehem's Water Treatment Plant is located in southern Lehigh Township. It is connected to pipelines from Bethlehem's reservoirs in the Poconos. The Bethlehem water system is proposed to be extended to serve the development of the former Seminary property east of Cherryville Road.

Eventually, it may be desirable to extend central water service into additional portions of the Township, such as Berlinsville, development areas surrounding Walnutport, Pennsville, and Danielsville. If lots would use on-lot septic systems, a developer could be offered a minor lot area and a lot width reduction if they extend central water service. The goal is to provide an incentive for a developer to agree to pay for a water service extension. Water extensions are much more cost-effective than sewage extensions.

A public water service extension can reduce public health problems from malfunctioning septic systems and other types of water contamination, and can free up land to install a replacement septic drain field. A public water extension can also provide a water supply for firefighting, as opposed to needing to rely upon tanker trucks. Moreover, public water service can allow a wider range and taller heights of business development, because it is easier to provide sprinkler service inside buildings. Public water systems can also be extended to replace small private water systems, and thereby provide a more reliable and financially sustainable source of water.

NATURAL FEATURES PLAN

Development needs to recognize the limitations and assets of the natural environment and strives for harmony with the forces of nature. When natural features are not properly taken into account, we find malfunctioning septic systems, polluted wells, pollution, flooded basements, and stormwater problems.

Flood-prone Areas

The 100-year floodplain includes land areas expected to be flooded during the worst storm in an average 100-year period. Lehigh has zoning regulations that meet the minimum federal and state regulations on development in the 100-year floodplain. The “floodway” is the main channel that carries the deepest flood waters. The rest of the floodplain is known as the “flood-fringe” and may be covered by less deep flood waters. These areas function as “overlays” to the regular zoning districts, which means they apply more restrictive provisions for certain matters.

It is recommended that the floodplain regulations be revised to prohibit new buildings within the 100 year floodplain. This is particularly important because the frequency and severity of flooding events have been increasing, with supposed 40 year storms occurring two years apart.

Topography

The Topography Map shows contours of land throughout the Township. Lehigh Township is located in two sections of the Appalachian Valley Province: the Ridge and Valley Section in the north, and the Appalachian Valley Section which included more level farmland. The Township is quite hilly and is mostly underlain by shale, in contrast to the limestone valley farther to the south.

Elevations in Lehigh Township range from a high 1,580 feet above sea level at the top of the Blue Mountain in the northeastern corner of the Township to a low of 30 feet above sea level at the southern point where the Lehigh River leaves the Township. Elevations along the Blue Mountain are generally between 1,000 feet and 1,500 feet. The ridge is one of the outstanding landmarks of the Lehigh Valley Region. It is densely wooded. A relatively level strip of land runs along the base of the Blue Mountain. The southern half of the Township to the east of the Lehigh is a rugged area of hills and stream valleys.

Geology

Lehigh Township is underlain by the Martinburg formation. Specifically, the Pen Argyl member in the north half of the Township and the Ramseyburg member in the south. The rock types consist of medium to dark gray claystone slate with interbedded thin beds of graywacke siltstone, quartzose slate and carbonaceous claystone slate. Illinolan glaciation overrode the Township leaving poorly sorted till and well sorted outwash. Due to the age of this glaciation, many areas are no longer covered by the unsorted till since the effects of weathering and erosion have taken place. Still, thick areas of till can be found along Blue Mountain in the northern section of the Township, and in scattered patches throughout the rest of the Township.

Sloped Lands

Slope, expressed as a percentage, is the amount of rise in elevation covering a specific horizontal distance. Therefore, a rise in elevation of 10 feet over a horizontal distance of 100 feet would be considered as a 10 percent slope.

Lehigh Township NORTHAMPTON COUNTY

TOPOGRAPHY

— 10' Contours



SOURCE:
Lehigh County Planning Commission, 2018,
ESRI and PASDA.

0 1,500 3,000 6,000
Feet



Community Planning Consultants
Urban Research & Development Corporation
28 West Broad Street Bethlehem, Pennsylvania 18018 610-865-0701

Steep Slope (15 percent and over)

Parts of the Township in this category include all areas which have a slope in excess of 15 percent. Although there is a trend today for people to look for a hillside site “with a view” on slopes up to 25 percent, such small areas can only be developed at added cost. The land is generally too steep for the well designed streets, drainage systems, and lotting required in the modern subdivision. If buildings are constructed on these slopes, they should be confined to deep well-drained soils and extreme caution should be taken with foundations and sewage disposal systems. Steep slopes, in addition to all of the problems of grading and access, usually also have shallow soils which cause problems with drainage and installing a properly functioning septic system. Stony, shallow soils on slopes above 15 percent and all other soils above 25 percent are considered unsuitable. Land in excess of 25 percent slope is best kept in its natural state for use as watershed, conservation, or recreation.

Steeply sloping hillsides are found in three parts of the Township: on the Blue Mountain, bounding both sides of the Bertsch and Indian Creeks; and along the bend in the Lehigh River to the east of Treichlers. Most of these areas are undeveloped and afford scenic views from the ridge of the valley below.

Development on hillsides should be carefully designed and carefully controlled because of the special problems it poses for development. In general, intensive subdivision development should be discouraged. As slopes get steeper, lot size requirements should get larger.

Moderate Slope (10 to 15 percent)

Generally, this category is well suited to residential development, provided care is given to drainage characteristics and the installation of individual septic systems. The land is usually too steep for most industrial, commercial, and high density uses. In addition, slopes in excess of 10 percent generally make the construction of good roads difficult. (Less land in this slope category is found in Lehigh Township than that in the steep slope category.) Most of it is located near the base of Blue Mountain and in association with steeper slopes in the southern half of the Township.

Although standards applied to development of these areas need not be as rigid as those for the steep slope categories, precautions should be taken to assure that subdivisions are carefully designed and that standards for street design, lotting, and stormwater control are geared to the hilly nature of the terrain.

Gentle Slope (3 to 8 percent)

Land which slopes between 3 and 8 percent is ideal for residential subdivision and practically all other types of development. Unless associated with extremely poor soil conditions, it generally permits good drainage and produces an interesting and variable landscape without excessive cost for grading, retaining walls, and other problems of steeper slopes.

Portions of the northern half of the Township is comprised of land in this category. Existing development concentrations in and about Treichlers are also located on land in this category.

Providing soil conditions are adequate to assure septic tank operations, a more intensive form of development than found elsewhere could probably be justified.

Nearly Level Slope (0 to 3 percent)

In general, land in this slope category is suitable for nearly all types of industrial, commercial, public, or residential use. In Lehigh Township, however, slope in this category is frequently found along streams that flood or is associated with soils that do not drain well. For this reason, level land must be developed with caution to assure that wetlands will not be a problem, especially in and near the floodplain of the river and creeks.

Flood-Prone Areas

Soils in the floodplain are usually permanently wet and subject to periodic flooding by adjacent streams. They are the alluvial soils that have been deposited by receding floodwaters of adjacent streams.

Stream valleys play a vital role in retaining the nature balance. When urban development with its impervious roads, pavements, rooftops, parking lots, etc., takes place in the floodplain, it reduced the absorption capacity of lands within the watershed. On the other hand an undeveloped floodplain allows for the absorption of a large portion of rainfall, thereby replenishing the water table and at the same time produces a more constant flow between storms. The ability of a watercourse to recharge its underground supplies is reduced by any development on water absorbing areas. This reduction in the underground water supply can cause dry wells, creating a demand for public water facilities in regions which otherwise never have had a need for them. When absorption capacity is reduced, the seasonal flow of water is affected and the wet season becomes water, the dry season drier, this leads to flooding and the growing inability of a stream to dispose of sewer plant effluvia. In addition to these practical aspects, development which interferes with the natural process of stream evolution adversely affects vegetation and animal life.

The danger of periodic flooding should be a logical deterrent to any development. In addition to the possibility of flooding, poor drainage and unstable soils requiring fill and waterproofing of structures also make development in the floodplain a generally unsatisfactory venture. Periodic flooding and drainage problems which have occurred in Pennsville in past years are evidence in Lehigh Township of the problems normally associated with floodplain development.

Floodplains are logical areas to preserve for their aesthetic value to surrounding development and future generations. They are logical park and recreation areas, including for passive recreation.

There has been a significant increase in the frequency and severity of flooding events in recent years. Therefore, consideration should be given to prohibiting the construction of new buildings in the 100 year floodplain. Also, a building and paving setback should be established from the banks of a waterway, such as a minimum of 75 feet from the top of the primary bank of the Lehigh River and 50 feet from the top of the primary bank of perennial creeks (which usually have year-round flows of water).

Drainage and Drainage Basins

Drainage involves the natural downward flow of all water to the sea through rivers, creeks, gullies, underground caverns, the watertable, or through any combination of these depending on which offers the least resistance to flow under any given circumstances.

In Lehigh Township there are three major creeks: Bertsch Creek, Indian Creek, and Hokendauqua Creek, plus the Lehigh River. All three creeks flow southward into the Lehigh River. These three creeks, along with the Lehigh River, form the drainage basins. The next table shows the approximate area of the Township drained by each basin.

AREA OF DRAINAGE BASINS - LEHIGH TOWNSHIP		
NAME	LAND AREA SQUARE MILES	% OF AREA
Lehigh River (direct drainage)	7.9	25.4
Bertsch Creek	9.4	30.4
Indian Creek	11.5	37.4
Hokendauqua Creek	2.1	6.8
TOTAL	30.9	100.0

Drainage basins are natural planning units. For purposes of planning, the drainage basin is often a much more important boundary than the man-made political boundary. The ridge lines separate one drainage basin from another. Water flows downhill from each ridge in the direction of the major creek in the basin. Such a distinction is vital to the planning of sanitary sewer and storm sewers to serve an area. One of the problems in Lehigh Township is that there are too many drainage basins within the Township. Counting the areas that drain directly into the Lehigh, there are four district basins in the Township. Ridge lines would have to be crossed to serve major developed parts of the Township with one sanitary sewer system. This would almost certainly involve installation of costly pumping equipment. Otherwise more than one system would have to be developed.

