CHAPTER 4 - NORTHAMPTON TOWNSHIP REGIONAL SETTING

REGIONAL SETTING

Northampton Township is located in southwest portion of central Bucks County and is bordered by nine municipalities including Ivyland Borough, Langhorne Borough, Lower Southampton Township, Middletown Township, Newtown Township, Upper Southampton Township, Warminster Township, Warwick Township, and Wrightstown Township.

New Britain Upper orough Buckingham Doylestown Makefield Township Township Township Wrightstown Townshi Township Newtown Warwick Yardley Township Warrington Township Lower rough Township Makefield Township Northampton Warminster Township Township Middletown Township Falls Township Upper Southampton Township Lower **Montgomery County** Southampton Township Bristol Township Bensalem BCPC 2019 Northampton Township **Regional Setting**

MAP 2 - NORTHAMPTON TOWNSHIP REGIONAL SETTING

LAND USE

Approximately 24 square miles in size (15,355 acres), land use in Northampton Township is predominately a mix of residential uses (56.9%) and Parks, Recreation & Protected Open Space uses (19.4%). Agriculture accounts for 6.2% percent of land use in the township.

TABLE 3 - LAND USE CHARACTERISTICS, 2012

Land Use Category	Acreage	Percent
Single Family Residential	7,140	46.5%
Multifamily Residential	148	1.0%
Rural Residential	1,440	9.4%
Agricultural	946	6.2%
Industrial	275	1.8%
Government & Institutional	730	4.8%
Parks, Recreation & Protected Open Space	2,985	19.4%
Commercial	340	2.2%
Transportation & Utilites	817	5.3%
Vacant	534	3.5%
Total	15,355	100%

DEMOGRAPHICS

Northampton Township's population as of 2017 was estimated to be 39,411. The population of the township tends to be slightly older than Bucks County with a median age of 45.8 years versus 43.6 years. This is partially attributable to a higher percentage of the population in the township being in the 45 - 64 age groups (32 percent) versus the county (30.9 percent).

The level of education attainment is also higher in Northampton Township versus Bucks County. Over half of the adult population (51.0 percent) in Northampton Township has a bachelor's degree or higher. This is in contrast to Bucks County where 39.4 percent have a bachelor's degree or higher.

Similarly, household income in the township is higher when compare to the rest of the county. 56 percent of Northampton Township households make over \$100,000 a year compared to the County at 40 percent.

Table 4 - Demographics, 2017

	Northampton Township		Bucks County	
	2017	Percent of		Percent
	2017	Total	2017	of Total
Total Population	39,411		626,486	
Under 5 years	1,808	4.60%	30,676	4.9%
5 - 9 years	2,366	6.00%	36,654	5.9%
10 - 14 years	2,533	6.40%	39,097	6.2%
15 - 19 years	2,746	7.00%	40,278	6.4%
20 - 24 years	2,532	6.40%	36,135	5.8%
25 - 35 years	2,998	7.60%	68,597	10.9%
35 - 44 years	4,475	11.40%	73,809	11.8%
45 - 54 years	6,492	16.50%	98,424	15.7%
55 - 64 years	6,116	15.50%	95,476	15.2%
65 years and over	7,345	18.60%	107,340	17.1%
Median Age	45.8		43.6	
Educational Attainment (Population over 25)				
Total population	27,426		443,646	
Less than high school	754	2.7%	27,962	6.3%
High school graduate	5,897	21.5%	130,201	29.3%
Some college, no degree	4,418	16.1%	76,095	17.2%
Associate's degree	2,284	8.3%	34,638	7.8%
Bachelor's degree	7,691	28.0%	104,639	23.6%
Graduate or professional degree	6,382	23.3%	70,111	15.8%
Household Income				
Total number of households	13,975		235,909	
Less than \$24,999	1,224	8.8%	29,749	12.6%
\$25,000 to \$34,999	666	4.8%	15,591	6.6%
\$35,000 to \$49,999	903	6.5%	24,352	10.3%
\$50,000 to \$74,999	1,736	12.4%	38,874	16.5%
\$75,000 to \$99,999	1,587	11.4%	31,171	13.2%
\$100,000 to \$199,999	5,147	36.8%	68,524	29.0%
\$200,000 or more	2,712	19.4%	27,648	11.7%

