

November 2020

East Rockhill Township



Comprehensive Plan Update

Prepared by:



RESOLUTION NO. 2020 – 16

A RESOLUTION OF THE BOARD OF SUPERVISORS OF EAST ROCKHILL TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA, UPDATING AND AMENDING THE EAST ROCKHILL TOWNSHIP COMPREHENSIVE PLAN

WHEREAS, the East Rockhill Township Planning Commission and the Bucks County Planning Commission have prepared an update to the East Rockhill Township Comprehensive Plan; and

WHEREAS, the Comprehensive Plan Update is designed to recognize and manage a high quality of life for East Rockhill Township residents and to manage growth through the year 2030; and

WHEREAS, the Comprehensive Plan update is designed to recognize and manage the Township’s natural resources, historic resources, agricultural resources, cultural resources and future growth.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Supervisors of East Rockhill Township that the East Rockhill Township Comprehensive Plan of 2020, as prepared by the Bucks County Planning Commission, is hereby adopted, and the following summary of Chapters, Appendices, Figures, Maps and Tables are adopted by reference as if set forth in full:

CHAPTERS

- Chapter 1- Guiding Principles
- Chapter 2 - Regional Location and Township History
- Chapter 3 - Demographics
- Chapter 4 - Land Use Characteristics and Development Trends
- Chapter 5 - Natural Resources and Geology
- Chapter 6 - Housing
- Chapter 7 - Nonresidential Development and Economic Characteristics
- Chapter 8 - Community Facilities and Services
- Chapter 9 - Parks, Recreation, Farmland, and Open Space
- Chapter 10 - Historic and Scenic Resources
- Chapter 11 - Transportation
- Chapter 12 - Hazard Mitigation
- Chapter 13 - Water and Sewer
- Chapter 14 - Future Land Use
- Chapter 15-Recommendations and Implementation

APPENDICES

- Appendix A---Growth Analysis
- Appendix B---Fair Share Analysis
- Appendix C---Resident Survey Results

FIGURES

Figure 1-East Rockhill Population Cohorts

Figure 2-Hydrological Cycle

MAPS

Map 1-Regional Location and Township History

Map 2 - Existing Land Use

Map 3 - Geology

Map 4 - Steep Slopes and Woodlands

Map 5 - Agricultural Soils

Map 6 - Watersheds

Map 7 - Floodplains and Wetlands

Map 8 - Parks and Recreation and Open Space

Map 9 - Historic and Scenic Resources

Map 10 - Functional Street Classification

Map 11 - Future Land Use

Map 12-Resident Survey Question One

TABLES

Table 1-Housing and Population, East Rockhill and Surrounding Municipalities, 2000-2010

Table 2 - Population Characteristics, East Rockhill and Bucks County, 2000-2010

Table 3 - Population by Age, East Rockhill Township, 2000-2010

Table 4 - Population Projections, East Rockhill Township, 2015-2045

Table 5 - Land Use Characteristics, 2018

Table 6 - Steep Slope Regulations

Table 7 - Woodland Protection Standards

Table 8 - Hydrologic Resources Regulations

Table 9 - Housing Units by Type, 2000-2017

Table 10 - Housing Occupancy Status

Table 11 - Housing Tenure

Table 12 - Housing Units, Year Built

Table 13 - Mortgage Status of Housing Units

Table 14 - Value of Owner-Occupied Housing Units

Table 15 - Financial Characteristics of Households in the Past 12 Months

Table 16 - Monthly Housing Costs

Table 17 - Household Income and Poverty Status

Table 18 - Permitted Housing

Table 19 - Projected Housing Unit Growth

Table 20 - Employment Status

Table 21 - Class of Worker

Table 22 - Occupation

Table 23 - Industry

Table 24 - Employment Projections

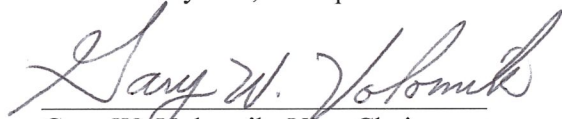
- Table 25 - Mode of Commute
- Table 26 - Place of Residence for People Working in East Rockhill Township
- Table 27 - Place of Employment for People Living in East Rockhill Township
- Table 28 - Township-Owned Parks and Recreation Lands
- Table 29 - Township-Owned Protected Open Space
- Table 30 - Open Space with Conservation Easements
- Table 31 - Common Sources of Groundwater Contamination
- Table 32 - Development Capacity
- Table 33-Units in Structure and Multifamily Dwellings, East Rockhill and Surrounding Townships, 2013-2017

RESOLVED, at a duly convened meeting of the Board of Supervisors of East Rockhill Township conducted this _____ day of _____, 2020.

**EAST ROCKHILL TOWNSHIP
BOARD OF SUPERVISORS**



David R. Nyman, Chairperson



Gary W. Volovnik, Vice-Chairperson

ATTEST:



Marianne K. Morano, Manager



James C. Nietupski, Member

2020

East Rockhill Township

Board of Supervisors

David R. Nyman, Chairperson

Gary W. Volovnik, Vice Chairperson

James C. Nietupski

Planning Commission

Anne Fenley, Chairperson

Joseph Chellew, Vice Chairperson

David R. Nyman, Secretary

George Brodhead

Blake Eisenhart

Richard Kelly

James Weikel

Former Members

Bill Barnish

Nancy Booz

Blaze Youngers

Township Manager

Marianne K. Morano

Planning Consultant:



The Almshouse Neshaminy Manor Center 1260 Almshouse Road
Doylestown, Pennsylvania 18901 215.345.3400 FAX 215.345.3886
E-mail: bcpc@buckscounty.org Website: buckscounty.org/pc

East Rockhill Township

Table of Contents

Executive Summary	iii
Chapter 1 - Guiding Principles.....	1
Chapter 2 - Regional Location and Township History.....	3
Chapter 3 - Demographics	5
Chapter 4 - Land Use Characteristics and Development Trends	11
Chapter 5 - Natural Resources and Geology.....	15
Chapter 6 - Housing	27
Chapter 7 - Nonresidential Development and Economic Characteristics.....	41
Chapter 8 - Community Facilities and Services.....	49
Chapter 9 - Parks, Recreation, Farmland, and Open Space	55
Chapter 10 - Historic and Scenic Resources.....	69
Chapter 11 - Transportation and Circulation.....	77
Chapter 12 - Hazard Mitigation	85
Chapter 13 - Water and Sewer	89
Chapter 14 - Future Land Use	103
Chapter 15 - Recommendations and Implementation	115
Appendices	
Appendix A - Growth Analysis.....	121
Appendix B - Fair Share Analysis.....	125
Appendix C - Resident Survey Results.....	129
Figures	
Figure 1 - East Rockhill Population Cohorts, 2000-2010.....	7
Figure 2 - Hydrological Cycle.....	21
Maps	
Map 1 - Regional Location and Township History	after page 4
Map 2 - Existing Land Use	after page 12
Map 3 - Geology.....	after page 16
Map 4 - Steep Slopes and Woodlands	after page 16
Map 5 - Agricultural Soils	after page 20
Map 6 - Watersheds.....	after page 22
Map 7 - Floodplains and Wetlands	after page 22

Map 8 - Parks and Recreation and Open Spaceafter page 56
 Map 9 - Historic and Scenic Resourcesafter page 74
 Map 10 - Functional Street Classificationafter page 78
 Map 11 - Future Land Use.....after page 104
 Map 12 - Resident Survey Question One.....after page 130

Tables

Table 1 - Housing and Population, East Rockhill and Surrounding Municipalities, 2000-2010 5
 Table 2 - Population Characteristics, East Rockhill and Bucks County, 2000-2010 6
 Table 3 - Population by Age, East Rockhill Township, 2000-2010 8
 Table 4 - Population Projections, East Rockhill Township, 2015-2045 9
 Table 5 - Land Use Characteristics, 2018 12
 Table 6 - Steep Slope Regulations..... 17
 Table 7 - Woodland Protection Standards..... 18
 Table 8 - Hydrologic Resources Regulations 23
 Table 9 - Housing Units by Type, 2000-2017 27
 Table 10 - Housing Occupancy Status 28
 Table 11 - Housing Tenure 28
 Table 12 - Housing Units, Year Built..... 29
 Table 13 - Mortgage Status of Housing Units 29
 Table 14 - Value of Owner-Occupied Housing Units..... 30
 Table 15 - Financial Characteristics of Households in the Past 12 Months 31
 Table 16 - Monthly Housing Costs 31
 Table 17 - Household Income and Poverty Status 32
 Table 18 - Permitted Housing 35
 Table 19 - Projected Housing Unit Growth 38
 Table 20 - Employment Status 42
 Table 21 - Class of Worker 42
 Table 22 - Occupation 43
 Table 23 - Industry 43
 Table 24 - Employment Projections 44
 Table 25 - Mode of Commute 44
 Table 26 - Place of Residence for People Working in East Rockhill Township..... 45
 Table 27 - Place of Employment for People Living in East Rockhill Township 45
 Table 28 - Township-Owned Parks and Recreation Lands..... 56
 Table 29 - Township-Owned Protected Open Space 58
 Table 30 - Open Space with Conservation Easements..... 59
 Table 31 - Common Sources of Groundwater Contamination 93
 Table 32 - Development Capacity 123
 Table 33 - Units in Structure and Multifamily Dwellings, East Rockhill and Surrounding Townships,
 2013-2017 126

East Rockhill Township

Executive Summary

Introduction

A comprehensive plan is a municipality's main policy document. The East Rockhill Township Comprehensive Plan Update (2020) details the collective township vision for the future, the historic, environmental, and cultural facilities it seeks to protect, and the steps necessary to achieve this vision.