Another problem is that the most level terrain, which is more suitable for development, is farthest away from the point where a treatment plant would most likely be constructed, i.e., at the confluence of the river and the creeks. This would require a long interceptor line from the treatment plant to the point where service actually begins, thereby making construction more expensive.

Soils

There are three major soil compositions in Lehigh Township.

About 70 percent of the Township is composed of soils having a shaly or channery surface layer and shaly subsoil. The Berks-Bedington-Comly Association soils are predominant here. These soils occur on gently sloping to steep terrain and are moderately deep to moderately shallow, well drained to somewhat poorly drained, and underlain by acid, gray shale. Most of the south, south central, central, and north central areas of the Township are composed of this type of soil.

The soils in the group are the best in the Township. The major problem which some have is shallowness. This calls for careful site inspection before construction of any structure in which high cost for excavating a foundation would be a problem. Shallow soils also pose problems for the effective use of septic tanks in that shallowness reduces the amount of filtration through the soil and can also cause polluted well water.

The Bedington soil is the best of the group. It poses few limitations to urban development. Soils of this type are found in the high areas around Treichlers and Cherryville.

In the central portions of the Township the Berks soils predominate. These soils have poorer texture than the Bedington soils and lower moisture capacity. They are also more shallow.

The Comly soils are the least suitable for urban development. They are found near streams and watercourses and present severe limitations to urban development due to a high watertable. Septic tanks will not function well in these soils and special measures must be taken to protect basements from seepage.

The Bedington and Berks soils are the best in the Township for urban development. Future urban growth of all types should be encouraged where these soils exist, provided of course that some other limiting factor such as steep slope is not present. The Comly soils are related to other wet soils in the Township found near the streams. Development in these areas should not be encouraged in the future. They are best suited for recreation, agriculture, and other open space uses of land.

About 25 percent of the Township is composed of soils having an extremely strong or gravelly surface layer and a firm, cobbly and gravelly subsoil. The Buchanan-Laidig-Andover Association comprises over half of this type (about 15 percent of the Township). These soils occur on gently sloping to moderately steep terrain, are deep, well-drained to poorly drained soils on mountain-foot slopes. The Laidig-Stony Land Association comprises the remainder of this type (about 10 percent of the Township). These soils occur on gently sloping to very steep terrain, are deep, well-drained, extremely stony soils on upper mountain slopes. The above soils compose the northern-most part of the Township adjacent to and along the Blue Mountain.

In the flat areas at the base of the mountain and in stream channels these soils are very wet because of a high watertable. The high watertable is caused by drainage off the mountain. In addition, the soils are stony in some areas.

The well drained Laidig soils occupy the highest areas in this association. Next to the Laidig but at lower elevations are the Buchanan soils. The Buchanan soils have a high watertable that persists for several weeks in late winter and early spring. The poorly drained Andover soils are found in depressions, stream channels, and other low areas where seepage water from higher areas accumulates. The Danielsville area and most of the portion of the Township along Route 946 have soils in this association. Malfunctioning septic systems, seepage from septic systems, and drainage problems are found in these areas. If the soils in this association are used as fields for septic tanks, the watertable will be too high for effluent to be absorbed properly, posing an obvious health hazard.

The remaining 5 percent of the Township is composed of soils that have a medium textured to moderately coarse textured surface layer and subsoil. The Colton-Red-Hook-Urban Association soils predominate here. These soils are nearly level to moderately steep, deep, well-drained to somewhat poorly drained soils and underlain by sand and gravel on terminal moraines, kames, eskers, out-wash terraces, and floodplains. These soils are found in floodplain areas of the Township along the Lehigh River.

Woodlands

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

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

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

Wooded areas also have recreational potential, whether for individual lot owners, or when within public recreational facilities, for the population as a whole.

The Township has zoning regulations upon forestry. Municipalities are limited under the State ACRE law on the extent they can regulate forestry. Forestry must be allowed as a permitted by right use in all areas of the Township.

Wetlands and Areas of High Water Table

Mapped wetlands in the Township are generally found near the watercourses in the Township. In addition, there is a substantial band of high watertable soils at the foot of the Blue Mountain. While wetlands may be present in this area south of the Blue Mountain, this cannot be established unless a field study is performed. Such a study should be required in conjunction with any proposed development.

Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, prevalence of vegetation typically adapted for life in saturated soil conditions. During on-site investigation, wetlands can sometimes be identified when they are saturated with permanent or semi-permanent standing water and contain common wetlands plants such as cattails and willows. If wetlands can not be identified by hydrophytes (plants

adopted to life in saturated soil conditions), soils may be investigated to determine whether wetlands are present. Hydric soils mapping can be used to identify potential wetlands sites.

Wetlands are often low lying lands that remains wet for considerable periods of time, that cannot typically be farmed. Wetlands can be areas rich in plant growth and animal habitat. They often serve as breeding places for many organisms. In addition to providing a home and a source of food for organisms, wetlands can protect water sources and can help keep water sources clean by acting as natural filters and removing pollutants such as bacteria and sediment from water. This occurs as plants growing in and around wetlands trap pollutants. Wetlands store water which can replenish groundwater and surface water supplies. This is a particularly important function in the area south of the Blue Mountain because this is the headwaters area for the Indian and Bertsch creeks and tributaries thereto.

Consideration should be given to establishing a minimum building and paving setback from a wetland, such as 25 feet. The goal is to provide a vegetated buffer next to wetlands, and to avoid the intrusion of construction equipment into the wetland.

TRANSPORTATION PLAN

The road system within the community influences the type and location of development which occurs. The location of residential, commercial, and industrial land uses is influenced significantly by the functional classification roads, design of the roads and their condition. In addition, opportunities for pedestrian and bicycle travel need to be considered.

Functional Classification

The roads within the Township are classified as to the function they serve in the road network within the Township and the region. The classification can be particularly useful in establishing roadway design standards, necessary improvements and treatment of access.

In land use planning, it is desirable to plan for future land uses that are consistent with the design of the circulation system or to require provisions for improvements to the circulation system to support proposed land uses.

Factors which influence road function include:

- Traffic volume
- Existing design of the roadway
- Special relationships to other roads
- Directness of the route between major traffic generators
- Accessibility (ease of entering or exiting a roadway to or from adjacent properties)
- Mobility (actual ability of a road to move traffic)

Arterials

Arterials provide access between major parts of counties and through and around cities, towns, and major activity centers. They are designed for large traffic volumes and high speed traffic with access to abutting properties often restricted.

The Major Arterials in the Township include:

- Route 145
- Route 248

The following is a Minor Arterial:

- Blue Mountain Drive (SR 4001) between Route 145 and Route 248

Major Collectors

Major Collectors connect municipalities and major activity centers. These roads are the major contributors to Arterial traffic and carry fairly heavy traffic volumes at moderate rates of speed. While the primary function of Arterials is to move traffic and access should be limited, Collectors provide for access as well as traffic movement.

Major Collectors include Blue Mountain Drive, from Route 248 to the Township's northern boundary and Mountain View Drive (Route 946) from the eastern Township boundary to Route 248.

Blue Mountain Drive connects the villages of Cherryville and Danielsville and residential subdivisions along the road to Route 145 at Treichlers. It also provides access to recreation areas to the north. It serves both local and through traffic.

Cherryville Road serves large volumes of traffic from the south.

Route 946 is an east-west link with other parts of the Lehigh Valley. It parallels Route 248 through the northern portion of the Township, along the base of the Blue Mountain. The road extends southeasterly to Route 512 in Moorestown, north of Bath. Route 946 connects to Route 987, which goes to Bath.

Minor Collectors

Minor Collectors facilitate relatively low volumes of traffic at lower speeds. They gather traffic from local roads and direct it to the Arterial and Major Collector road networks. Minor collectors often provide traffic circulation between and within residential neighborhoods. They can serve local activity centers. Minor Collectors in Lehigh Township include:

- Timberline Road (T-814)
- Wood Drive (T-813)
- Walnut Drive - Elk Road (SR 4018, SR 4003)
- Maple Drive (SR 4020)
- West Mountain View Drive, from Route 248 to Route 145 (T-815)

Local Roads

Local Roads provide direct access to abutting properties and channel local traffic to Collector Streets. They typically provide for short distance, low speed travel. Local access roads have the primary function of access to abutting properties, not through movement of vehicles.

The remaining roads in the Township are considered Local Access Roads.

In an ideally functioning transportation network, the Local Roads feed into the Collector Roads which then feed into the Arterials. Lower speeds, more frequent turning, and increased number of ingress and egress points can combine to lower the capacity of arterial roads to fulfill their primary function of serving through-traffic. Route 248 is particularly susceptible to this concern.

Traffic Safety

The Lehigh Township Police Department completed a study of crashes in the Township from January 2018 through August 2020. During this period, the Township Police investigated 588 crashes, or approximately 19 crashes per month. The most significant problem corridors included:

- Riverview Drive (PA 145), and
- Lehigh Drive (PA 248), including near the PA 873 bridge.

The study found that 65 of the crashes were serious “reportable” incidents that required a vehicle to be towed or caused injury.