Source: American Community Survey

The population of 39,411 residents is spread across nearly 14,000 housing units. Northampton Township saw a modest increase in housing units over the past 17 years coupled with a slight population decline from 2010 to 2017. Despite economic downturns and changes in regional demographics Northampton Township has remained a stable community that has largely built it out its viable land for new housing development. However, given the township's proximity to major transportation corridors, and the quality of life it affords its residents, Northampton Township should remain an attractive place for future residents and development.

Trail networks benefit all age segments of the population but specifically are useful to individuals under the age of 19 and those over the age of 65. This is because those under the age of 19 usually have infrequent access to a car and may utilize a trail network to get to school, work, or other obligations. Also because these individuals tend to be more locally based, going to school, working and socializing locally, a fully developed trail network would go far in supporting these activities. This is opposed to individuals over the age of 65 that would opt to use the trail network as a way to run errands, stay active, save money or connect

with friends throughout the township. As individuals reach retirement age many consider practical ways to downsize and cut back on personal expenses, it is not unusual for a household to downsize to one car to cut back on expenses. Therefore a trail network would supplement aging household's mobility needs.

TABLE 5 - TARGET POPULATION GROWTH TRENDS

Target Population Growth Trends						
Category 2010 2017 Change Percent Change						
Under 19 years old	10,969	9,453	(1,516)	-13.8		
55 to 64 years old	5,723	6,116	393	6.9		
Over 65 years old	5,076	7,345	2,269	44.7		

Furthermore, the chart above indicates that Northampton Township has seen a large increase in individuals over the age of 65 and this trend is expected to continue into the 2020s. Critical to supporting these individuals would be a trail and bicycle facilities network that supplements the mobility needs of these aging individuals.

TABLE 6 - POPULATION AND HOUSING GROWTH

				2000 to 2010		2010 to 2017	
	2000	2010	2017		Percent		Percent
	2000	2010	2017	Change	Change	Change	Change
Population							
Northampton Township	39,384	39,726	39,411	342	0.9%	(315)	-0.8%
Bucks County	597,635	625,249	626,486	27,614	4.6%	1,237	0.2%
Housing Units							
Northampton Township	13,014	13,568	13,975	554	4.3%	407	3.0%
Bucks County	218,725	229,552	235,909	10,827	5.0%	6,357	2.8%

Source: U.S. Census Bureau, American Community Survey

A township-wide trail and bicycle facilities network would complement the existing roadway and parks and recreation assets by encouraging residents to take a safe and viable form of transportation through the township. This would open up new avenues of development for the township while creating a higher quality of life for current residents.

NATURAL FEATURES

As part of the planning process, the natural, man-made, and historic and cultural resources of the township were explored. Natural resource features including rivers and streams, riparian buffers, wetlands, floodplains, woodlands, topography and agricultural land were reviewed as the need to protect these features may limit the placement of trails in areas containing these features. Man-made resources such as roads and utilities were identified as these may provide right of way opportunities for trails. Other man-made resources including existing trails, parks and existing trails, as well as historic and cultural resources were inventoried as these resources serve as the destination points for the trails and bicycle facilities network.

Water Resources

Northampton Township is divided by several watersheds. A watershed consists of all the land and waterways that drain into the same main body of water. Smaller watersheds make up larger watersheds that combine with even larger watersheds. The drainage of water resources through a watershed includes both groundwater and surface water.

All watersheds within the township eventually drain to the Neshaminy Creek watershed which drains into the Delaware River. Areas located at the northern part of the township, Tyler State Park, and areas within and around it, drain directly into the Neshaminy Creek. Areas around the Churchville Reservoir in the southeastern portion of the township, including the sub-watersheds of Ironworks Creek and Pine Run, drain into the Mill Creek watershed, which then drains into the Neshaminy Creek. Lastly, the area in the southwestern part of the township drains into the Little Neshaminy Creek and on into the Neshaminy Creek.