The Pennsylvania Department of Community and Economic Development has described the comprehensive plan as: "...more than just a document disclosing past and present land use trends with a proposed course of action. It is a process of organizing for the future. It creates a blueprint for our land use patterns of tomorrow. This process results in a comprehensive plan that is not a legal document nor is it a land use ordinance. However, like a land use ordinance, it can and should be adopted. It is an overall plan embracing general goals and objectives with which a governing body agrees, based on input from its constituents, to observe in making day-to-day decisions."¹

By combining an understanding of past trends, the limitations imposed by the pattern of development that already exists, the potential for future growth in the township, and the community's vision for the future, a plan has been prepared which can be used to guide change in a positive way. The assets of the township can be protected; problems can be defined, and possible solutions identified.

Plan Purpose

The last comprehensive plan was prepared in 2005 and continues to be a useful reference on township characteristics. Its description of the role of East Rockhill in the region, the natural environment, and past population and development trends are as valuable today as they were then.

As with the 2005 Comprehensive Plan, the purpose of this plan is to understand the current state of East Rockhill Township and to use that information to plan for the future. This plan creates a vision for the township and its residents, and encourages actions that will allow the township to realize that vision. This is the planning step which informs the zoning and related policies for the township.

¹ Pennsylvania Department of Community and Economic Development, The Comprehensive Plan in Pennsylvania, Planning Series #3, 2001, <http://www.dced.pa.gov/download/planning-series-03-the-comprehensive-plan-in-pennsylvania/>, accessed October 3, 2019.

The preparation of the comprehensive plan has been initiated and directed by the township's planning commission, which guides plan preparation, and by the Board of Supervisors, which must adopt the final plan. At the outset of the process, public participation was determined to be an important part of the process in the development of this plan. As such, the township elected to conduct a community survey, which was sent to every family in the township to gather opinions on a variety of planning, policy, and community service subjects. Analysis of these opinions can be found in many chapters throughout the plan and were instrumental to its development.

The Future Land Use chapter ties together recommended actions of the plan and sets forth land use policy for East Rockhill Township in accordance with the plan's vision and principles. An implementation chart summarizes the plan's recommended actions. This planning activity, in connection with the recommended actions, provides a road map to the next actions required by the township in order to realize this vision.

Plan Findings

To help understand East Rockhill Township, its current development patterns, and possible directions for the future, the East Rockhill Township Comprehensive Plan Update analyzed the existing conditions and characteristics of the township. Among the plans findings:

- East Rockhill and its surrounding municipalities gained about 3,938 housing units and 8,753 people during the years 2000 to 2010. East Rockhill gained 237 new housing units and 507 residents. The township is projected to gain 354 new housing units and 986 people by 2045.
- The township has over 4,900 acres of protected land.
- The township has been thus far successful with its growth management efforts, and the distinction between the growth areas and the conservation areas is having the desired effect.
- Many of the recommendations from the 2005 Comprehensive Plan were accomplished, including the expansion of the VR Village Residential and VC Village Commercial zoning districts in Hagersville Village, an update to various ordinances, and continued participation in the Penridge Area Coordinating Committee.
- The township has adequately planned for the anticipated growth in population.

Survey Results

Residents were consulted through a township-wide survey. This is an important step in the decision making process and the results of the survey were taken into account in this plan. The anonymous survey was sent to over 2,000 East Rockhill households and over 500 were completed and returned. The survey included multiple choice questions and rating scale questions, and also allowed space for comments. In addition to the survey results, the comments were tabulated and analyzed.

The purpose of the questions asked was to gauge general feelings about the township and its future. Respondents were asked generally where they lived in East Rockhill and the town was split into three areas. Area 1 is the area east of Route 313 (Dublin Pike), area 2 is south of Route 563 (Ridge Road) and west of Route 313, and Area 3 is north of Route 563 and west of Route 313. The demographics of the respondents were as follows:

- Nearly half of respondents live in Area 3, a third of respondents live in area 2, and roughly 20 percent live in area 1.

- Approximately 40 percent of respondents have lived in East Rockhill for more than 20 years. Roughly 70 percent of respondents have lived in East Rockhill for more than 10 years.
- About 97 percent of respondents own their own property.
- About 4 percent of respondents said they are employed in East Rockhill. About 31 percent are employed elsewhere in Bucks County and nearly 30 percent of respondents are retired.

It was anticipated that there may be different response patterns from the people who lived in more rural portions of the township and those who lived in the more suburbanized portions. This did not appear to be the case. Each question was analyzed based on the area of the township where the respondent claimed to live, and there was no discernable difference based on geography. Responses were consistent across all three zones of the township.

Respondents generally noted the importance of the rural character of the township and many cited that as the reason for living in East Rockhill. General quality of life and natural features were also noted as a large reason for wanting to live in East Rockhill.

Respondents believed that crime and public safety, property taxes, and water quality/groundwater protection are among the most important issues facing the township. New development, a mix of housing, and employment opportunities were ranked as the issues of least importance for the future of the township.

When asked what kind of development they would support, respondents were supportive of residential (single-family, twins, and duplexes) and commercial development. Residential (multifamily, apartments, townhouses) and industrial development were generally not supported, while many respondents were in favor of no development whatsoever.

In terms of township expenditures, respondents were most supportive of using funds for police protection, fire protection, and roadway maintenance and improvements. Residents were less supportive of using township funds for zoning enforcement, growth management planning, and active recreation facilities.

List of Plan Actions

One of the biggest difficulties with most comprehensive plans is that they quickly become irrelevant. Once the plan is completed the recommendations presented can be easy to ignore because the plan is no longer on the minds of local officials and residents until it becomes time to develop a new plan. New initiatives, which could make real differences, are essentially wasted. One way to keep this plan relevant is to provide a checklist that would note the plan's progress and tasks that yet need to be completed. This checklist will keep the plan on the minds of both decisions makers and residents, publicize the accomplishments of the plan, and provide necessary adjustments that need to be made to carry out the remaining tasks.

The recommendations chapter of the plan contains a list of activities that are recommended to realize the vision of this plan. What follows is a checklist of activities that are most critical to this plan's success and have measurable outcomes (i.e., can be evaluated as completed or not). Each activity also provides page numbers where the issue is discussed in the plan. This checklist can also form the basis of future progress reports, distributed by way of newsletters, websites, or other township publications.

Plan Actions

Action	Completed
1. Amend the zoning ordinance to address short term rentals in the township. (pg. 37)	_____
2. Consider amending the zoning ordinance to address medical marijuana land uses, such as medical marijuana dispensary and medical marijuana grower/processor. (pg. 47)	_____
3. Review forestry regulations to provide more restrictive clear-cutting standards. (pg. 18)	_____
4. Evaluate and possibly amend the riparian buffer corridor regulations in the zoning ordinance to determine if an expansion of Zone 1 and 2 would provide greater protection to the township’s stream corridors. (pg. 22)	_____
5. Remove Fraxinus tree species from tree lists in the subdivision and land development ordinance, due to their vulnerability to the emerald ash borer. (pg. 24)	_____
6. Work with farmers to preserve farms through the Bucks County Agricultural Preservation Program or conservation easement purchase. Continue to preserve open space using funds from the township’s open space tax. (pg. 62)	_____
Acres preserved:	_____
7. Consider an agritourism ordinance to encourage the economic vitality of farming operations. (pg. 106)	_____
8. Establish scenic overlay provisions to encourage compatible land uses that complement the existing rural character and provide protection of scenic vistas from roadways, entrances to historic villages, and overall scenic character of the township. (pgs. 74-75)	_____
9. Consider adopting an arterial corridor overlay ordinance to ensure that the functionality of the Route 313 / Route 663 corridor is maintained. (pg. 78)	_____
10. Assess the feasibility and necessity of updating the current Act 537 Plan. (pgs. 97-98)	_____
11. Develop a water quality and quantity baseline study for the township. Consider a formal, Geographic Information System-based watershed monitoring program for the Penridge Area. (pg. 92)	_____
12. Consider adopting an ordinance regulating on-lot sewage systems and requiring a pumping schedule for on-lot sewage systems. (pg. 100)	_____
13. Assess the need for and continue to provide public water and sewer connection along the Old Bethlehem Pike corridor. (pg. 98)	_____

Why Can't We Just Say No to Development?

East Rockhill's beautiful open spaces, highway access, and rural quality of life make it an attractive place to live for many. But rapid growth and development can change the scenic landscape of East Rockhill Township which attracted people in the first place. Over the past few decades, new, large-scale housing developments have been built in many places in Upper Bucks County. A common theme in responses to the township resident survey was a general aversion to new development, and a desire to maintain the township's rural character.

So if sprawl and development potentially change the township in a negative way, why can't the township just tell developers to go elsewhere?

Moreover, why would they even try to accommodate development by zoning land for higher density uses? Two reasons prevent East Rockhill from stopping development altogether and even compel the township to accommodate it.

East Rockhill Township cannot keep private property owners from gaining some economic use out of their properties. Widely known as the "takings clause," the Fifth Amendment of the U.S. Constitution states "nor shall private property be taken for public use, without just compensation." When a government regulation denies all economic use or value of a property, a "taking" of property results. This is applied in a land use context through zoning regulations, and means that all property must be zoned to allow for some form of housing and/or some commercial use.

In addition, every municipality must provide for basic forms of housing and all institutional, commercial, and industrial uses. In a series of court decisions, the Pennsylvania Supreme Court found that every community must provide for its "fair share" of each particular use.

If the amount of land zoned for a particular use is disproportionately small or if the use cannot be reasonably accommodated under the provisions of the zoning ordinance, then the courts will hold the ordinance to be exclusionary, will grant relief, and permit the developer to build whatever he or she wishes, despite the municipality's zoning ordinance. Thus, to meet this fair share requirement, East Rockhill's zoning ordinance must contain provisions for all basic forms of housing and other common types of development.

Appendix A of this comprehensive plan includes an analysis of the amount of land zoned for housing to ensure the township has met the minimum threshold requirement based on estimated population growth. This legal requirement is based on the premise that everybody has to live somewhere, and everybody needs some services and businesses to support them. Many people want to preserve their communities in a state that they desire. But if every community did this, there would be nowhere for anyone to go. Because of this, the law requires that every community allow for some growth to accommodate the needs of the greater population.