- Stormwater runoff problems are prominent along Route 248 from Timberline Road to Route 145.
- Route 145 terminates at Route 248) with a sharp right turn, which tractor-trailers cannot make, forcing them into the opposing lane.
- The signal at Routes 248 and 873 is confusing, and some cars turn left against the arrow. Signage is constantly knocked down.
- The speed limits on Route 248 constantly change (such as from 55 mph to 50 mph). This creates difficulties because speed enforcement is not allowed within 500 feet of a speed reduction sign.

The following six specific locations accounted for 234 crashes (40 percent of total accidents) during the reporting period,

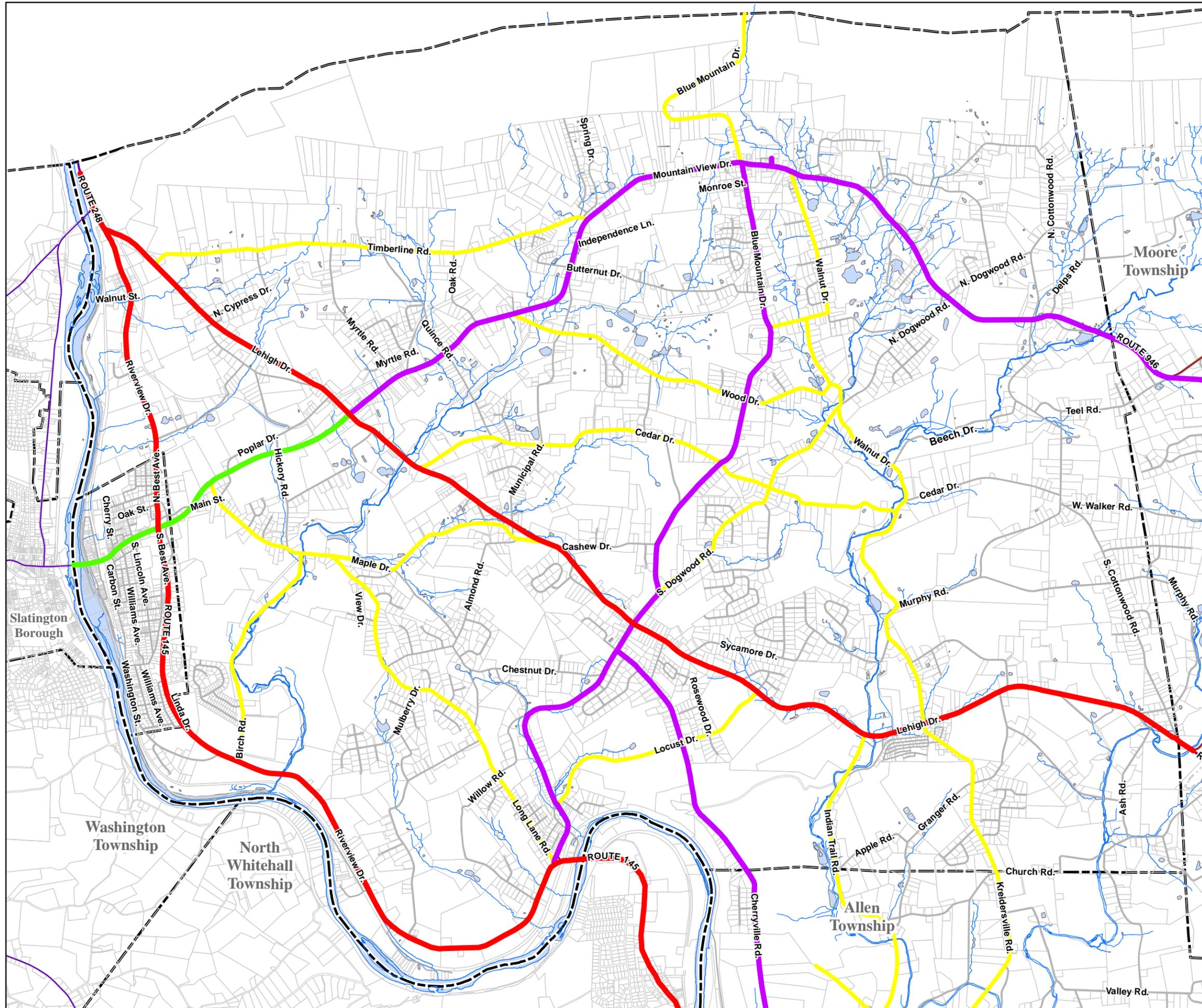
1. Riverview Drive (PA 145) – 73 crashes
2. Lehigh Drive (PA 248) and Blue Mountain Drive (SR 4001) – 70 crashes
3. Mountain View Drive (PA 946) and Blue Mountain Drive (SR 4001) – 32 crashes
4. Lehigh Drive (PA 248) and Mountain View Drive (PA 946) – 26 crashes
5. Blue Mountain Drive at Wood and Elm – 21 crashes

Lehigh Township NORTHAMPTON COUNTY

ROAD CLASSIFICATION September 2020

- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector

All other roads are local roads.



SOURCE:
Lehigh Valley Planning Commission, 2018,
ESRI, PASDA and PENNDOT 2018, as
adjusted by URDC.



Community Planning Consultants
Urban Research & Development Corporation
28 West Broad Street Bethlehem, Pennsylvania 18018 610-865-0701

6. Mountain View Drive and Maple – 12 crashes

The Lehigh Township Police Chief reported that Route 145 suffers from aggressive driving, particularly between Blue Mountain Drive and Route 248. Route 248 also suffers from aggressive driving, as well as severe congestion at the intersection of Routes 248 and 873. Mountain View Drive has sight distance problems, with particularly poor sight distance exiting Maple Drive. The speed limit was reduced in the area, but the problem still exists. Cherryville Road experiences high volumes during the morning and afternoon peaks, as a commuting route.

Traffic Impact Fee Studies

Lehigh Township has a system of requiring that developers pay traffic impact fees as part of new development. The impact fees are intended to off-site some of the costs of improvements that are needed near the development. Otherwise, a municipality is only allowed to require that a developer improve immediately abutting segments of roads.

Hanover Engineering Associates has prepared a set of studies to support the traffic impact fee system.

The report projects an average of 51 new housing units being built per year in Lehigh Township, as well as additional commercial development concentrated along Routes 145 and 248. The Hilltop Center development will also result in a mix of residential and commercial development.

In addition, the report divides the Township into three Transportation Service Areas (TSAs), each between 6.0-6.5 square miles:

- 1 – northwestern part of the Township
- 2 – southern part of the Township
- 3 – eastern and northeastern parts of the Township

Needed Intersection Improvements

The Traffic Impact Fee Update also identifies the following intersections as “Intersections of Interest” for potential future improvement:

- TSA 1 - Lehigh Drive (PA 248) / Mountain View Drive (PA 946),
- TSA 2 - Lehigh Drive (PA 248) / Blue Mountain Drive,
- TSA 2 - Blue Mountain Drive / Cherryville Road, and
- TSA 2 - Lehigh Drive (PA248) / Walnut Drive.

Further, the report identifies the following intersections as “Intersection Improvements”:

- TSA 1 - Lehigh Drive (PA 248) / Timberline Road,
- TSA 1 - Lehigh Drive (PA 248) / North Cypress Road,
- TSA 1 - Mountain View Drive (PA 946) / Maple Drive,
- TSA 2 - Blue Mountain Drive / Locust Drive,
- TSA 2 - Riverview Drive / Blue Mountain Drive,
- TSA 2 - Lehigh Drive (PA 248) / Sycamore Drive,
- TSA 2 - Cherryville Road / Locust Drive,
- TSA 2 - Lehigh Drive (PA 248) / Hickory Road and Locust Road,
- TSA 2 - Lehigh Drive (PA 248) / Indian Trail Road,
- TSA 3 - Lehigh Drive (PA 248) / South Cottonwood Road,
- TSA 3 - Blue Mountain Drive / Wood Drive, and
- TSA 3 - Blue Mountain Drive / Mountain View Drive (PA 946).

PennDOT 12-Year Program

Federal Department of Transportation regulations require a locally-based programming process in order for the area to receive Federal funding for transportation improvements. Local organizations throughout Pennsylvania identify needed transportation improvements, establish priorities, and apply for Federal

funding to implement the improvements. PennDOT assembles all of the submissions and creates a statewide program consisting of projects to be completed during the next 12 years. The program is called the 12-Year Program (TYP). The TYP is reviewed and updated every two (2) years.

The first four years of the TYP is referred to as the Transportation Improvement Program (TIP). Projects on the TIP are the highest priority and are expected to be completed in the next four years.

In Lehigh and Northampton Counties, the transportation planning and programming process is conducted by the Lehigh Valley Transportation Study (LVTS). The Lehigh Valley Planning Commission (LVPC) serves as the professional support staff for LVTS.

The latest TYP was adopted by the Pennsylvania Transportation Commission in 2020. The program includes one specific project in Lehigh Township, at the intersection of Route 248 and Blue Mountain Drive (at the Turkey Hill store).

In addition, funds are set aside for bridges, with some of that money possibly being used in Lehigh Township.

Walking and Biking Trails

The Delaware & Lehigh (D&L) National Heritage Corridor includes the D&L Trail. The main Trail is located along west bank of the Lehigh River.

The Lehigh Canal towpath, which is part of the D&L, is open in Walnutport and extends to the north and south in Lehigh Township. The towpath has a long break in the southern part of Lehigh Township (east side of the Lehigh River).

The Appalachian Trail is a 2,184-mile connection from Maine to Georgia. In Lehigh Township, the Trail is located along the top of the Blue Mountain and comprises the northern border of Lehigh Township, separating the Township from Lower Towamensing Township, Monroe County.