The Churchville Reservoir is a 172 acre impoundment created by the damming of the Ironworks creek. The reservoir sits northeast of the Village of Holland and serves as an aquatic wildlife refuge for the Churchville County Park. Its primary function is to provide its owner, Aqua America Water Company, with supplemental water to the supply their treatment plant on the Neshaminy Creek in Middletown Township. The reservoir area is managed by Aqua America, Northampton Township, and Bucks County.

Topography

Northampton Township is a place of gently rolling hills, productive agricultural farmland, and relatively stable elevation. Outside of the areas immediately abutting the Neshaminy and Mill Creeks the elevation is not typically steeper than an 8 percent grade. As one approaches the Mill and Neshaminy Creeks the elevation grade can quickly approach 25 percent or greater, most notably around the Village of Holland and the area along the Neshaminy Creek across from Wrightstown Township. Topography has an influence on trail design in terms of the appropriate placement of trails. Trail development will take advantage of the gently rolling terrain where possible to create the most user-friendly and accessible routes possible. Trail design to help individuals safely traverse the steeper parts of the township will be developed when necessary.

Riparian Buffers

A riparian buffer zone is the normally vegetated or wooded area occurring along a streamside. Without the vegetative buffer, runoff from adjacent lawns more quickly enters the stream, exacerbating streambank erosion, increasing floodwaters during the flood cycle, and decreasing stream flows during the normal stream cycle. In addition, pesticides and herbicides used in lawn care and agricultural cultivation, as well as sediment from construction activities, are able to flow directly into the stream's surface water when it rains, reducing water quality. The provision of riparian buffers also create recreational opportunities.

Floodplains

Floodplains are relatively flat or low-lying areas adjacent to surface waters where flooding has occurred in the past and will likely occur again in the future. During periods of heavy rains and high stream flow, floodplains provide temporary storage for floodwaters, reducing flooding threats to adjacent areas. Floodplain soils or alluvial soils are eroded soils from previous floods that were deposited along the banks of stream or other watercourses. When developing trails in floodplains, buffer areas and wetland areas, caution needs to be exercised to help minimize disturbance and impact to these areas.

Woodlands

Woodland resources provide numerous benefits. They support wildlife habitat, provide recreational opportunities, provide diversity to the landscape, and have significant aesthetic value. They also moderate environmental conditions by anchoring soil and reducing erosion and sedimentation, and by providing shade to lower water temperature in streams which helps to maintain aquatic life. The vegetative cover softens the impact of falling rainwater, enables groundwater recharge, and reduces the volume and rate of stormwater runoff. Additionally, woodlands play a role in filtering air pollutants.

Agricultural Land

Despite a high amount of land consumption Northampton Township still has a large and well rooted agricultural sites, primarily within the northwestern portion of the township. The presence of these agricultural sites not only contributes to the local economy, but also provides scenic vistas and experiences.

Large areas of agricultural land in the township can be found in the following areas of the township:

- Along Almshouse Road between Hatboro Road, Old Jacksonville Road, and Sacketts Ford Road.
- Along 2nd Street Pike between Tapeworm Road and the Neshaminy Creek
- Along the Churchville Reservoir south of Churchville Lane between the Reservoir and Holland Road
- Within Tyler State Park along Stable Mill Road and Twining Ford Road

The Pennsylvania Agricultural Security Area Law (House Bill No. 43) and the provisions of Chapter 138e., Agricultural Conservation Easement Purchase Program, issued under the Pennsylvania Agricultural Security Area Law, specifies that agricultural restricted land preserved under the easement purchase program shall be used solely for agricultural production or other uses permitted by the act. This has implications for trail and bicycle facilities planning in that farms preserved using state funding for the easement cannot have trails placed on them. Farms which have not been preserved, or have been preserved without the use of state funding, are not subject to this limitation.