Moreover, the township should not want to completely stop development and growth. A well-planned development area that allows different forms of development provides a stimulus to the local and regional economy, and the township has tools available to effectively guide growth that benefits the town and its residents. Anticipated and planned increases in rates for the township helps offset the increasing cost of services and provides an adaptable economic engine that can keep the municipality financially stable, but not stagnant. Planning allows appropriate and reasonable growth that helps existing residents and those who would also want to take advantage of East Rockhill's high quality of life.

Guiding Principles

The following statements make up the collective vision of how East Rockhill Township aims to develop and function as a community. The statements articulate the ideals that this plan strives to attain. The guiding principles were developed through discussions with the Planning Commission, the resident survey, and the information herein.

I. Resources

i. Protection of Natural Resources

The township will continue to protect critical natural areas, water resources, and natural resources. Resources such as woodlands, watersheds, groundwater, and wetlands should be protected and enhanced to ensure their integrity.

ii. Preservation of Agricultural, Historic, and Cultural Resources

The preservation of farmland, historic, cultural, and scenic resources, and the processes that contribute to the township's health and rural character will continue to be a priority for the East Rockhill Township. Villages, farmsteads, schools, historic buildings and churches are all of great local importance. These resources will be preserved with land use and design controls to enhance the quality of life in the present and to maintain it for future generations. Responsible use of resources will be promoted in all development and activities.

II. Housing

The rural character of the township obliges a focus on single-family residential development. East Rockhill will, however, provide for a diversity of housing choices, including affordable housing types such as multifamily, mobile home, and senior housing units, in appropriate areas of the township. All housing, regardless of type or size, will be of the highest quality and safety. Sufficient housing stock will be provided to accommodate the projected population growth.

III. Economic Vitality

East Rockhill Township's economy will be supported by well-integrated and compatible industries that provide jobs to township residents and tax revenues to support municipal services. Commercial and industrial businesses will be convenient, accessible, sustainable, and will not detract from but enhance

quality of life. Land use conflicts will be minimized by concentrating nonresidential development in areas zoned to accommodate and contain adequate infrastructure. Businesses will have room to grow in place and evolve to meet the needs of future residents.

IV. Community Development

Community facilities and services provide for the health, safety, and social needs of all East Rockhill residents, regardless of age, income, physical capability or background. Community facilities and services include police, schools, community institutions, parks and public recreation. Park and recreation facilities provide an avenue for residents to interact and recreate and help create a sense of community. The orderly and coordinated use of community infrastructure will adequately service and appeal to current and future residents. East Rockhill will continue to strive toward providing high quality and cost-effective municipal services to its residents.

V. Mobility and Connectivity

East Rockhill Township is dependent on its system of roads and streets to meet its transportation needs. Roads should be safe, well-maintained and allow for free and easy movement of people and goods. The township will encourage the development of an interconnected network of bike paths, bike lanes, trails, sidewalks, pathways, and crosswalks that provide safe and attractive recreation and alternatives to vehicular travel.

VI. Sustainable Growth Management

The future land use and growth management strategy of East Rockhill Township will be to direct future growth and development towards areas of public infrastructure and existing development and to protect the significant natural and agricultural resource areas in the remainder of the township. The township will engage in responsible regionalism practices by supporting adjacent jurisdictions and working with regional entities on intermunicipal issues. East Rockhill will ensure the safe and adequate supply of water and the proper treatment and disposal of wastewater. Comprehensive management of water issues will enable the township to reduce pollution, control flooding, and help manage growth and development. Proactive mitigation efforts will be supported to prevent or reduce the impacts of natural and man-made disasters. The township will promote smart development patterns and practices that foster a sustainable economic and social climate that meets the needs of present residents and businesses without compromising the ability of future generations to do the same.

Regional Location and Township History

Regional Location

East Rockhill Township is located in the northwest portion of Bucks County (see Map 1). East Rockhill Township encompasses 12.91 square miles (8,262.4 acres). The township is bordered by Richland, Haycock, Bedminster, Hilltown, and West Rockhill townships, and Sellersville and Perkasio boroughs. East Rockhill is centrally located between the city of Philadelphia (approximately 28 miles to the south) and the Allentown/Bethlehem metropolitan area (approximately 20 miles to the north).

East Rockhill is predominately rural in nature, but is accessible to the regional transportation network. It is about 8 miles from the Quakertown exit of the Northeast Extension of the Pennsylvania Turnpike and within 18 miles of Interstate 78. Pennsylvania Routes 313 and 309 provide access to the north and south, and PA Routes 563 and 113 provide access to the east and west.

As a result of East Rockhill's location within the regional transportation network, access to and from surrounding employment and commerce centers is relatively convenient. Development within the region has not been as widespread as other areas of the county, but the township's economic stability and wealth of natural and scenic resources make it very attractive for businesses and residents alike.

Township History

East Rockhill Township was created from a much larger incorporated area known as Rockhill Township. Before its division into East and West Rockhill, Rockhill Township also included the villages (now established boroughs) of Telford, Sellersville, and Perkasio. Named after its rocky and uneven landscape, Rockhill Township was established as a result of a petition by Richland Township residents who argued that roads in the unincorporated territory to the southeast were inadequately maintained and in poor condition. Rockhill Township was created by court order in 1740, and a road supervisor and constable were appointed soon after.

Rockhill was also known as "Servants" during the early days of the county's history, because William Penn had originally reserved the land for indentured servants. The initial inhabitants of the area, however, were the Lenni Lenape Indians, who settled along the area's valleys, including the East Branch of the Perkiomen Creek. The first Europeans in Rockhill were Quakers of English or Welsh descent, but since they were more landowners than actual settlers, German immigrants soon dominated the area. The majority of early settlers built farmsteads and cultivated crops and livestock. Local *villages* provided a wide range of

businesses, offering essential goods and services to residents of the surrounding countryside. General stores, post offices, churches, blacksmiths, and wheelwrights were among the common merchants and trades of early villages.

Rockhill Township was the largest township in Bucks County with regard to size and number of inhabitants, with a land area of 19,168 acres (29.95 square miles) and population of 3,369 in 1870. Over the years, there were dissensions and controversies between western and eastern township residents primarily concerning the condition of township roads in the eastern portion of the township. In late 1889, residents from eastern Rockhill Township formally organized and petitioned the Bucks County Court to establish East Rockhill Township, which was formally decreed on May 24, 1890.




Between the late 19th and early 20th centuries, East Rockhill Township, like many other upper Bucks communities, saw minimal growth and development. Most growth occurred within the incorporated boroughs and villages. However, during the 30-year period between 1940 and 1970, the township's population increased about 110 percent from 1,350 and 2,886 people.

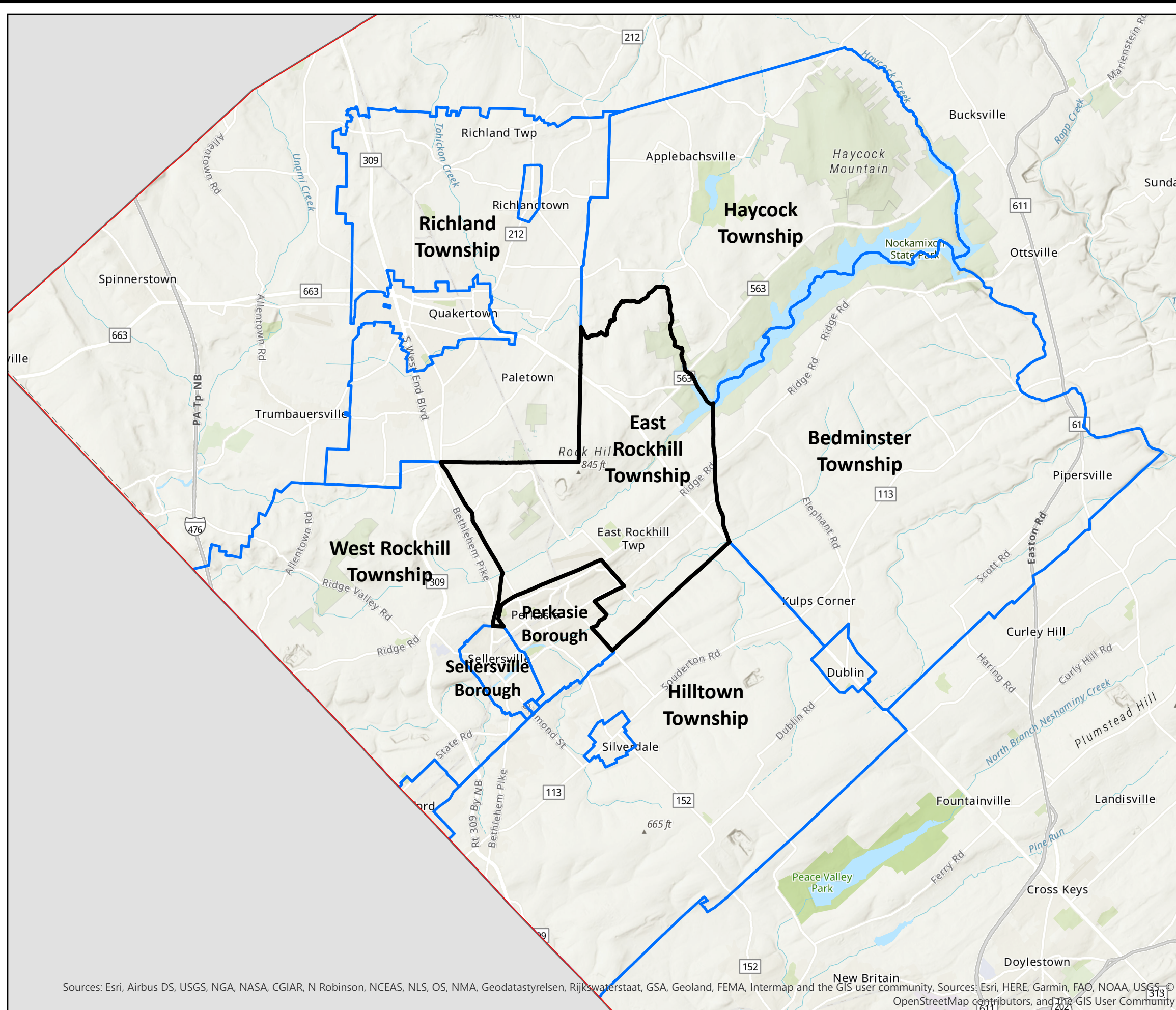
In 1957, the Northeast Extension of the Pennsylvania Turnpike from Norristown to Scranton was officially opened. As a result, access to upper Bucks County, as well as destinations throughout this corridor were significantly increased. In 1969, access to the area was further enhanced following the completion of the Route 309 bypass. This bypass runs from County Line Road in Hilltown Township to Bethlehem Pike in West Rockhill Township. Finally in 1989, Interstate 78 from Fogelsville to the Pennsylvania—New Jersey State line opened.