Walking and biking trails, when properly designed and maintained, can provide excellent transportation alternatives. Bicycling and walking are good not only for general recreation and exercise of the entire community, but are also valuable for children to be able to reach recreation facilities, and to serve persons who cannot drive or who do not have access to a personal vehicle. Moreover, some persons choose to use bicycling for everyday travel. Improvements to pedestrian and bicycle facilities will reduce noise pollution and improve air quality, traffic flow, and overall quality of life.

On the other hand, walking and biking trails can be controversial. Neighbors may object to having trail access close to their property, specifically, adjacent to individual back yards.

In 2018, Northampton County commissioned a feasibility study of a potential Northern Tier Trail connecting the Lehigh and Delaware Rivers through the northern portion of the county. The proposed trail would be 35 miles long and connect the 14 most northern municipalities in Northampton County, including Lehigh Township. Most of the railroad rights-of-way proposed for use for the trail have fragmented ownership, which would make it very hard to re-assemble it for long trail segments. In many cases, the railroad right-of-way has been acquired by the adjacent landowner, who may not be in favor of a trail.

Local subdivision and land development ordinances (SALDOs) can be used to foster the use of bike and hiking trails by requiring connections within new developments.

Public Transportation

Public transportation service is provided in the Lehigh Valley by the Lehigh and Northampton Transportation Authority (LANTA). The following LANTA routes serve areas near Lehigh Township.

LANTA Service, Lehigh Township, 2020

Route	Serving	Service ¹	
		Peak	Off-Peak
103	Allentown/Northampton via PA 145	30 min.	60 min.
325	Walnutport / LV Mall via Lehigh Carbon Comm. College	150 min., weekdays	
503	Walnutport / Slatington / LANTA Flex available for scheduled pick-ups M– Sat. 6:00 AM-6:30 PM. Flexzone approximately from Orefield to Routes 145 and 248	Call 888-287-8818 to schedule/reserve	

¹ Service definitions: Peak: approximately 5:00-9:00 AM and 4:00-7:00 PM, weekdays
 Off-Peak: approximately 9:00 AM-4:00 PM, weekdays after 7:00 PM, weekdays and weekends

Source: LANTA

Route 103 is a major route in the LANTA system that connects Allentown to Northampton via PA 145/7th St./MacArthur Road. Weekday southbound service operates from the intersection of Held Drive and Cherryville Road between 5:42 a.m. and 9:11 p.m. Weekday northbound service terminates at Held Drive and Cherryville Road between 6:49 a.m. and 8:43 p.m. Buses operate every 30 minutes during peak hours and every 60 minutes during off-peak hours.

Route 325 connects the former K-Mart on Route 145 to the Lehigh Valley Mall via Lehigh Carbon Community College (LCCC).

Route 503, called a “LANTA Flex” service, is a specialized flexible service within a defined service area. Users can schedule personal pick-ups within defined service hours.

Rail Transportation

A freight rail line runs north-south along the east bank of the Lehigh River for the entire length of Lehigh Township. The line is owned by the Norfolk Southern Railway. There is no passenger rail service within the Township.

PUTTING THIS PLAN INTO ACTION

- GOAL.** Promote substantial citizen input, including making sure residents are well-informed about community issues and have plentiful opportunities to provide their opinions on Township matters.
- GOAL.** Coordinate transportation, development and infrastructure across municipal borders, and seek opportunities for additional shared municipal services.
- GOAL.** Continually work to put this Plan into action—through a program of updated planning and many short-term actions within a long-range perspective.

This section describes methods that should be considered to implement this Plan. This Plan will need to be reviewed periodically and, if necessary, updated to reflect changing trends.

Lehigh Township has been working to maximize use of the internet to regularly update residents with information that will help spur public interest, enthusiasm and involvement. Opportunities for citizen involvement should also be highlighted through newspapers, social media, email lists, continued newsletters, posters and other media.

Strategy A.1. – Update the Zoning Ordinance to carry out this Plan.

The Zoning Ordinance is the primary legal tool to regulate the uses of land and buildings. The Zoning Ordinance and Map should be updated to be generally consistent with this Comprehensive Plan, to modernize standards and to address public concerns. The Zoning Ordinance includes a Zoning Map that divides the Township into different zoning districts. Each district permits a set of activities and establishes a maximum density of development. Zoning also controls the following:

- the heights of buildings,
- the percentage of a lot that may be covered by buildings and paving,
- the minimum distances that buildings may be placed from streets and property lines,
- the minimum size of lots,
- the maximum sizes and heights of signs, and
- the protection of important natural features, such as setbacks from creeks.

As part of this project, a separate memo has been prepared that describes recommended policy revisions for the SALDO.

Strategy A.2. – Update the Subdivision and Land Development Ordinance (SALDO).

The SALDO mainly regulates the creation of new lots, the construction of new streets by developers, and the site engineering of new multi-family, commercial, industrial and institutional buildings. It includes procedures, application requirements and engineering standards. As part of this project, a separate memo has been prepared that describes recommended policy revisions for the SALDO.

Strategy A.3. – Consider enacting parts of the Property Maintenance Code.

A township Property Maintenance Code can be a valuable tool to make sure that buildings are maintained to a minimum level and to address problem properties before they become blighted. There is a model nationwide International Property Maintenance Code. However, within Lehigh Township, it would be appropriate to only enact selected portions of the Code to address common issues that affect neighboring properties. For example, the Code requires that vacant buildings be secured to keep out children, and that rodent problems be addressed if they affect neighboring properties. The Code usually limits the number of inoperative vehicles that can be kept outdoors on a residential property, and limits the outdoor storage of junk.

The system of fees and fines for property maintenance and nuisance violations should be written to increase penalties for repeat offenses and violations that are not corrected within a reasonable time limit.

A number of communities have shifted certain nuisance matters to a ticket system that avoids use of the Magisterial District Judge system and thereby reduces the administrative burden to the Township.

Strategy A.4. – Consider adopting an Official Map.

The State Municipalities Planning Code grants each municipality with the authority to adopt an “Official Map.” An Official Map can designate proposed locations of new streets, street widenings, intersection improvements, municipal uses and future parks and trails. The Map may cover the entire Township or only certain areas. This process may be particularly useful, for example, to reserve right-of-way for a future intersection widening or trail connection.

Once an Official Map is officially adopted by the Board of Supervisors, then the Township is provided with a limited amount of authority to reserve land for the projects on the Map. If the land affected by a project shown on the Official Map is proposed for development, then the Township would have up to one year to either purchase the land for its fair market value or decide not to go forward with the project. This one year period is intended to provide time to raise funds to acquire the land, and avoid lost opportunities. If this one year period is not in effect, a person could obtain a building permit almost immediately in many cases and construct a building that could obstruct an important project.

An Official Map also serves to provide notice to property owners about the Township’s future plans, which increases the likelihood that a proposed project, such as an intersection widening, can be incorporated into a developer’s site design, with limited Township expense.

Strategy A.5. – Plan for major needed capital improvements.

“Capital” improvements are projects involving a substantial expense for the construction or improvement of major public facilities that have a long life span and that are not annual operating expenses. Examples of capital projects include major street improvements, stormwater improvements, acquisition of parkland, and construction or expansion of buildings. Lehigh Township does have a budget for capital expenses.

The intent is to assemble a list of all of the needed capital projects with estimated costs. This process assists in prioritizing the most needed projects and coordinating the projects with deadlines to apply for grants or low interest loans. The total cost of a road project can often be minimized if it is coordinated with a utility project.

By establishing a schedule of major road and stormwater projects, the Township, the Township Authority and utility companies will be able to improve coordination with underground construction projects. This coordination minimizes the need to cut into a street after it has been recently re-paved, and reduces costs for each entity.

Through capital projects planning, many different projects can be combined into a single bond issue, which avoids the high administrative costs of multiple bond issues. Capital projects planning also can allow the Township to carefully time any bond issues or a bank loan to take advantage of the lowest interest rates.

Strategy A.6. – Seek additional grants to meet community needs.

The Township should continue to identify Federal, State and County grant opportunities to address community needs. This should include highlighting grant deadlines for major programs a few months in advance, so that there is time to prepare a quality grant application. The Appendix of this Plan lists a large number of federal, state and county funding programs for community and economic development purposes.

Strategy A.7. – Increase inter-governmental cooperation efforts, including holding periodic discussions with officials of neighboring municipalities.

Inter-governmental cooperation can decrease the costs of many services, while also improving the quality of services. The Pennsylvania Inter-governmental Cooperation Act provides broad and flexible

authority to organize joint efforts, as municipalities deem appropriate. In general, the Act allows two or more municipalities to jointly accomplish anything that an individual municipality is allowed to do. In most cases, this grant of authority is carried out through the adoption of an ordinance by each municipality to formalize an agreement. One option involves one municipality providing a service to a second municipality through a contract. These same concepts can also apply between a municipality and a school district. For example, a township may agree to plow snow from school parking lots and driveways in return for free municipal use of some school facilities.

There is a relatively new Northampton County Council of Governments (COG). Many nearby municipalities also participate in the Nazareth Area COG. One of the main benefits of a COG or similar organization would be to offer joint purchasing among municipalities, which decreases bidding and purchase costs. The COG can provide the foundation for expanded discussion and cooperation among the municipalities on how to address common problems or to jointly seek funding for needed transportation projects.

The toughest issue in providing joint municipal services is determining a fair allocation of costs. The State Department of Community and Economic Development has several publications that can assist in these issues.