MAN-MADE FEATURES

Road Network

Northampton Township's transportation network is composed of a hierarchy of arterial, major and minor collector, and local access roads. Arterials are those streets that are designed to provide the highest level of mobility for large traffic volumes to regional businesses and employment centers. Access onto arterial streets is typically controlled because the proliferation of turning movements at individual driveways will degrade the function of an arterial street. Arterial streets in the township include:

- Bristol Road along the border with Upper Southampton Township, Warminster Township, and Ivyland Borough
- Hatboro Road from Bristol Road to Almshouse Road
- Rocksville Road to Holland Road to Almshouse Road
- Sacketts Ford Road from Hatboro Road through to Wrightstown Township

Major collector roads are designed to provide the link between arterial highways and local neighborhood streets. They are designed to carry moderate volumes of traffics uninterrupted flow. Major collectors include:

- Bridgetown Pike from Bristol Road to Playwicki Park
- Buck Road (PA 532) from Bristol Road through to Newtown Township
- Almshouse (PA 332) Road from Newtown Township through to Warwick Township
- Bustleton Pike from Bristol Road to 2nd Street Pike
- Second Street Pike(PA 232) from Bristol Road through to Wrightstown Township
- Jacksonville Road (PA 332) from Bristol Road to Almshouse Road

Generally, arterials and major collector roads are not suitable for on-road bicycling and/or pedestrian usage given their higher traffic volumes and vehicular speeds. However, in certain cases, there may be significant right of way available adjacent to the road to allow for the placement of trails or sidewalks in these areas. Specifically, portions of Almshouse Road, Bustleton Pike and Hatboro Road identified as arterial and major collector roads in the township have relatively low traffic volumes and often have posted speed limits of 25 - 35 miles per hour which would allow for the establishment of on-road bicycle facilities on these roads.

Utilities

Utility corridors often serve as the right of way for trails as the land within the utility corridor is typically restricted for future land development. This combined with the linear nature of trails, makes trails one of the very few compatible uses within utility corridors.

PECO owns and operates one high-tension transmission line that runs through the lower southeastern section of the township along the Norfolk Southern owned train line near the border of Northampton and Lower Southampton townships. Although PECO has shown a willingness to work with municipalities relative to the placement of trails within their corridors, the presence of the freight line, steep terrain, and streams within the corridor would present a challenge for the placement of trails within this utility corridor in the township.

Five Natural Gas Pipelines traverse the township. SUNOCO owns one of the lines and the Transcontinental Gas Pipe Company owns the other four. All lines run underground during their course through the township while traversing public and private lands via easements. The use of the corridors the pipeline create as trail pathways would require negotiating new trail easements with each property owner, which would be a lengthy process.

Trails

There are currently approximately 32.03 miles of existing trails in the township that form the beginnings of the proposed comprehensive trail and bicycle facilities network. These facilities include footpaths, shared use recreational trails, equestrian and hiking trails. More details on the existing facilities by each planning area is contained in the next Chapter.

TABLE 7 – EXISTING TRAILS

Area	Existing Trail	Type of Trail	Mileage
1	Tyler State Park Equestrian Trails	Equestrian	12.6
1	Northampton Recreation Center Site	Shared Use	0.8
1	Tyler Park Nature Trail	Hiking Trail	1.1
1	Cooper Trail/Mill Trail Cut Off	Hiking Trail	0.3
1	Fisherman's Parking Lot Trail	Hiking Trail	0.1
1	Stable Mill Trail	Shared Use	1.2
1	Red Oak Trail	Shared Use	0.6
1	Mill Dairy Trail	Shared Use	1.0
1	Wood Field Trail	Shared Use	0.5
1	Number 1 Lane Trail	Shared Use	1.2
1	College Park Trail	Shared Use	0.5
1	Dairy Hill Trail	Shared Use	1.9
1	White Pine Trail	Shared Use	0.5
1	Bridge Trail	Shared Use	0.4
2	Northampton Municipal Park Complex	Shared Use	3.3
2	Ivy Greene Run	Shared Use	0.2
3	Council Rock South Complex	Shared Use	2.5
3	Rock Way Towards Newtown	Shared Use	0.1
4	Rocksville Road to Hope Road	Shared Use	0.4
4	Bellwood Drive	Shared Use	0.1
4	Bridgetown Pike to the Neshaminy Creek	Hiking Trail	0.5
4	Holland Middle School Complex	Shared Use	0.2
5	Churchville Elementary Complex	Shared Use	0.3
5	Bustleton Pike to Hilltop Drive	Shared Use	0.0
5	Churchville Nature Center	Hiking Trail	1.7
Total Exis	sting Trails		32.0