Today, East Rockhill Township is still closely linked with its rural history and remains distinct as an area with an abundance of natural resources. The construction of the Pennridge Airport and industrial park, Pennridge High School, and the Upper Bucks Campus of the Bucks County Community College have had an impact on the township's land use and development. East Rockhill's proximity to Perkasie Borough and convenient access to the regional transportation network will continue to provide economic development opportunities. Balancing the preservation of historic, natural, and scenic resources with the need to satisfy its population and economic base will be among the challenges for East Rockhill Township in the future.

Map 1: Regional Location

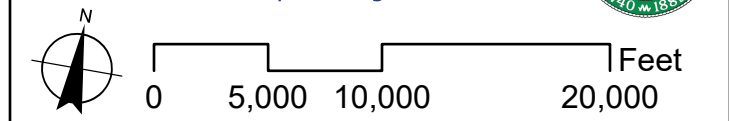
East Rockhill Township
Comprehensive Plan Update 2020

-  East Rockhill Township
-  Surrounding Municipalities
-  Bucks County



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community

Source: Bucks County Planning Commission 2019



Demographics

Regional Perspective

Between 2000 and 2010, East Rockhill Township and its surrounding municipalities gained around 9,000 residents and nearly 4,000 housing units (see Table 1). The municipalities that experienced the most housing and population growth include Bedminster, Richland, and West Rockhill townships. Those that experienced the least growth include Haycock Township, Sellersville and Perkasio boroughs, with Sellersville and Perkasio losing resident population. From this table, we can see that the regional pattern of development has been partial to areas with favorable development conditions and access to public infrastructure. In particular, townships with access to regional transportation routes and a more extensive sewer system seem to have experienced more growth during the previous decade. Each municipality experienced more housing unit growth than the county average (9.1 percent) except for Sellersville and Perkasio boroughs.

TABLE 1. HOUSING AND POPULATION, EAST ROCKHILL AND SURROUNDING MUNICIPALITIES, 2000-2010

Municipality	Population				Housing			
	2000	2010	Change	Percent	2000	2010	Change	Percent
East Rockhill Township	5,199	5,706	507	9.8	1,883	2,120	237	12.6
West Rockhill Township	4,233	5,256	1,023	24.2	1,701	2,265	564	33.2
Richland Township	9,920	13,052	3,132	31.6	3,877	5,016	1,139	29.4
Haycock Township	2,165	2,191	26	1.2	841	947	106	12.6
Bedminster Township	4,804	6,574	1,770	36.8	1,868	2,561	693	37.1
Hilltown Township	12,102	15,029	2,927	24.2	4,370	5,574	1,204	27.6
Sellersville Borough	4,564	4,249	-315	-6.9	1,827	1,804	-23	-1.3
Perkasie Borough	8,828	8,511	-317	-3.6	3,378	3,396	18	0.5
Total	51,815	60,568	8,753	16.9	19,745	23,683	3,938	19.9
Bucks County	597,635	625,249	27,614	4.6	225,498	245,956	20,458	9.1

Source: US Census, 2000, 2010

Township Perspective

In the last decade, East Rockhill Township continued to experience population and housing growth. The township experienced its highest 10-year population increase of 1,446 persons, or about 39 percent, from 1990 to 2000. As depicted on Table 2, population growth through the 2000s was not as robust but maintained a 9.8 percent growth rate. From the 2000 to 2010 the township grew by 507 residents and 237 housing units. Housing units increased from 1,883 in 2000 to 2,120 by 2010, or a 12.6 percent increase.

The census data paints a picture portraying the population as a middle-aged, working class community. The 2010 Census shows that East Rockhill households have an average size of 2.79 persons per household, which is greater than the county average of 2.63 persons per household, as East Rockhill maintains a much greater percentage of family households. Average household size in the township declined slightly from 2.82 in 2000. In 2010 in East Rockhill the average family size was 3.17 (among family households) and the number of householders living alone rose to 350 persons from 312 in 2000.

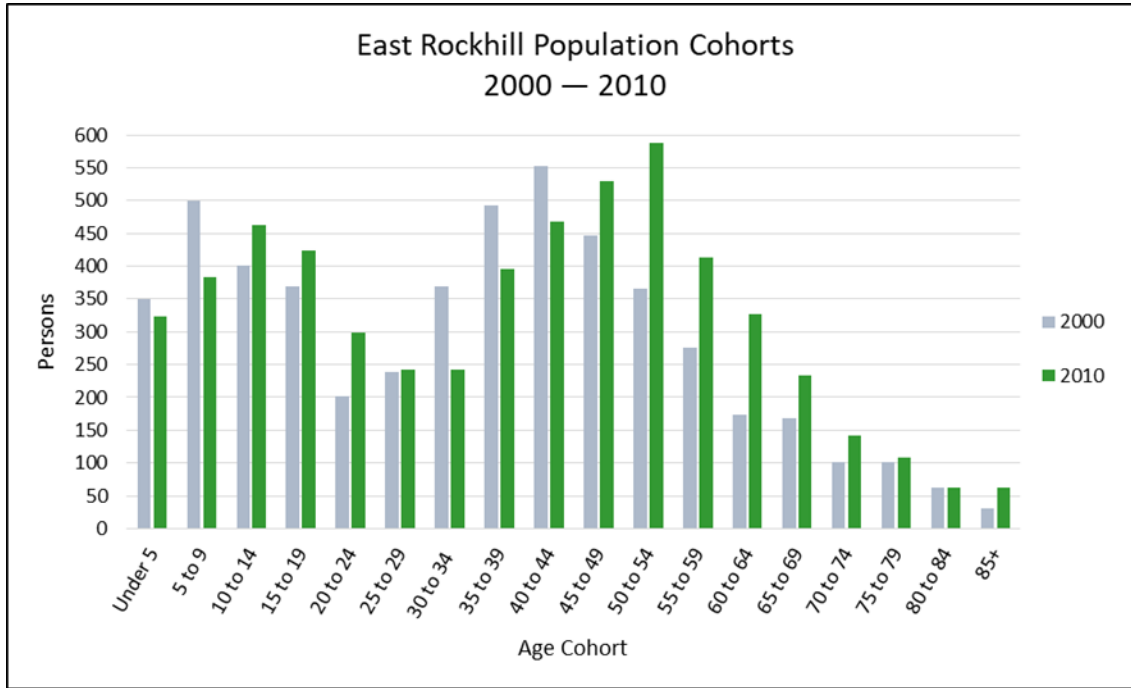
TABLE 2. POPULATION CHARACTERISTICS, EAST ROCKHILL AND BUCKS COUNTY, 2000 — 2010

Population Characteristics	East Rockhill		Bucks County	
	2000	2010	2000	2010
Median Age (years)	36.5	40.8	37.7	43.1
Households	1,828	2,030	218,725	234,849
Family Households	1,428	1,594	160,946	168,665
Married Couple Families	1,254	1,374	133,878	136,531
Nonfamily Households	400	436	57,779	66,184
Householders Living Alone	312	350	46,956	53,912
Average Household Size	2.82	2.79	2.69	2.63
Average Family Size	3.21	3.17	3.17	3.11
Median Household Income	\$59,663	\$79,082	\$59,727	\$82,031
Population age 25 or older				
% High School Grad or Higher	87.2	94.7	88.6	93.7
% Bachelor's Degree or Higher	27.8	37.5	31.2	39.4

Source: US Census 2000, 2010. American Community Survey 5-year estimates, 2013-2017

The median household income for East Rockhill Township is \$79,082, just below the countywide estimate of \$82,031. The township's median household income grew by \$19,419 between 2000 and 2017. The township also saw an increase in the percentage of residents that received a high school diploma and college degree. According to the American Community Survey estimates, 94.7 percent of township residents have a high school diploma, exceeding the percentage shown at the county level. However, only 37.5 percent of residents have a college degree while 39.4 percent of county residents have graduated college.

FIGURE 1. EAST ROCKHILL POPULATION COHORTS, 2000 — 2010



The median age of East Rockhill residents increased from 36.5 in 2000 to 40.8 in 2010 (see Figure 1). The climb in median age is in part a result of a significant increase in population of the 45 to 64 age cohorts, which reflect a large share of the township’s population (19.4 percent).

During the 2000s, the township lost around 230 people in the populations moving from the 10 to 14 and 15 to 19 cohorts in 2000 to the 20 to 24 and 25 to 29 age cohorts in 2010 (see Table 3). Possible reasons for leaving East Rockhill could include a desire for more affordable housing opportunities, a lack of employment options, or a more urban style of living. The data further suggests that East Rockhill is attracting middle-age and older residents, as the township saw 198 more people in populations moving from the 20 to 24 and 25 to 29 cohorts in 2000 to the 30 to 34 and 35 to 39 age cohorts in 2010.