The following types of inter-governmental cooperation efforts may be useful:

- **Shared Services and Shared Staff-persons** – Shared staff-persons can be particularly beneficial for specialized staff, such as different types of construction inspectors. Two or more municipalities could hire the same person to do the same job, with certain hours assigned to each municipality. This allows each municipality to hire a highly qualified person who is working full-time, as opposed to each trying to find a part-time person. This approach can reduce turnover, which reduces training costs and reduces the potential for mistakes being made by inexperienced staff. In addition, sharing staff makes staff-persons available during more hours of the day, which is beneficial to residents and business-persons. It also provides greater coverage during periods of illness or vacation.
- **Shared Recreation Programs** – When municipalities share and coordinate recreation programs, it greatly increases the types of programs that can be offered. For example, one municipality may offer a gymnastics program, while another municipality offers basketball programs. Residents of each municipality could be allowed to participate in each of those programs at the same cost per person as a municipal resident. There has been great success in parts of Pennsylvania with multi-municipal recreation programs, where each municipality contributes funds towards one set of programs. These programs are often organized in partnership with a school district.
- **Joint Purchasing** – Joint purchasing can reduce the costs to each municipality of preparing bid documents and legal ads. It also can result in lower costs because larger volumes are being purchased, or a larger service area is being bid. The State also has arrangements that allow municipalities to "piggyback" upon State purchases. State law allows a similar process of "piggyback" bids between municipalities and a county. The State Intergovernmental Cooperation Act includes rules for joint municipal purchasing. Under State law, one municipality can be the lead municipality in purchases, without requiring multiple municipalities to seek bids.
- **Sharing of Equipment** – This method of sharing is most beneficial for expensive equipment that is needed by each municipality for only portions of the year. The equipment could be jointly owned, or be owned by one municipality and leased to other municipalities. Alternatively, an arrangement could allow trading of equipment.
- **Incentives for Intergovernmental Cooperation in Grants** – Many competitive State grant programs provide preference to projects that involve cooperation between more than one municipality. Therefore, if two similar projects are in competition for a grant, and one involves cooperation between two municipalities, the two municipality project is most likely to be funded.

ACTION PROGRAM

The following table summarizes the major recommendations of this Plan, along with recommended priorities. The timing of each recommendation is listed, as well which agencies should have the primary responsibility to carry out the recommendation. Additional information for each strategy is included in the main body of this Plan. Abbreviations for the prime responsibilities for each recommended action are listed as follows:

Abbreviations of Responsible Agencies/Groups:

Adj. Mun.	=	Adjacent Municipalities
Ag. Pres.	=	Northampton Co. Agricultural Land Preservation Board and Staff
Co. DCED	=	Northampton Co. Dept. of Community and Economic Development
Co. Emerg. Mgt.	=	Northampton County Emergency Management
Con. Dis.	=	Northampton County Conservation District
Hist. Soc.	=	Northampton County and Lehigh Twp. Historical Societies
LANTA	=	Lehigh and Northampton Transit Authority
Lehigh Twp. Athletic	=	Lehigh Township Athletic Association
LVEDC	=	Lehigh Valley Economic Development Corporation
LVPC	=	Lehigh Valley Planning Commission Staff
LVTS	=	Lehigh Valley Transportation Study Committee (which is staffed by LVPC)
PADCNR	=	Pennsylvania Department of Conservation and Natural Resources
PC	=	Township Planning Commission
PennDOT	=	Pennsylvania Department of Transportation
PHFA	=	Pennsylvania Housing Finance Agency
PHMC	=	Pennsylvania Historical and Museum Commission
Rec. Com.	=	Lehigh Township Recreation Commission
Staff	=	Township Staff
Super.	=	Board of Supervisors
ZHB	=	Zoning Hearing Board

In the right-hand column that lists entities that should carry out a recommendation, the entity that is proposed to have the lead responsibility is boldfaced. High priority strategies are ones that are recommended for the most attention and that should be considered first. Medium priority strategies are moderately important, while low priority strategies are commended to be completed as time and resources become available.

In the “Timing” column, short-range is intended to refer to actions that should be completed within the next two years. Medium-range strategies are intended to be completed within the three to six years, and long-range strategies are envisioned to be completed in seven or more years. Most strategies are listed as continuous, because they should involve many smaller actions that are completed over many different years.

LAND USE AND HOUSING PLAN

Recommended Strategy	Priority: H = High M = Medium L = Low	Timing	Prime Responsibilities (see abbreviations)
<p>L.1. Work to attract new business development to areas zoned for businesses, and to improve the appearance of major road corridors to help attract additional investment. Seek to extend public water and/or sewage service to serve major business areas, and to market areas for business development to increase tax revenues and close-to-home employment opportunities. This includes reuse of the former K-Mart site. Work to improve the attractiveness along Routes 248 and 145 to attract new investment, including seeking to clear away or screen out junk storage that is visible from the highway. Help link businesses with available economic development resources.</p>	H	Con- tinuous	Super., PC, Staff, LVEDC, Twp. Authority
<p>L.2. Base land use policies upon the Land Use and Housing Plan Map and update development regulations to carry out the Land Use and Housing Plan. Make sure that a wide range of housing types continue to be available to meet the needs of all types of households, with particular emphasis upon housing to meet the needs of Township residents who are aging. The recommended changes include encouraging new development in areas where it can help to fund needed sewage and/or water services, such as in Treichlers.</p>	H	Con- tinuous	PC, Super., Staff
<p>L.3. Promote Clustering/Open Space Development in selected areas in new residential development, after updating standards to make sure that the open spaces serve valuable purposes. This involves permanent preservation of open space that serves a valuable public purpose, in return for flexibility in lot dimensions. Update standards to make sure the open spaces serve valuable public purposes and will be attractively landscaped. Promote open space to be provided as a buffer between homes and active farms, or between homes and intensive businesses.</p>	H	Con- tinuous	PC, Super., Staff
<p>L.4. Allow for a compatible mix of uses and housing types in and round the older villages. Seek that most new commercial buildings be built close to the street, with most parking to the side or rear of buildings, to maintain a village character.</p>	H	Con- tinuous	PC, Super., Staff
<p>L.5. Cooperate with other agencies to improve the condition of older housing and to increase home ownership rates.</p>	M	Con- tinuous	Co. DCED, Super., PC, Staff
<p>L.6. Promote an upgrading of manufactured/mobile homes within manufactured/home parks to improve resident safety and to generate additional tax revenue. This should include flexibility in development regulations so that older units can be replaced with newer units, which are typically wider and longer.</p>	M	Con- tinuous	Sup., PC, property- owners
<p>L.7. Promote public interest and awareness in historic preservation. Encourage rehabilitation of older buildings to maintain their character. Allow new uses in old barns, to encourage their upkeep.</p>	L	Con- tinuous	Hist. Soc., PC.

AGRICULTURAL AND NATURAL FEATURES CONSERVATION PLAN

Recommended Strategy	Priority. H = High M = Medium L = Low	Timing	Prime Respon- sibilities
N.1. Encourage additional property owners to apply to funding to have their land be permanently preserved.	H	Con- tinuous	Ag. Pres., Sup.
N.2. Assist in making agriculture more financially viable , such as allowing supplemental uses on farms and promoting retail farm stands. Seek to have new homes be set back as far as reasonable from active farms, and to avoid planting trees that would interfere with farm equipment.	H	Con- tinuous	PC, Sup.
N.3. Carefully manage stormwater and other water resources to improve water quality, promote groundwater recharge, and comply with Federal MS4 requirements.	H	Con- tinuous	Staff, Super., PC, Con. Dis., property owners
N.4. Minimize the disturbance of steeply sloped lands , including reviewing development regulations that protect them.	M	Con- tinuous	PC, Super., Staff
N.5. Carefully manage floodprone areas and preserve wetlands.	M	Con- tinuous	Staff, Super., PC, Con. Dis., property owners
N.6. Improve the creeks as scenic and possible recreational assets. Maintain building and paving setbacks from streams to protect water quality and fishing habitats. Encourage landowners to plant and maintain native vegetation and native trees along creeks.	M	Short- range	Staff, Super., PC
N.5. Promote additional tree plantings. Minimize unnecessary removal of trees during construction. Maintain reasonable regulations to allow forestry in a responsible manner.	M	Con- tinuous	PC, Super., Staff

COMMUNITY FACILITIES AND SERVICES PLAN

Recommended Strategy	Priority. H = High M = Medium L = Low	Timing	Prime Responsi- bilities (see abbre- viations)
<p>C.1. Continue to provide excellent parks and recreation facilities. Seek funding to improve existing parks to meet a wide variety of recreational needs and to add selected parkland. Discuss opportunities with Walnutport Borough of possible joint use of land they own adjacent to Bryfoggle Park. Bryfoggle Park has limited room for parking, and the Walnutport land might even be suitable for a recreation building to provide programs to the two municipalities. Joint municipal applications to the State for recreation improvements are more likely to receive funding.</p>	H	Con- tinuous	Rec. Com., Lehigh Twp. Athletic Assoc., Super., Donors, PA DCNR, Walnutport
<p>C.2. Seek to extend trail systems within and adjacent to Township Parks and the Elementary School to improve bicycling and pedestrian access. Trails often have the highest participation rate of any type of recreation facility. Trails are also valuable to connect residential areas to parks, and to provide interesting loops. There should also be additional trail links to the Lehigh Canal towpath and the D&L trail.</p>	M	Con- tinuous	Rec. Com., Delaware and Lehigh Corridor Comm., Sup., PC, Adj. Mun.
<p>C.3. Continue to provide high-quality recreation programs to persons with a wide range of interests, ages and abilities. Consider joint or shared programs with neighboring municipalities to allow wider offerings. Consider possible involvement of the regional YMCA in offering additional programs.</p>	M	Con- tinuous	Rec. Com., Lehigh Twp. Athletic Assoc., Sup., Adj. Mun.
<p>C.4. Work with the School District to coordinate plans for growth and recreation.</p>	M	Con- tinuous	Staff, Rec. Com., School District
<p>C.5. Continue to provide high-quality police protection services.</p>	H	Mid- range	Police, Super., Staff.
<p>C.6. Continue to provide high-quality fire protection and emergency medical services (EMS), with cooperation with neighboring companies.</p>	H	Con- tinuous	Fire and EMS providers, Super., Staff, Co. Emerg. Mgt.
<p>C.7. Ensure that a high quality water supply continues to be available. Promote the extension of public water service to areas with failing septic systems or where it would promote new business development.</p>	H	Con- tinuous	Twp. Authority, Twp. Engineer
<p>C.8. Consider whether additional wastewater treatment allocation should be sought from Slatington for future growth adjacent to Walnutport (such as along W. Mountain View Dr.). Continue work to reduce inflow and infiltration into the wastewater system. Over the long-run, consider providing central sewage service to Treichlers, with the intent that some of the capital costs could be funded by an adjacent developer. Continue work to install an upgraded treatment plant in Pennsville.</p>	M	Con- tinuous	Twp. Authority, Super, developers.