Parks and Open Space

Northampton Township residents benefit from an abundance of parks and open space. Parks and recreation areas are important features which help to define an area and create a sense of community. Such areas provide the opportunity for individuals to get outdoors and interact with others as well as to be closer to nature.

Specific to trails and bicycle facilities, parks and open space areas are often among the primary destination points within the network. Providing trails and bicycling facilities that connect to these areas provides an opportunity for children to be able to bicycle to the local parks, and provides opportunities for close-to-home recreation.

Six local township parks, are supplemented by one county park and one state park to provide over 1,300 acres of permanently protected park and recreation land within the township. Table 6 provides an overview of park and recreation resources in the township.

TABLE 8 - PARKS AND OPEN SPACE RESOURCES

Park	Ownership	Acreage
Tyler State Park	Commonwealth of Pennsylvania	1,108.0
Churchville Nature Center* Northampton Recreation	Bucks County	65.0
Center	Northampton Township	61.8
Hampton Estates Park	Northampton Township	16.4
Big Meadow	Northampton Township	31.9
Pheasant Run	Northampton Township	19.5
Municipal Park Complex	Northampton Township	12.5
39 Acre Park(Proposed)	Northampton Township	39.0
		1,354

^{*} The Churchville Nature Center is a part of a 700 acre preserve, 65 acres of which are readily accessible to the public

Schools

Northampton Township is a part of the Council Rock School District which serves as the public education option for school age children residing within the township. In total, Council Rock School District educates upwards of 6,500 of the township's school age children grades kindergarten through 12. To accomplish this task the school district has 9 sites within Northampton Township, 8 of which are home to a fully functioning school. The one remaining site is the location of the former Richboro Middle School. Although the site is no longer home to a functional school it is still under the control of the School District. A select number of students attend Wrightstown Elementary in Wrightstown Township, and Newtown Middle School and Council Rock North in Newtown Township. Even though all three of the schools are a part of the public school network for Northampton Township they were not factored into this plan. Northampton is also home to 2 prominent regional Catholic schools, Saint Katharine Drexel Regional Catholic School serving grades kindergarten through 8 and Villa Joseph Marie All Girls Catholic High School serving grades 7 through 12.

A comprehensive trail network would ensure that over 6,500 students would have a safe alternative to busing or driving to school while providing a new way to connect to their larger community.

TABLE 9 - SCHOOLS AND ENROLLMENT

School	Grades Served	Approximate Enrollment*
Churchville Elementary	K to 6	550
Hillcrest Elementary	K to 6	500
Holland Elementary	K to 6	450
Maureen Welch Elementary	K to 6	550
Richboro Elementary	K to 6	350
Rolling Hills Elementary	K to 6	400
Holland Middle School	7 to 8	950
Council Rock South High School	9 to 12	2,000
Saint Katharine Drexel	K to 8	400
Villa Joseph Marie High School	7 to 12	400
		Total: 6,550

^{*}Students attending Council Rock Schools outside of Northampton are not included.

Commercial Areas

Northampton Township is home to two commercial areas that center around the historic Villages of Holland and Richboro. Holland is the smaller of the two and defined as the area extending down along Holland and Buck Roads from Rocksville Road to Elaine Drive. This area is home to a small office complex, a select number of bars and restaurants, small shops, a bank, a gas station and convenience retail. In addition to these types of features Richboro is home to several banks, gas stations, two large grocery store chains, fast food establishments, multiple bars and restaurants, and newly developed office and medical space. The Richboro commercial area is directly adjacent to the township municipal facilities and library, creating a sizable commercial market for these business, resulting in a much larger commercial area than Holland. In total, the Richboro Village area is defined as the commercial and institutional properties that run along Bustleton Road and Second Street Pike from the Richboro Middle School Site and Crossroads Plaza up to Manor Drive.