Various other age cohorts show a changing East Rockhill population. School-age cohorts, ages 5 to 19, represent 22.2 percent of the township’s population while retirement age cohorts, 65 and older, comprise 10.7 percent. School-age cohorts have declined since 2000 due to declines in the under 5 years and 5 to 9 cohorts from 2000 to 2010. Conversely, the retirement age cohort has increased from 8.9 percent in 2000 to 10.7 percent in 2010. Changes to the composition of the population will impact the types of services and community facilities needed in the township in the future.

TABLE 3. POPULATION BY AGE, EAST ROCKHILL TOWNSHIP, 2000 — 2010

Population by Age	2000		2010	
	Persons	Percent	Persons	Percent
Under 5 years	350	6.7	324	5.7
5 to 9	500	9.6	384	6.7
10 to 14	401	7.7	463	8.1
15 to 19	370	7.1	424	7.4
20 to 24	202	3.9	299	5.2
25 to 29	238	4.6	242	4.2
30 to 34	369	7.1	243	4.3
35 to 39	492	9.5	395	6.9
40 to 44	552	10.6	467	8.2
45 to 49	447	8.6	529	9.3
50 to 54	366	7.0	588	10.3
55 to 59	275	5.3	413	7.2
60 to 64	174	3.4	326	5.7
65 to 69	168	3.2	234	4.1
70 to 74	101	1.9	141	2.5
75 to 79	102	2.0	109	1.9
80 to 84	62	1.2	63	1.1
85+	30	0.6	62	1.1
Total	5,199	100	5,706	100

Source: US Census 2000, 2010

Racial and Ethnic Diversity

East Rockhill Township remains a relatively homogenous area: as of the 2010 Census, 96.7 percent of the residents were born in the United States. About 91 residents (1.6 percent) are from a Latino or Hispanic background. Due to the township's stable population and rural features, we can expect these trends to continue in the coming decades.

Population Projections

A projection is a numerical estimate of future conditions that is based on existing conditions and trends. Population projections are a useful tool in helping a municipality plan for future needs, such as senior services, park and recreation facilities, and emergency services. As this plan is focused primarily on development issues that will occur over the next 10 to 20 years, projections extending to 2045 are included in Table 4.

The population projections depicted on Table 4 were developed by the Delaware Valley Regional Planning Commission (DVRPC). The DVRPC provides demographic and economic projections for the nine counties in Pennsylvania and New Jersey which make up the Philadelphia metropolitan region. Bucks County and its municipalities are within the Philadelphia metropolitan region.

The DVRPC’s population projections were developed using an age cohort survival model. The age cohort survival model simulates the process by which population actually changes by applying birth (fertility), death, and migration rates to a starting population (in this case, the 2000 Census). Under the process, the starting population was broken down into five-year increments (the population cohorts) according to the age structure and sex of the population. Fertility, death, and migration rates based on past trends were applied to the cohorts of the starting population to produce a 2015 projected population. The process was repeated for the following 5-year increments.

Table 4 shows the projected population growth by the DVRPC for both East Rockhill Township and Bucks County in 5-year increments until 2045. The DVRPC predicts consistent growth in both the township and the county over the next twenty years. Population growth in East Rockhill is projected to gradually slow by 2045. However, if these projections are accurate, the township will grow by 986 people within the next thirty years. If the township is expected to grow by 986 people by 2045, using the current average household size of 2.79 persons per household, this would represent an additional 354 expected households in that timeframe, or 11.8 households per year during the thirty year span of 2015 to 2045.

TABLE 4. POPULATION PROJECTIONS, EAST ROCKHILL TOWNSHIP AND BUCKS COUNTY, 2015 - 2045

Year	East Rockhill	Bucks County
2015	5,742	627,367
2020	5,924	640,495
2025	6,106	654,792
2030	6,290	669,299
2035	6,450	681,273
2040	6,581	691,111
2045	6,692	699,498

Source: Delaware Valley Regional Planning Commission Population Forecasts, 2015 - 2045

Land Use Characteristics and Development Trends

East Rockhill Township contains over 12.9 square miles of land. Land use is the purpose for which land or buildings are used. A land use analysis categorizes the entirety of a parcel under one primary use regardless of secondary uses occurring on the land. Table 5 provides a snapshot of land use acreages within the township in 2018 and Map 2 shows 2018 parcel-by-parcel land use.

The primary sources of information in the land use classification of the township is the Bucks County Board of Assessment, aerial photographs, and township records. This analysis reveals that East Rockhill has remained largely rural in character, with most of the township comprised of lower density, rural and single-family residential uses. About 46 percent of lands in the township are composed of these two land uses.

The largest single category of land use within the township is rural residential land use at 26 percent. Rural residential uses are properties that contain a single-family house, are greater than 5 acres in area, and are not used for agricultural purposes. Single-family residential properties (single-family homes on less than 5 acres) make up 20.5 percent of the township's area. Lands in the single-family residential category include both detached and attached, one- and two-unit dwelling units.

Multifamily properties make up less than 1 percent of the land use in the township and are defined as a residential use of three or more attached units (including townhouse and apartment units). Multifamily residential developments are scattered throughout the township, however a concentration of multifamily units is located within the Pines at Pennridge and Cedarbrook Crossing neighborhoods along North Fifth Street.

Agricultural uses make up 10.4 percent of the lands in the township. Agricultural land use is concentrated in the southeastern portion of the township, due to the underlying geology of the township. The agricultural land use category is limited to parcels that are 10 acres or over. Those lands used for agricultural purposes under 10 acres are classified as either vacant or rural residential land uses. Thus, Table 5 – Land Use should not be used as a complete accounting of active farmland in the township.

The vacant land use category, which includes parcels without dwelling units or buildings containing nonresidential use, comprise 14.9 percent (1,236 acres) of the township's land area. Many of the vacant parcels contain natural resources, principally those located north and west of Ridge Road, and may not be suitable for future development.

TABLE 5. LAND USE CHARACTERISTICS, 2018

Land Use Category	Acreage	Percent
Single-Family Residential	1,693	20.5
Multifamily Residential	58	0.7
Rural Residential	2,151	26
Agricultural	862	10.4
Industrial	19	0.2
Extraction	127	1.5
Commercial	92	1.1
Transportation & Utilities	686	8.3
Government & Institutional	354	4.3
Parks, Recreation, & Protected Open Space	986	11.9
Vacant/Undeveloped	1,236	14.9
Total	8,262	100.0

Source: East Rockhill Township and BCPC Data 2018

Commercial land use, which includes offices, restaurants, and retail spaces, makes up a little over 1 percent of the township's land use. Commercial uses are scattered throughout the township, along the highways, and in the immediate vicinity of Perkasio Borough.

Industrial land uses, with 19 acres of land, make up under 1 percent of the township's land. Two industrial facilities on Park Avenue, one establishment on North Fifth Street, one facility along Route 313, and one establishment off of North Rockhill Road compose the Industrial land uses.

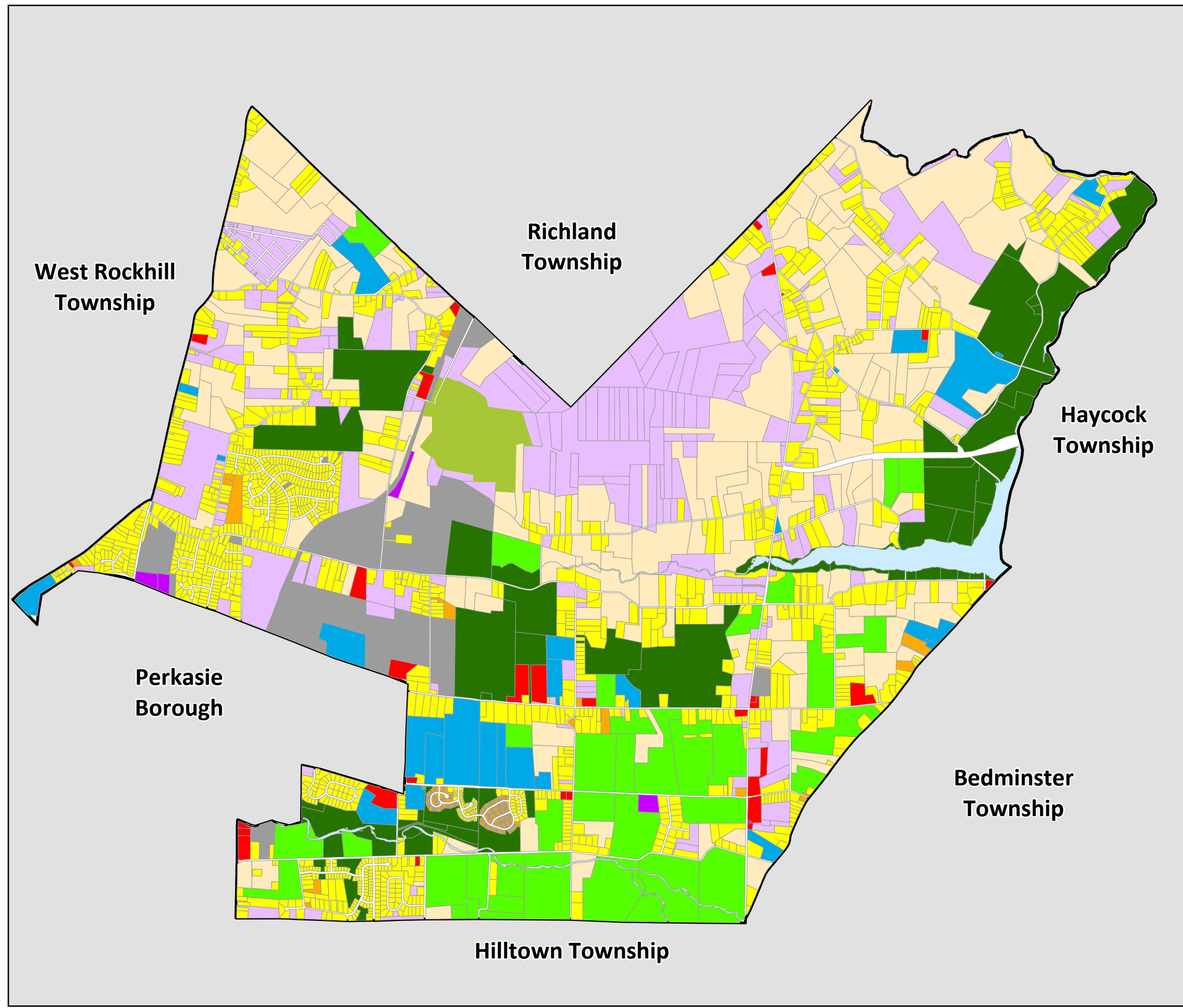
The Rock Hill Quarry on North Rockhill Road is the lone Extraction Land Use within the township. The quarry site is 127 acres.