Recommended Strategy	Priority. H = High M = Medium L = Low	Timing	Prime Responsibilities (see abbreviations)
C.9. Work to coordinate road and utility improvements in advance, including letting utilities and the Township Authority know the schedule of road paving projects as far in advance as possible.	H	Continuous	Staff, Super.
C.10. Continue to implement storm water management improvements, including working to add substantial plantings along creek corridors to meet federal requirements.	H	Short-range	Super., Staff

TRANSPORTATION PLAN

Recommended Strategy	Priority. H = High M = Medium L = Low	Timing	Prime Responsibilities (see abbreviations)
T.1. Manage streets according to their functional classifications.	M	Continuous	PC, PennDOT, LVPC
T.2. Continue to use the Township’s Traffic Impact Fee system to fund needed road improvements. Also, consider an amendment to the Subdivision and Land Development Ordinance to allow developers an option of paying a road fee in lieu of constructing certain road and curb improvements that otherwise would be required.	M	Continuous	Super., PC, Twp. Engineer
T.3. Work with LVPC/LVTS and PennDOT to seek funding to complete cost-effective road improvements. Work with adjacent property-owners to seek needed right-of-way for improvements, which greatly simplifies the process of improving a state road. Require developers to improve immediately abutting road segments, and work with PennDOT to coordinate needed off-site improvements when a PennDOT permit is needed.	H	Continuous	Staff, Super., PennDOT, LVPC/LVTS
T.4. Improve pedestrian and bicycle access, such as by extending trails or widening shoulders near parks and schools.	H	Continuous	Staff, Super., PennDOT
T.6. Seek improved opportunities for public transit, such as a flexible route system. Seek additional bus passenger shelters along any route, which are typically funded by allowing an advertising sign.	M	Continuous	LANTA, Super.
T.8. Seek commuter carpool parking areas, particularly if a parking lot has extra space, such as at the former K-Mart.	M	Continuous	Property-owners, PennDOT, LVPC

PUTTING THIS PLAN INTO ACTION

Recommended Strategy	Priority. H = High M = Medium L = Low	Timing	Prime Responsibilities (see abbreviations)
A.1. Update the Zoning Ordinance to carry out this Plan.	H	Short-range	PC, Super., Staff
A.2. Update the Subdivision and Land Development Ordinance (SALDO).	M	Short-range	PC, Super., Staff
A.3. Consider enacting portions of the Property Maintenance Code, and target fees and fines to repeat offenders.	M	Continuous	Staff, Super
A.4. Consider adopting an "Official Map" to seek to reserve land that is expected to be needed to improve existing intersections or other public improvements.	M	Short-range	PC, Super., Staff
A.5. Plan for major needed capital improvements, such as stormwater projects to meet federal requirements.	H	Continuous	Staff, Super., LVPC
A.6. Seek additional grants to meet community needs, while paying close attention to upcoming submission deadlines.	M	Continuous	Staff, Co. DCED, State agencies
A.7. Increase inter-governmental cooperation efforts, including holding periodic joint meetings with other municipalities and working through a Council of Governments.	M	Continuous	Staff, Super., PC, Adj. Mun.

APPENDIX

A. COUNTY COMPREHENSIVE PLAN

FutureLV is the Comprehensive Plan for Lehigh and Northampton Counties. The Plan was developed by the Lehigh Valley Planning Commission to provide a policy framework for land use, development and conservation decisions in the region.

The southeastern quadrant of the Township is within the Farmland Preservation category, which the emphasis is intended to be placed upon agricultural preservation, with limited amounts of non-agricultural development. The Danielsville area is shown as a Development Area, where various types of residential and business development are appropriate. The areas surrounding Walnutport and Danielsville are shown as Preservation Buffer areas, that may be suitable for development depending upon an analysis of the characteristics of the sites. Where development is not suitable, the Plan recommends natural resource conservation and farmland preservation in the Preservation Buffer areas. The bulk of Lehigh Township is shown in the Exurban category, which is intended to provide for agricultural uses and rural uses. The Plan states that "Housing in or adjacent to rural crossroads villages or at low densities is also compatible" in the Exurban areas

B. DEMOGRAPHICS OF LEHIGH TOWNSHIP

The following section contains data regarding population, housing, income, education, and selected economic data for Lehigh Township residents. In many cases, data for Lehigh Township is compared to Northampton County and Pennsylvania. Unless otherwise indicated, all 2000 and 2010 data are from the U.S. Census, and more recent data are estimates from the Census Bureau's annual American Community Survey (ACS).

POPULATION

The US Census Bureau reports the 2020 population of Lehigh Township to be 10,774, which was a 2.4 percent increase from the 2010 census. Northampton County as a whole experienced a higher growth rate of 5.1 percent during that decade (Table A-1).

Table A-1
Total Population, 2000–2020

	Total Population			Change 2010-2020	
	2000	2010	2020	Number	Percent
Lehigh Township	9,728	10,526	10,774	248	2.4%
Northampton County	267,066	297,735	312,951	15,216	5.1%

Source: U. S. Census Bureau

Group quarters are places where people live or stay in a group living arrangement which are owned or managed by an entity or organization providing housing and/or services for the residents. Group quarters are not typical household-type living arrangements. Services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other. Group quarters include such places as college residence halls, residential treatment centers, skilled-nursing facilities, group homes, military barracks, correctional facilities, and workers’ dormitories.

Information about the population in group quarters in the American Community Survey is only given at the state level. In 2018, the ACS 5-year estimates reported that 3.3 percent of Pennsylvania’s population lived in group quarters. The 2010 decennial census reported group quarters populations of 0.1 percent for Lehigh Township, 3.6 percent for Northampton County, and 3.3 percent for Pennsylvania.

The Census reported that the senior population of Lehigh Township grew faster than in both Northampton County and Pennsylvania. Township residents age 65 and older increased by 25.0 percent from 2010 to 2018 compared to 21.9 percent for the whole of Northampton County and 15.6 percent for Pennsylvania (Table A-2).

Table A-2
Population Age 65+, 2000–2018

	Population, Age 65+				
	Population			Change 2010-2018	
	2000	2010	2018	Number	Percent
Lehigh Township	1,335	1,634	2,042	408	25.0%
Northampton County	42,030	45,064	54,951	9,887	21.9%
Pennsylvania	1,919,165	1,929,744	2,229,861	300,117	15.6%

Source: U. S. Census Bureau

The median age is the number at which 50.0 percent of persons or households are older and 50.0 percent are younger. Based on median age, the population of Lehigh Township is older than both Northampton County and Pennsylvania (Table A-3). Furthermore, also based on median age, the population as a whole in all three geographies is aging.

From 2010 to 2018, the Lehigh Township population of African-American and other/mixed races decreased. The corresponding populations in Northampton County increased over the same

Table A-3
Median Age, 2000–2018

	Median Age (Years)			Change, 2010-2018	
	2000	2010	2018	Number	Percent
Lehigh Township	40.8	45.8	46.5	0.7	1.5%
Northampton County	38.5	40.2	42.1	1.9	4.5%
Pennsylvania	38.0	39.8	40.7	0.9	2.2%

Source: U. S. Census Bureau

period (Table A–4). Also from 2010–2018, the number of residents reporting themselves as Latino or Hispanic increased in both Lehigh Township and Northampton County. The two groups may overlap.

Table A-4
Population by Race and Ethnicity, 2010-2018

	Race												Latino or Hispanic			
	White				African-American				Other/Mixed							
	Number		Est. Change, 2010–2018		Number		Est. Change, 2010–2018		Number		Est. Change, 2010–2018		Number		Est. Change, 2010–2018	
	2010	2018	No.	Pct.	2010	2018	No.	Pct.	2010	2018	No.	Pct.	2010	2018	No.	Pct.
Lehigh Twp.	10,271	10,327	56	0.5%	7	0	(7)	(100.0)	194	105	(89)	(45.9)%	68	289	221	325.0%
Northampton Co.	259,359	259,902	543	0.2%	13,467	16,649	3,182	23.6%	24,710	25,423	713	2.9%	28,720	38,717	9,997	34.8%

NOTE: The significant increase in Latino-Hispanic residents reported for Lehigh Township in Table A–4 may be the result of sampling in the data sources.

Source: U. S. Census Bureau

The Lehigh Valley Planning Commission (LVPC) has prepared population projections for each of the municipalities in Lehigh and Northampton Counties. If the projections hold true, the population of Lehigh Township would grow to 12,451 by 2040, an increase of 16 percent (Table A–5). During the same period, LVPC projects the population of Northampton County to grow by 19 percent.