To guide the long term development of these commercial areas Northampton Township has recently adopted master plans for the Villages of Holland and Richboro.

The *Holland Village Master Plan* (2014) identifies multiple principles to craft a future vision for Holland. Three of the principles are advanced by the development of a trail network:

- "Design roadway improvements for all users—As improvements occur to the roadway system, the needs of pedestrians and bicyclists, as well as motorists, should be included."
- "Provide connectivity—Efforts should be made to provide pedestrian connections to each distinct area of the village."
- "Plan for the pedestrian—Walkability is key to the economic health of the village. With that in mind, a safe pedestrian environment should be included in all redevelopment plans for the village."

Similarly the *Richboro Village Master Plan* (2018) principle "Improve Mobility, Safety, and Access" describes several design principles and measures that will be accomplished by developing Northampton's trail network. The plan specifically proposes:

- Four trails to connect Richboro to the surrounding communities.
- Over a dozen proposed and potential pathways for sidewalks.
- Improvements to streetscapes, gateways to the town-center the foster safe travel for pedestrians and cyclist.
- Calm traffic and create a safe environment for all mobility needs.

A fully developed trail network, as laid out in this plan will not only connect residents to the Township's two commercial centers but increase the long term economic viability of the township for years to come.

The Council Rock School District also has six sites within the Township that provide additional recreational facilities including playgrounds, ball fields, and open space that township residents can utilize for recreational purposes.

HISTORIC RESOURCES

Given Northampton Township's history as a farming and milling community, the majority of its historical assets once served as Mills or Farm Houses. In either instance, modern day development pressures have led to the area immediately surrounding these assets to be supplanted by single-detached housing, thus eroding the historic nature of these areas.

In addition to Historic Mills and Farmhouses, the Township has three Villages that have served as centers of commerce and community throughout its history. The Village of Churchville is the lead example of this, straddling the boundary between Northampton and Upper Southampton townships, Churchville has been able to retain its historic charm by preserving a large portion of its historic buildings. These buildings include the Churchville Train Station, North and Southampton Reformed Dutch Church, and the Churchville Telephone exchange.

The Villages of Holland and Richboro have been significantly impacted by modern development patterns and have lost a large portion of their village character. Still, historic assets do exist, most notably the Richboro School House, and Spread Eagle Inn in Richboro, and the Mill Race Inn in Holland. The 2014 Holland Village Master Plan and 2018 Richboro Village Master Plan present strategies to invigorate these communities and reclaim some of their lost historic charm. A key in both of these plans is an improved streetscape that will serve walkers and bicycle riders to better integrate them with their surrounding communities.

The 2018 *Northampton Township Comprehensive Plan* identified the township's key historic assets, noting the Village of Churchville as a historic district under the National Register of Historic Places, and the Willow Mill Complex, Hampton Hill House, Twin Trees Farm, and John Thompson House as historic buildings under the National Register of Historic Places. A comprehensive trail and bicycle facilities network would help connect residents and visitors to these assets. Table 7 summarizes the historic assets of the township.

Table 10 – Historic Resources

Historic Resource	Asset Type	Earliest Date of Significance	Year Added to National Register of Historic Places
Willow Mill Complex	Building	1739	2002
Hampton Hill	Building	1740	1973
Twin Trees Farm	Building	1740	1975
John Thompson House	Building	1740	1973
Spread Eagle Inn	Building	1790	-
Churchville Historic District	District	1812	1995
Spring Garden	Village	1819	-
Villa Joseph Marie School, Maria Hall	Building	1860	-
Twinning Ford Bridge	Bridge	1873	-
Richboro Schoolhouse	Building	1913	-
Nike Missile Battery PH-07	Military Installation	1956	-