The remaining lands in the township are primarily used for some form of civic purpose, either government uses, parklands, or infrastructure. Transportation and utilities, which are the roads, bridges, power lines, and other infrastructure needed to support residents and businesses in the community, make up about 686 acres of land, or 8.3 percent. Government and institutional uses, which are the schools, hospitals, religious institutions, government buildings, and other related facilities, make up 3.6 percent of the township. The Pennridge School District facilities and the Upper Bucks Campus of the Bucks County Community College, both located along North Fifth Street, just outside of Perkasio Borough, make up a majority of this land use category. Other Government and institutional uses are scattered throughout the township.

The township has 986 acres, or 11.9 percent, of parks, recreation, and protected open space. Much of this acreage comes from the extensive state and local park systems. State-owned lands consist of portions of Nockamixon State Park and State Gameland No. 139. Other protected open space includes common open space associated with residential subdivisions and land with conservation easements.

Map 2 - Existing Land Use

East Rockhill Township
Comprehensive Plan Update 2020



- Single-Family Residential
- Multifamily Residential
- Rural Residential
- Agricultural
- Industrial
- Government & Institutional
- Commercial
- Parks, Recreation and Protected Open Space
- Transportation and Utilities
- Extraction
- Vacant

Source: Bucks County Board of Assessment & Planning Commission Data 2018

BCPC
Bucks County Planning Commission

0 1,500 3,000 6,000 Feet

Approved Development Proposals

As of January, 2019, various development proposals have received approval or preapproval status from the township, but have not received a building permit. The majority of these proposals involved subdivisions of three lots or less; therefore, the inclusion of these proposals have not been incorporated into the 2019 land use statistics and mapping.

Natural Resources and Geology

East Rockhill has a wealth of natural resources that enhance the quality of life of its residents. Farmland, woodlands, steep slopes, and stream valleys are some of the resources that contribute to the aesthetic and rural character of the township. Land use planning should balance future development with the protection of the township's inherent natural resources.

The purpose of this section is to provide an inventory of the existing natural resources in East Rockhill and to suggest implementation strategies for their protection and enhancement. Natural resources consist of two categories—land and hydrologic resources. Land resources include geology, steep slopes, woodlands, and agricultural soils. Hydrologic resources consist of watersheds, streams, floodplains, and wetlands.

Land Resources

Geology

Geology is a strong determinant on the development of the township. To understand its impact, this section will describe the township's regional geologic context, its geologic formation and composition, and the development limitations presented by current conditions.

Physiographically, East Rockhill Township is located in the Triassic Lowland Section of the Piedmont Province. In general, the Piedmont Province is characterized by rolling land and abrupt ridges, formed by millions of years of tectonic movement and erosion.

Within the township are three geologic units: Brunswick Formation (red shales and sandstones), Lockatong Formation (argillite, hard mud stone), and Diabase (see Map 3).

Geology affects future planning and land use decisions through its impacts on water supply, topography, and soil characteristics. Groundwater supplies largely depend upon geology, surface characteristics, water use and seasonal precipitation. The capacity of these aquifers to transmit and store water is directly related to the specific physical and chemical properties of the underlying geologic formation. The descriptions and water bearing characteristics of each geologic unit are described below:

- **Brunswick Formation**—Interlaced with bands of Lockatong, the Brunswick formation composes the majority of the eastern and southern portions of the township. A sedimentary rock consisting mostly of red to reddish-brown shale, gray to greenish-gray mudstone, and siltstone. Brunswick shale is nonporous rock moderately resistant to erosion and weathering. However, because it is highly fractured, the Brunswick Formation is considered a more reliable source of groundwater than

Lokatong with well yields often greater than 100 gallons per minute (gpm). Yields in the fractured rocks of Brunswick shale are more predictable than in areas of dense, hard, poorly fractured rocks such as diabase or Lockatong argillite.

- **Lokatong Formation**—More resistant to weathering than the Brunswick formation, the Lockatong formation defines two distinct ridges in the East Rockhill Township, one along Ridge Road and a smaller band parallel to the East Branch of the Perkiomen Creek. Characterized by a gray to black argillite and containing tightly cemented sediment. The Lockatong Formation is a less reliable source of groundwater. Storage areas within the fractures are generally small and often obstructed by the formation itself that weathers to a dense clay-like soil that fills joints and prevents water flows. Therefore, the Lockatong formation has a low capacity to transmit and store water. Median well yields from Lockatong formations are about 10 gpm.
- **Diabase**—This formation covers more than one third of East Rockhill Township, covering the extreme northern and western portions of the township. Diabase consists of a dense, erosion-resistant crystalline, which is the primary rock type underlying many wooded ridges, steep slopes, and narrow stream valleys. Most diabase is too dense and the fractures and fissures too narrow to provide reliable well water on a large scale. Thus, diabase is considered a poor source of groundwater, which is only available within the weathered zone to 30 feet deep. The average well yield is 5 gpm. The shallow depth to bedrock also presents difficulties for excavation of on-site septic systems.

Steep Slopes

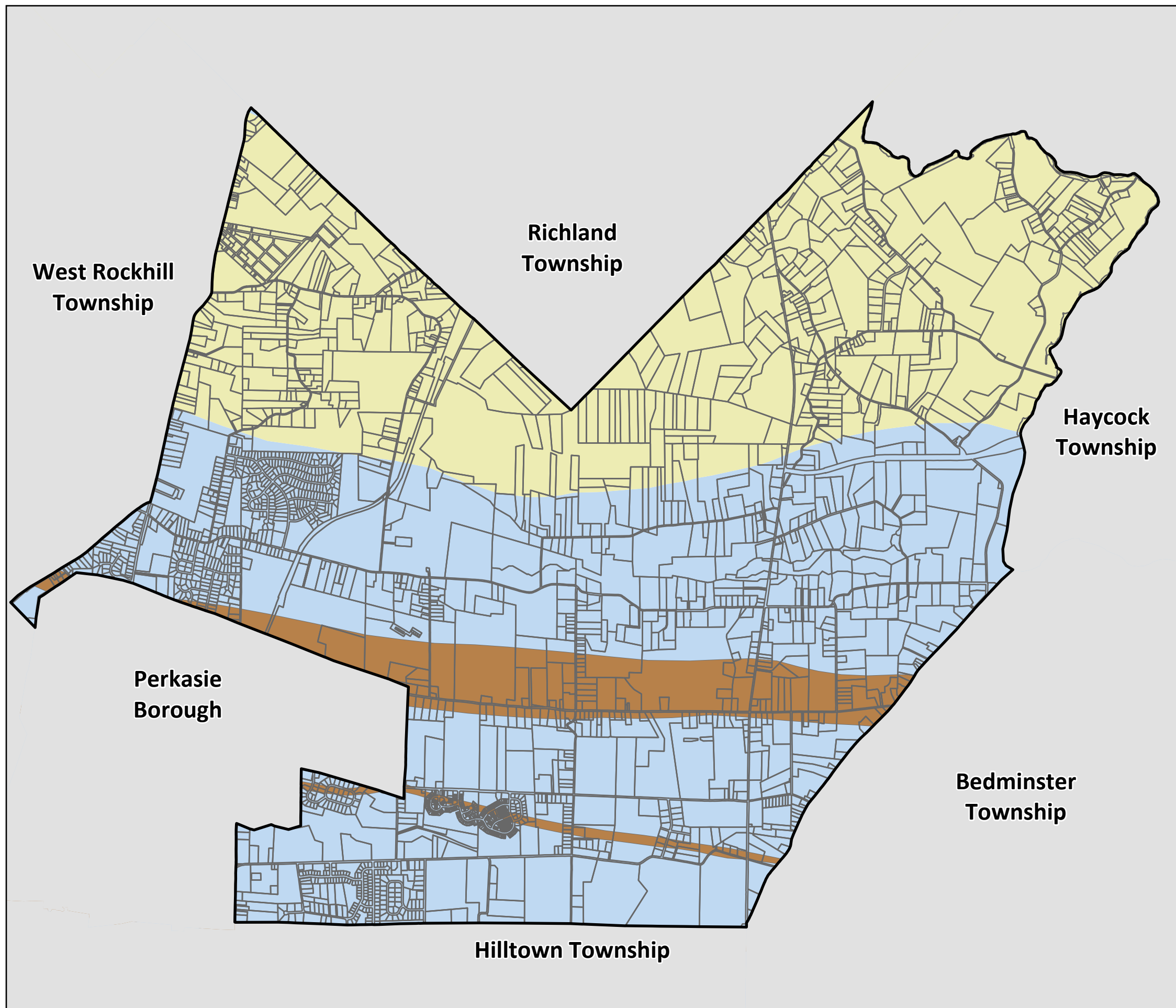
Topography can have a profound influence on development capacity, stormwater runoff, and site erodibility. East Rockhill's topography is characterized by two geologic systems: the hilly terrain of the diabase intrusion and the alternating ridges and valleys of the parallel Lockatong and Brunswick formations. The dominant topographic feature of the Pennridge Area is the Rockhill chain, a major outcropping of diabase running across upper Bucks County from Haycock Mountain through East and West Rockhill, where the major hills are the so-called Rock Hills. Rock Hill, located in the northern portion of East Rockhill Township, between Three Mile Run Road, PA Route 313, and Rockhill Road, has the highest elevation in the Pennridge Area (over 840 feet above mean sea level). It is a striking geologic formation, identified by the Pennsylvania Geological Survey as an Outstanding Scenic Geological Feature of Pennsylvania.