**Table A-5
Population Projections**

	Population				Change, 2020–2040	
	2010 Census	2020 Census	2030 Projection	2040 Projection	Number	Percent
Lehigh Township	10,526	10,774	11,833	12,451	1,677	15.6%
Northampton County	297,735	312,951	347,494	372,793	59,842	19.1%

Source: U. S. Census Bureau, LVPC

HOUSING

The total number of housing units in Lehigh Township decreased by 4.0 percent from 2010 to 2018, according to U. S. Census data (Table A–6). During the same period, total housing units in Northampton County increased by 16,718 units (13.9 percent).

**Table A–6
Total Housing Units, 2000–2018**

	Total Housing Units			Change, 2010–2018	
	2000	2010	2018	Number	Percent
Lehigh Township	3,816	4,362	4,186	(176)	(4.0) %
Northampton County	106,710	120,363	123,428	16,718	13.9 %

Sources: U. S. Census Bureau

Households are housing units that are occupied, as opposed to vacant. From 2010 to 2018, the number of households in Lehigh Township declined slightly, while households in Northampton County increased slightly (Table A–7).

Questions about the types of housing units were not asked by the Census in 2010. Therefore, numbers of housing units in various types of structures is only reported in the ACS as estimates (Table A–8). The vast majority of units in both Lehigh Township and Northampton County are single-family structures. However, eight out of ten of the single-family units in Lehigh Township are detached structures, while less than 60 percent of the single-family units in the County are detached. In addition, almost 14 percent of homes in the Township are mobile homes, compared to only 2.2 percent of units in Northampton County.

Table A-7
Households (Occupied Housing Units)
Lehigh Township and Northampton County, 2000-2018

	Households			Change, 2010-2018	
	2000	2010	2018	Number	Percent
Lehigh Township	3,680	4,159	4,054	(105)	(2.6) %
Northampton County	101,541	113,565	114,123	558	0.5 %

Sources: U. S. Census Bureau

Table A-8
Units in Structure
Lehigh Township and Northampton County, Estimated 2018

Units in Structure	Lehigh Township		Northampton County	
	Number	Percent	Number	Percent
1, detached	3,361	80.3%	72,757	59.3%
1, attached	121	2.9%	24,394	19.9%
2	43	1.0%	5,706	4.6%
3-4	89	2.1%	4,684	3.8%
5-9	0	0.0%	3,855	3.1%
10-19	0	0.0%	2,612	2.1%
20 or more	0	0.0%	6,009	4.9%
Mobile home	572	13.7%	2,761	2.2%
Boat, RV, van, etc.	0	0.0%	84	0.1%
TOTAL	4,186	100.0%	122,862	100.0%

Source: U. S. Census Bureau

According to the 2018 ACS, Lehigh Township had a higher rate of owner-occupancy than both Northampton County and Pennsylvania (Table A-9). In Lehigh Township, almost nine out of 10 households are owner-occupied.

Table A-9
Housing Tenure
Lehigh Township, Northampton County, Pennsylvania, Estimated 2018

	Units		Percent	
	Owner-Occupied	Renter-Occupied	Owner-Occupied	Renter-Occupied
Lehigh Township	3,628	428	89.4%	10.6%
Northampton County	81,833	32,290	71.7%	28.3%
Pennsylvania	3,467,467	1,557,665	69.0%	31.0%

Source: U. S. Census Bureau

EMPLOYMENT

LVPC also prepares employment projections for two-county Lehigh Valley region. According to the LVPC projections, employment in Lehigh Township is expected to increase to 2,800 jobs by 2040 (Table A-10) – an increase of 68.1 percent from 2010 levels. In contrast, employment in Northampton County is projected to grow by only 32.7 percent by 2040.

Table A-10
Employment Projections – 2010–2040

	Employment				Change, 2010–2040	
	2010	2020	2030	2040	Number	Percent
Lehigh Township	1,666	2,287	2,594	2,800	1,134	68.1%
Northampton County	129,611	152,811	164,275	171,984	42,373	32.7%

Source: LVPC

Employment can also be described using data from the Census Bureau, which collects economic data on topics such as workers by occupation and workers by industry. Compared to both Northampton County and Pennsylvania, Lehigh Township residents have a higher share of jobs in sales/office and natural resources/construction/maintenance occupations. Township residents have a lower percentage of jobs in management/business/science/ arts and service occupations (Table A-11).

Table A-11
Number of Workers by Occupation, Age 16 and Over, 2018

Occupation	Lehigh Twp.	Northampton Co.	Pennsylvania
Civilian employed population, age 16 and over	100.0%	100.0%	100.0%
Management, business, science, arts	30.5%	35.6%	38.2%
Service	14.4%	17.3%	17.4%
Sales and office	26.7%	23.4%	21.7%
Natural resources, construction, maintenance	12.9%	8.2%	8.2%
Production, transportation, material moving	15.5%	15.5%	14.5%

Source: U. S. Census, ACS, 2014–2018 five-year estimates

Workers (or jobs) by industry is another descriptive measure of economic activity (Table A-12). Compared to Northampton County and Pennsylvania, a higher percentage of Lehigh Township residents are employed in the following industries:

- Construction,
- Manufacturing,
- Wholesale trade,
- Transportation, warehousing, utilities, and
- Other services, except public administration.

Conversely, the Township has a lower percentage of residents than either the County or the State who are employed in the following industries:

- Agriculture, forestry, fishing, hunting, and mining,
- Retail trade,
- Information,
- Finance, insurance, real estate, rental, leasing,
- Professional, scientific, management, administration, and waste management services,
- Educational services, health care, social assistance,
- Arts, entertainment, recreation, accommodation, food services, and
- Public administration.

TRAVEL TO WORK

The American Community Survey estimates that Lehigh Township had an average of 5,073 workers age 16 and over in from 2014 to 2018 (Table A-13). Of this total, 89.7 percent drove to work alone, compared to 82.7 percent for Northampton County. Other observations about travel to work in Lehigh Township include:

Table A-12
Number of Workers by Industry, Age 16 and Over, 2018

Economic Sector	Lehigh Township		Northampton County		Pennsylvania	
	Number	Percent	Number	Percent	Number	Percent
Civilian employed population, age 16 and older	5,196	100.0%	148,960	100.0%	6,151,998	100.0%
Agriculture, forestry, fishing, hunting, and mining	18	0.3%	950	0.6%	83,646	1.4%
Construction	439	8.4%	8,622	5.8%	357,563	5.8%
Manufacturing	904	17.5%	20,829	14.0%	727,961	11.8%
Wholesale trade	282	5.4%	4,444	3.0%	169,187	2.7%
Retail trade	573	11.0%	17,698	11.9%	697,501	11.3%
Transportation, warehousing, utilities	331	6.4%	8,523	5.7%	336,972	5.5%
Information	75	1.4%	3,240	2.2%	102,804	1.7%
Finance, insurance, real estate, rental, leasing	269	5.2%	8,660	5.8%	397,588	6.5%
Professional, scientific, management, admin., and waste mgt. services	340	6.5%	13,224	8.9%	636,276	10.3%
Educational services, health care, social assistance	1,153	22.3%	38,295	25.7%	1,590,166	25.9%
Arts, entertainment, recreation, accommodation, food services	402	7.7%	13,452	9.0%	516,476	8.4%
Other services, except public administration	248	4.8%	6,213	4.2%	288,748	4.7%
Public administration	162	3.1%	4,810	3.2%	247,110	4.0%

Source: U.S. Census, ACS, 2014–2018, five-year estimates

- The number and percentage of workers traveling to work in cars, trucks, and vans — both alone and in carpools — declined slightly from 2010 to 2018 in Lehigh Township.
- The number and percentage of workers traveling to work on public transportation (excluding taxicabs) increased from 2010 to 2018, both in Lehigh Township and in Northampton County.

**Table A-13
Travel to Work – 2010, 2018**

Means of Travel to Work	Northampton County				Lehigh Township			
	2010		2018		2010		2018	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	137,388	100.0%	146,233	100.0%	5,537	100.0%	5,073	100.0%
Car, truck, or van - drove alone	113,483	82.6%	120,935	82.7%	4,812	86.9%	4,550	89.7%
Car, truck, or van - carpoled	12,228	8.9%	9,944	6.8%	448	8.1%	320	6.3%
Public transportation (excluding cab)	1,923	1.4%	2,778	1.9%	22	0.4%	30	0.6%
Cab, motorcycle, bicycle, walked, or other	4,396	3.2%	6,142	4.2%	78	1.4%	51	1.0%
Worked at home	5,358	3.9%	6,434	4.4%	177	3.2%	122	2.4%

Source: U. S. Census Bureau,

The mean (average) travel time to work in 2010 was 27.5 minutes for Northampton County workers, compared to a slightly higher 28.0 minutes in 2018. The mean travel time to work for Lehigh Township workers was 33.1 minutes in 2018, or 18.2% higher than the countywide figure.

EDUCATION

According to the American Community Survey 2014–2018 5-Year Estimates, Lehigh Township had a higher percentage of high school graduates than either Northampton County or Pennsylvania (Table A-14). The Township also had a higher percentage of college graduates age 18-24 than in Northampton County as a whole. Among the population age 25 and older, Lehigh Township had a lower percentage of residents with college degrees than both Northampton County and Pennsylvania.