A second major ridge parallels most of the length of PA Route 563/Ridge Road, forming a steep natural barrier. Three Mile Run is a very sharply defined valley between Rockhill and Ridge Road. The lowest elevation in the township is 310 feet above mean sea level located at the western most edge of the East Branch of the Perkiomen Creek. Approximately 1,557 acres, or 19 percent of the township, is covered by slopes of 15 percent or greater (see Map 4).

If improperly regulated and designed, development on steep slopes can lead to accelerated erosion, structural instability, limited access, decreased water quality, and obstruction of scenic views. The East Rockhill Township Zoning Ordinance (Sections 27-1900 and 27-1901) restricts development of areas with slopes of 15 percent or greater as shown in the table below.

Map 3 - Geology

East Rockhill Township
Comprehensive Plan Update 2020



-  Brunswick Formation
-  Diabase Formation
-  Lockatong Formation

Source: Bucks County Board of Assessment & Planning Commission Data 2018

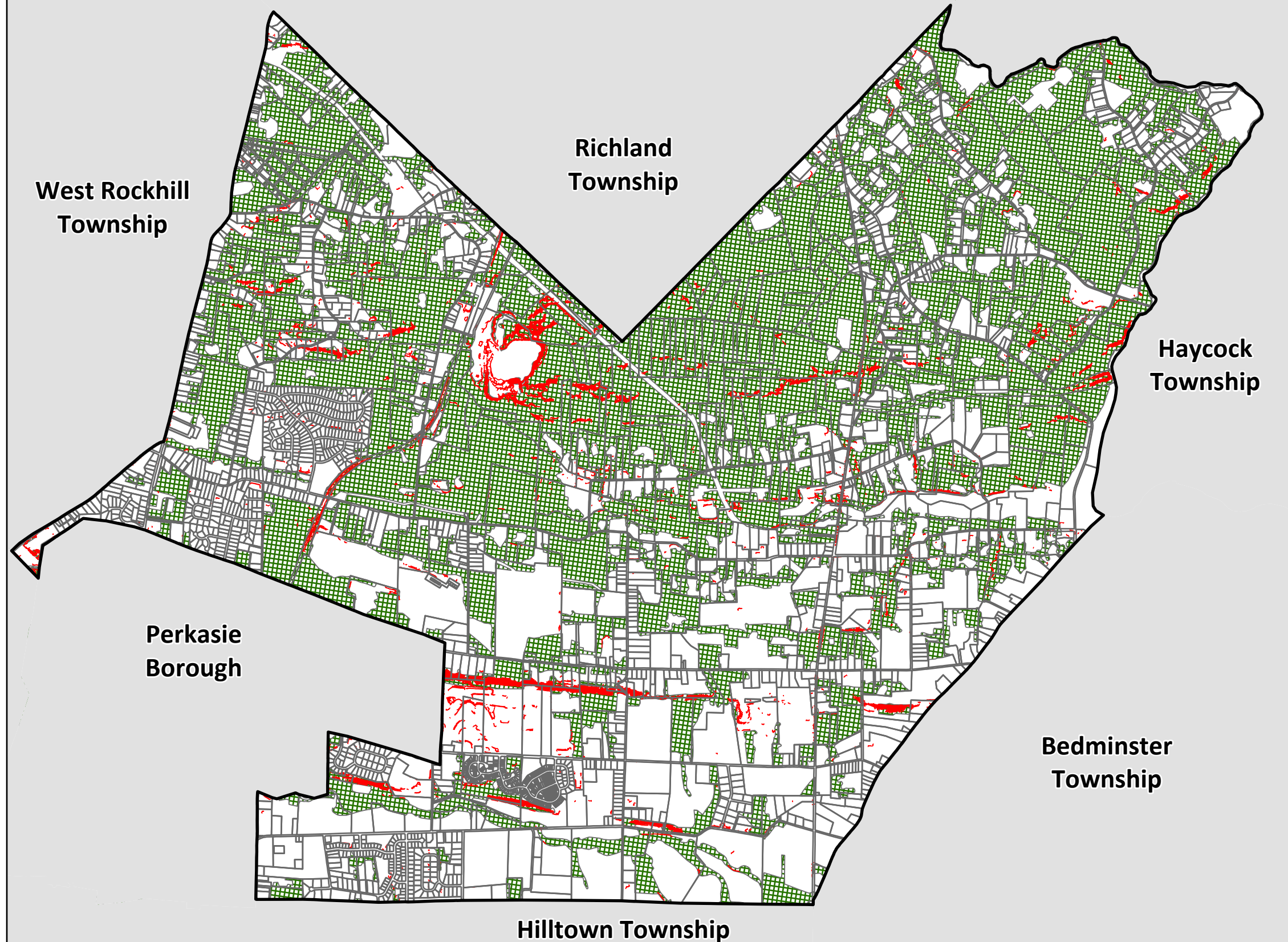
 **BCPC**
Bucks County Planning Commission





  0 3,000 6,000 Feet

Map 4 - Steep Slopes and Woodlands

East Rockhill Township
Comprehensive Plan Update 2020



-  Wooded
-  Steep Slopes (15 percent and greater)

Source: Bucks County Board of Assessment & Planning Commission Data 2018

 **BCPC**
Bucks County Planning Commission

 **TOWNSHIP OF EAST ROCKHILL**
1740 • 1859

 0 3,000 6,000 Feet

TABLE 6. STEEP SLOPE REGULATIONS

Slope	Allowable Disturbance
15 to 25 percent	No more than 30 percent
15 to 25 percent Tracts more than 10 acres in AP Agricultural Preservation District	No more than 75 percent
26 percent or steeper	No more than 20 percent
26 percent or steeper Tracts more than 10 acres in AP Agricultural Preservation District	No more than 70 percent

Source: East Rockhill Township Ordinance 2019

Township officials may wish to examine these provisions to determine if the zoning ordinance should be amended to incorporate additional protection measures or allowances for limited disturbance areas (see Table 6). For instance, for sites containing slopes of 26 percent or steeper that are located outside the Agricultural Preservation District, decreasing the maximum allowable disturbance to 15 percent would be consistent with Bucks County’s policy in the Natural Resources Plan (1999). The county policy also allows areas of minimal disturbance (e.g., areas of steep slopes that are less than 3,000 square feet) to be exempted from steep slope standards.

Soil Erosion

Insensitive development can cause excessive soil erosion and reduced water quality. For instance, removing natural vegetation and other groundcover through clearing and grading leaves soil exposed to the elements and susceptible to erosion by wind and stormwater. When the ground is dry, wind can pick up soil dust and deposit it elsewhere. Stormwater that runs directly over bare soils, picks them up, and moves them downhill toward waterways and waterbodies. Erosion is detrimental to both the site from which the soil is removed and the location where the sediment is deposited. Sites being eroded are depleted of valuable topsoil. Sites receiving runoff are subjected to sedimentation and an influx of nutrients. Sedimentation is the leading pollutant of Pennsylvania’s waterways, reducing channel capacity, water clarity and quality, fish populations, and aesthetics.

Pennsylvania’s Clean Streams Law authorizes the Erosion and Sediment Control Program, which mandates review of all development that involves earth disturbance. Bucks County Soil Conservation District provide for the review of soil erosion and sediment control plans where earth disturbances are proposed. Bucks County Soil Conservation District assists farmers also, to implement Best Management Practices (BMPs) for soil erosion.

Soil erosion and sediment control planning takes into account existing topography and watercourses, depth and limitations of soils, the character and sequence of earth disturbance proposed, the amount of runoff to be generated, and also a maintenance program for the installed BMPs.

Woodlands

In East Rockhill Township nearly 4,892 acres (59 percent of the area of the township) contain woodlands (see Map 3). Much of these woodlands are concentrated in the northwest of the township, northwest of Three Mile Run Road. The predominant woodland cover is oak-hickory association. Woodland resources provide numerous benefits to the environment, including water and air purification, local and regional

climate control, open space, erosion control, wildlife habitat, and providing a commercial value as timber and firewood. Vegetative cover also enhances groundwater recharge by reducing the volume and rate of runoff, which is invaluable, especially in the low-yielding aquifers of the diabase formation.

The wooded hillsides in East Rockhill Township dominate the landscape and contribute to its rural character. Woodlands provide visual and audible buffering, while contributing to the township’s scenic value. When woodlands are located in environmentally sensitive areas, such as steep slopes areas or along tributaries and wetlands, even minor disturbances can lead to serious environmental degradation.

The East Rockhill Township Zoning Ordinance (Section 27-1900.d) provides for the protection of woodlands as shown in the table below.

TABLE 7. WOODLAND PROTECTION STANDARDS

Zoning District	Allowable Disturbance
Resource Protection (RP)	No more than 20 percent
Rural Residential (RR)	
Agricultural Preservation (AP) Tracts less than 10 acres	
Residential (R-1)	No more than 40 percent
Suburban (S)	
Commercial-Office (C-O)	
Extraction (E)	
Industrial (I-1, I-2)	No more than 75 percent
Agricultural Preservation (AP) Tracts 10 acres or larger	
All other zoning districts	No more than 20 percent

Source: East Rockhill Township Ordinances

Zoning Ordinance Use A4 Forestry includes commercial logging operations; clearing or destruction of forested or wooded areas; selective cutting or clearing for commercial or development purposes, or clearing of vegetation in reserved open space or resource protection areas (see Table 7). A reforestation plan is required that will provide a reestablishment of the forest on a sustained yield, except where clearing is for agricultural use. All plans are required to illustrate how the general habitat and visual appearance of the forest is to be maintained, so that the forest retains its visual and habitat qualities at all stages of the long-term cutting plan. Clear cutting of vegetation is restricted to no more than 5 acres or more than 20 percent of the forest in any one calendar year, whichever is less.