Table A-14
Percent of Population by Educational Attainment, 2018

	Lehigh Township	Northampton County	Pennsylvania
Population, age 18–24			
Less than high school graduate	7.7%	7.9%	11.9%
High school graduate (incl. equivalency)	45.2%	30.1%	33.5%
Some college or associate’s degree	37.1%	52.3%	42.0%
Bachelor’s degree or higher	10.1%	9.6%	12.6%
Population, 25 years and older			
Less than 9 th grade	1.8%	3.1%	3.3%
9 th to 12 th grade, no diploma	7.9%	6.3%	6.5%
High school graduate (incl. equivalency)	39.2%	34.8%	35.1%
Some college, no degree	17.3%	17.3%	16.0%
Associate’s degree	8.2%	9.2%	8.3%
Bachelor’s degree	19.0%	18.5%	18.6%
Graduate or professional degree	6.5%	10.7%	12.1%
High school graduate or higher	90.3%	90.6%	90.2%
Bachelor’s degree or higher	25.5%	29.2%	30.8%

Source: U. S. Census, ACS 5-year estimates

INCOME

The most common measure of income is the median. By definition, exactly 50.0 percent of residents or households earn an annual income above the median, and 50.0 percent earn below the median. From 2010 to 2018, incomes in Lehigh Township increased by 5.0 percent (Table A-15). Income in Lehigh Township increased much faster than in Northampton County and Pennsylvania from 2000 to 2010. However, income in the Township grew at a slower rate than in the County and State from 2010 to 2018.

The 2006–2010 ACS five-year estimates indicated that 1.3 percent of Lehigh Township families had incomes below the poverty level, compared to 6.3 percent of families in County. Eight years later, the ACS estimated that 4.4 percent of Township families lived below the poverty line, compared to 6.4 percent of families in the County.

Table A-15
Median Annual Household Income, 2000–2018
Lehigh Township, Northampton County, and Pennsylvania

	Median Annual Household Income (dollars)			Change			
				2000–2010		2010–2018	
	2000	2010	2018	Number	Percent	Number	Percent
Lehigh Twp.	\$48,263	\$67,698	\$71,064	\$19,435	40.3%	\$3,366	5.0%
Northampton Co.	\$45,234	\$58,762	\$67,565	\$13,528	20.7%	\$8,803	15.0%
Pennsylvania	\$40,106	\$50,398	\$59,445	\$10,292	18.1%	\$9,047	18.0%

Notes: Data for 2000 is based on the decennial census, in which a 100% response is reported. However, questions about income were not asked in the 2010 census. The Census' annual American Community Survey (ACS) program asks questions based on a sampling, which may have a higher margin of error than decennial censuses.

Sources: 2000: U. S. Census, 2000 decennial census (Summary File 3)
2010, 2018: U. S. Census, American Community Survey 5-year estimates

C. Historic Resources of Lehigh Township

The Lehigh Township Historical Society (LTHS) website (www.lehightownshiphistoricalsociety.org) is still under construction. The site has a map of the Township from 1874. The Township is composed of five distinct villages: Berlinsville, Cherryville, Danielsville, Pennsville, and Treichlers.

The LTHS website also has information about the following historic sites in the Township:

- Lehigh Township Historical Centre (formerly known as the Trading Post restaurant as part of Indian Trail Park — rebuilt and reopened in 2007)
- St. Paul's One-Room Schoolhouse at 780 Almond Road in Walnutport, also known as the Indianland School, was built in 1865 at the end of the Civil War.
- Seven cemeteries:
 - Berlinsville Cemetery, near 4686 Poplar Dr.
 - Cherryville Cemetery, near 4142 Lehigh Dr.
 - Danielsville Union Cemetery, 1067 Blue Mountain Dr.
 - Indianland/Fairview Cemetery, 755 Almond Rd.
 - Indianland/St. Paul's UCC "Old Cemetery", Maple Drive near the intersection with Almond Rd.
 - Pennsville Cemetery - set back from the road at 840 Walnut Drive
 - St. Nicholas Catholic Cemetery - behind the church at 4112 West Mountain View Dr.

D. Compatibility with Zoning of Adjacent Municipalities

Lehigh Township is bordered by six municipalities, which are (clockwise from north):

- Lower Towamensing Township (Carbon County), over the Blue Mountain,
- Moore Township (Northampton County),
- Allen Township (Northampton County),
- North Whitehall Township (Lehigh County), across the Lehigh River,
- Washington Township (Lehigh County), across the Lehigh River, and
- Walnutport Borough (Northampton County).

The following information identifies the zoning district and significant zoning characteristics for areas immediately surrounding Lehigh Township.

Lower Towamensing Township

The Blue Mountain provides a substantial border with Lower Towamensing Township, particularly since much of the mountain is in public ownership, and the steep slopes greatly limit the development potential along the border. On the Lower Towamensing side of the mountain, land is zoned R-P Rural Preservation and R-C Rural Conservation. The R-P Rural Preservation district is mostly undeveloped and that is wooded and steeply sloped and requires a large lot size. The R-C Rural Conservation district includes the Blue Mountain Resort, and allows the ski resort, a hotel and associated residential uses.

Moore Township

Moore Township adjoins Lehigh Township for the entire length of Lehigh Township's eastern border. Moving southward from the Appalachian Trail atop Blue Mountain, Moore Township zoning districts adjoining Lehigh Township are:

- BMC Blue Mountain Conservation — The minimum lot size is 10 acres. Uses in the BMC, Appalachian Trail Overlay, and LC districts are very limited to preserve environmental characteristics.
- Appalachian Trail Overlay District — The overlay district provides additional protection for the Appalachian Trail itself.
- LC Limited Conservation — The LC district includes the 100-year floodplain at the base of Blue Mountain, extending southward to Mountain View Drive.
- RA Rural Agricultural — The RA district extends southward to the floodplain of Hokendauqua Creek, and has a one acre minimum for homes.
- LC Limited Conservation — Another LC district is the 100-year floodplain of Hokendauqua Creek, and has a three acre minimum for homes.
- RA Rural Agricultural — Another RA district extends southward to the VC Village Commercial district of Pennsville.

- VC Village Commercial — The VC Village Commercial district denotes the Village of Pennsville and has a one acre minimum lot size for homes in most cases.
- RA Rural Agricultural — The land from the VC Village Commercial district southward to the Lehigh Township/Moore Township line is also zoned RA Rural Agricultural.

Allen Township

The entire area adjacent to Lehigh Township is zoned R Rural, with the exception of one large parcel between Valley Road and Farmhill Road which is zoned A Agricultural. Selected uses permitted by right in the R Rural district include:

- single-family detached dwellings,
- places of worship,
- cemeteries,
- horse riding academy,
- flea market,
- vineyard and a variety of agricultural uses,
- a variety of farming uses, and
- bed and breakfast inns.

Uses in the A Agricultural district are very similar to those in the R Rural district, except that additional uses need conditional use approval. Minimum lot sizes in the A Agricultural district are:

- ten acres for farming and animal husbandry,
- six acres for kennels and stables,
- one acre minimum/two acre maximum for single-family detached dwellings, with a maximum of one dwelling per 30 acres, and
- one acre for all other uses,

North Whitehall Township

Across the Lehigh River from Lehigh Township, the entire border within North Whitehall is zoned CR Conservation Residential. Minimum lot size for all lots in the CR district is two acres. The main uses allowed in the CR district are agricultural uses and single-family detached dwellings. In addition, golf courses and plant nurseries are allowed.

Washington Township

Washington Township is separated from Lehigh Township by the Lehigh River. From the border with North Whitehall Township to the border with the Borough of Walnutport, zoning districts in Washington Township which border Lehigh Township are R Rural and RES Residential.

The permitted by right in the R Rural district include agriculture, animal husbandry, and single-family detached dwellings. Most uses require a one acre minimum lot size, except larger acreages are required for many livestock and animal uses.

The RES Residential district allows single-family detached dwellings, single-family semi-detached (twin) dwellings, single-family attached dwellings (townhomes), and multi-family dwellings. The minimum lot sizes in the Residential district vary by use, including

- 10,000 square feet for single-family detached dwelling,
- 6,000 square feet for single-family semi-detached dwelling,
- 2,800 square feet for single family attached dwelling, and
- One acre for multi-family dwellings.

Walnutport Borough

Lehigh Township borders Walnutport Borough on three sides. From the southeast corner of the Borough, Township, and River moving northward, the Borough zoning districts are:

- RC Recreation Conservation – Uses permitted by right include Cemetery, Publicly-owned and operated recreation, Crop farming, and Nature Preserves. A minimum lot size is not provided.
- R-1 Low Density Residential – This district mainly allows single family detached dwellings, with a minimum lot size of 12,000 square feet.
- GC General Commercial – This district allows a wide range of commercial uses, plus single-family detached or twin dwellings. Age-restricted dwelling units in the GC district shall have a minimum lot size of 2,400 square feet per unit. Other allowed uses require a minimum lot of 3,000 square feet.
- TCB Town Commercial/Business – This district allows for most types of commercial uses, plus most types of housing. The minimum lot size, per unit, in the TCB district is, generally:
 - 5,000 square feet for single-family detached units,
 - 3,000 square feet for twins,
 - 3,000 square feet for end unit townhouses,
 - 3,500 square feet for other townhouses,
 - 3,000 square feet for apartments that are unrestricted, and
 - 2,400 square feet for apartments restricted by age (55 and older) or physical disability,
 - 8,000 square feet for most other uses.

The remaining segments of the Walnutport/Lehigh border moving northward are zoned GC, R-1, and RC, respectively

Washington Township

North of Walnutport Borough, two zoning districts in Washington Township (Lehigh County) border Lehigh Township, across the Lehigh River. Moving northward, the districts are GI General Industrial and BM Blue Mountain Preservation.

- GI General Industrial – The GI General Industrial district extends from the Borough of Slatington across the Lehigh River from Lehigh Township northward to the base of Blue Mountain. The district mainly allows industrial uses, offices, agricultural uses, wholesale sales and auto repair, with a two acre lot size.
- BM Blue Mountain Preservation – This district includes the Blue Mountain and mainly allows single family detached houses, agricultural uses, and greenhouses with a 10 acre minimum lot size.