Township officials should review these regulations to consider more restrictive clear-cutting standards. For instance, the Forestry use regulations could be revised to establish a maximum area limit for tree removal (e.g., 20 percent of the site) for the lifetime of the lot, and a deed restriction may be placed on the remaining lot area to restrict further clear-cutting. Also, a permanent forested buffer area (e.g., 50 feet) may be required along adjacent roadway that will function to preserve forested areas and minimize the visual impact to passing motorists.

Agricultural Soils

The U.S. Department of Agriculture—Natural Resources Conservation Service (NRCS) has identified and mapped important farmlands in Bucks County. This identification takes into account not only soil quality, but also other environmental conditions that affect agricultural productivity, such as climate and soil acidity. Generally, in Bucks County, the important farmlands surveyed by the NRCS include soil capability classes 1 through 4, grouped into two classifications—Prime Farmland (soils with land capability class 1 and 2 soils) and Additional Farmland of Statewide Importance (soils with land capability class 2 and 3 soils). Class 2 soils and class 3 soils that do not qualify as Prime Farmland are classified as Additional Farmland of Statewide Importance.

NRCS defines Prime Farmland as land that has the best combination of physical and chemical characteristics for producing feed, forage, fiber, and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land or other land, but not urban built-up land or water). Additional Farmland of Statewide Importance generally includes those lands that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable.

As shown in Map 5, the highest concentration of agricultural soils are located in the central and southeast portions of the township. Based upon the NRCS soil classification, there are 459 acres of Prime Farmland and 2,530 acres of Additional Farmland of Statewide Importance in East Rockhill Township. This accounts for 6 and 31 percent of the area of the township, respectively.

In 2000, township officials created a new zoning district—AP, Agricultural Preservation District that is intended to promote the preservation of agriculture as a primary use. Limited residential uses are permitted. The standards and densities are intended to provide a positive incentive for the preservation of large amounts of open space and agriculture. Included in the district regulations are limits to the development of soils classified as Prime Farmland and Additional Farmland of Statewide Importance. No more than 40 percent of these soils may be developed.

Hydrologic Resources

Watersheds and Streams

A watershed consists of all the land and waterways that drain into the same body of water. Smaller watersheds join with other watersheds to drain into larger watersheds; hundreds of watersheds, including those that cover East Rockhill, ultimately drain into the Delaware River, and into the Atlantic Ocean at the Delaware Bay. The drainage of water resources through a watershed includes groundwater as well as surface water.

Watersheds are the primary organizing unit for managing water resources. Watersheds themselves are just one part of the hydrologic cycle, the process of water moving through our environment (see Figure 2 on page 21). By planning and providing regulations on a watershed basis, downstream and downhill areas are ensured protection from impacts such as excessive groundwater withdrawals and pollutant releases.

East Rockhill Township contains two primary watersheds—Tohickon and East Branch Perkiomen (see Map 6). The Tohickon Watershed originates in the northern portion of Bucks County, which includes Lake

Nockamixon (a human-made impoundment), and discharges its stream flow into the Delaware River at Point Pleasant in Plumstead Township. In East Rockhill, the Tohickon Watershed contains two secondary watersheds—Three Mile Run and Bog Run. The Three Mile Run Secondary Watershed, originally a tributary to the Tohickon Creek, starts in West Rockhill Township, crosses East Rockhill Township, and flows directly into Lake Nockamixon. The Bog Run Secondary Watershed is located in portions of East Rockhill and Richland townships and generally corresponds to the environmentally sensitive area known as the Quakertown (Great) Swamp. The headwaters of Bog Run originate in East Rockhill and flows eastward across the northern tip of the township to Tohickon Creek.

The dividing line between the Tohickon and East Branch Perkiomen watersheds generally parallels Ridge Road. The latter is located to the southeast. A small portion of the Morris Run Secondary Watershed corresponding to the confluence of Morris Run and the East Branch of the Perkiomen Creek is located along East Rockhill's border with Hilltown Township.

The juxtaposition of the two primary watersheds in East Rockhill Township has significance for water supply planning. Currently, public water is being withdrawn through a series of wells that are owned by the Perkasie Regional Authority (PRA) but are located in East Rockhill (within the Three Mile Run Secondary Watershed). These wells serve certain homes and businesses in Perkasie Borough and East Rockhill Township within the East Branch Perkiomen Watershed. Subsequently, wastewater is treated and discharged into the East Branch Perkiomen Creek. However, these wells also supply water to certain businesses in the East Rockhill portion of Tohickon Watershed, which discharges sewage into Three Mile Run interceptor. Ultimately, this source of water is treated and discharged into the East Branch of the Perkiomen Creek.



The Hydrologic Cycle

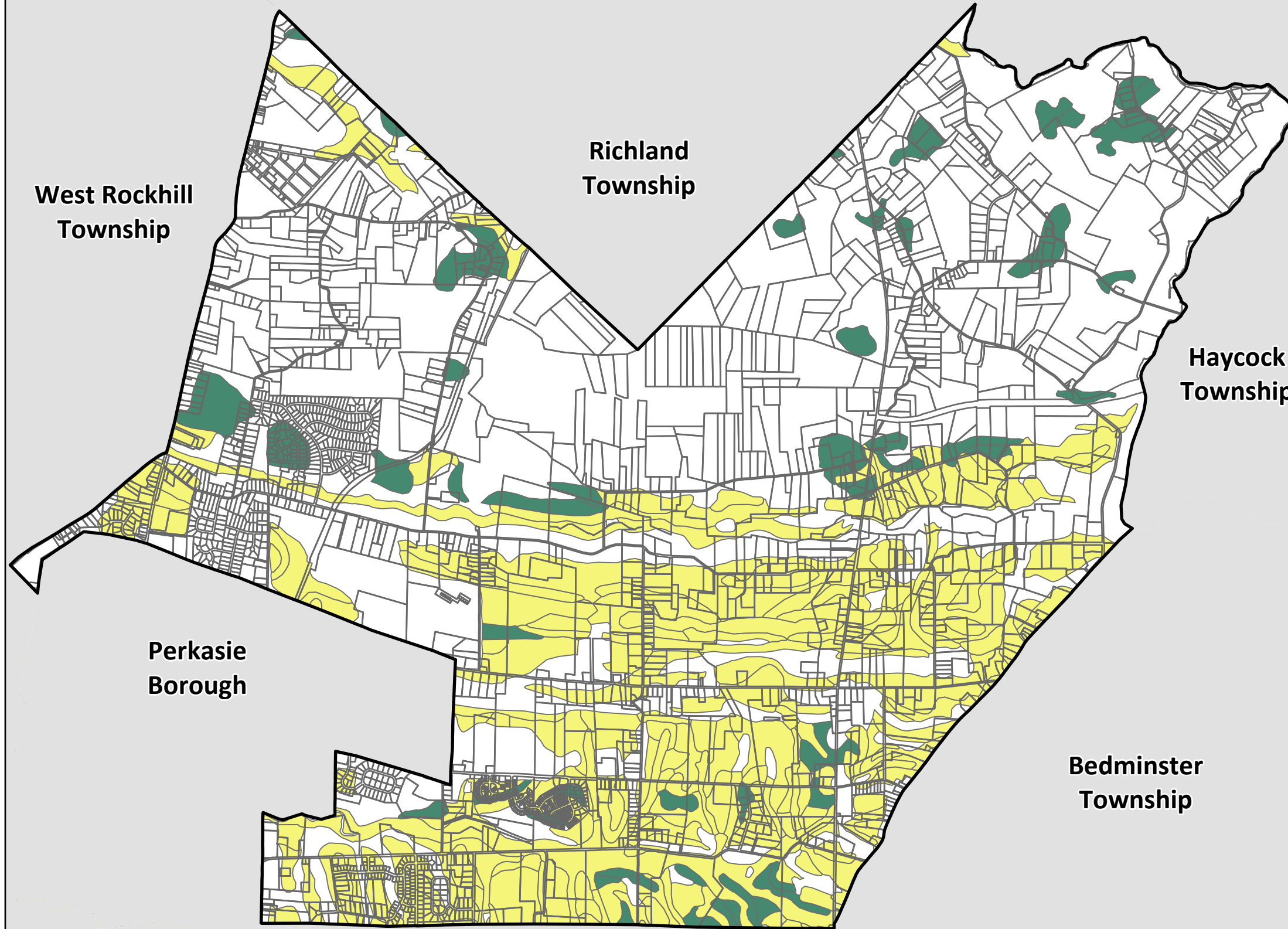
The hydrologic cycle is the process of water (and energy) moving through our environment. Because water and watersheds are base units of environmental planning, it is important that residents and officials understand where our water comes from and where it goes.

The hydrologic cycle begins with energy provided by the sun, causing water to evaporate from surface waters and plants. This water vapor then condenses and forms clouds. Clouds form larger and larger droplets, until they fall to the earth as precipitation. Water strikes the ground and then either runs over the ground toward surface waters, infiltrates into it, or is picked up by plants. Water running over surfaces makes its way through the watershed to surface water bodies, such as streams, rivers, or lakes. Water that infiltrates becomes groundwater, which also moves through the watershed toward surface waters (albeit more slowly). When surface waters evaporate and water picked up by plants is transpired into the atmosphere, the cycle begins again.

Map 5 - Agricultural Soils

East Rockhill Township
Comprehensive Plan Update 2020

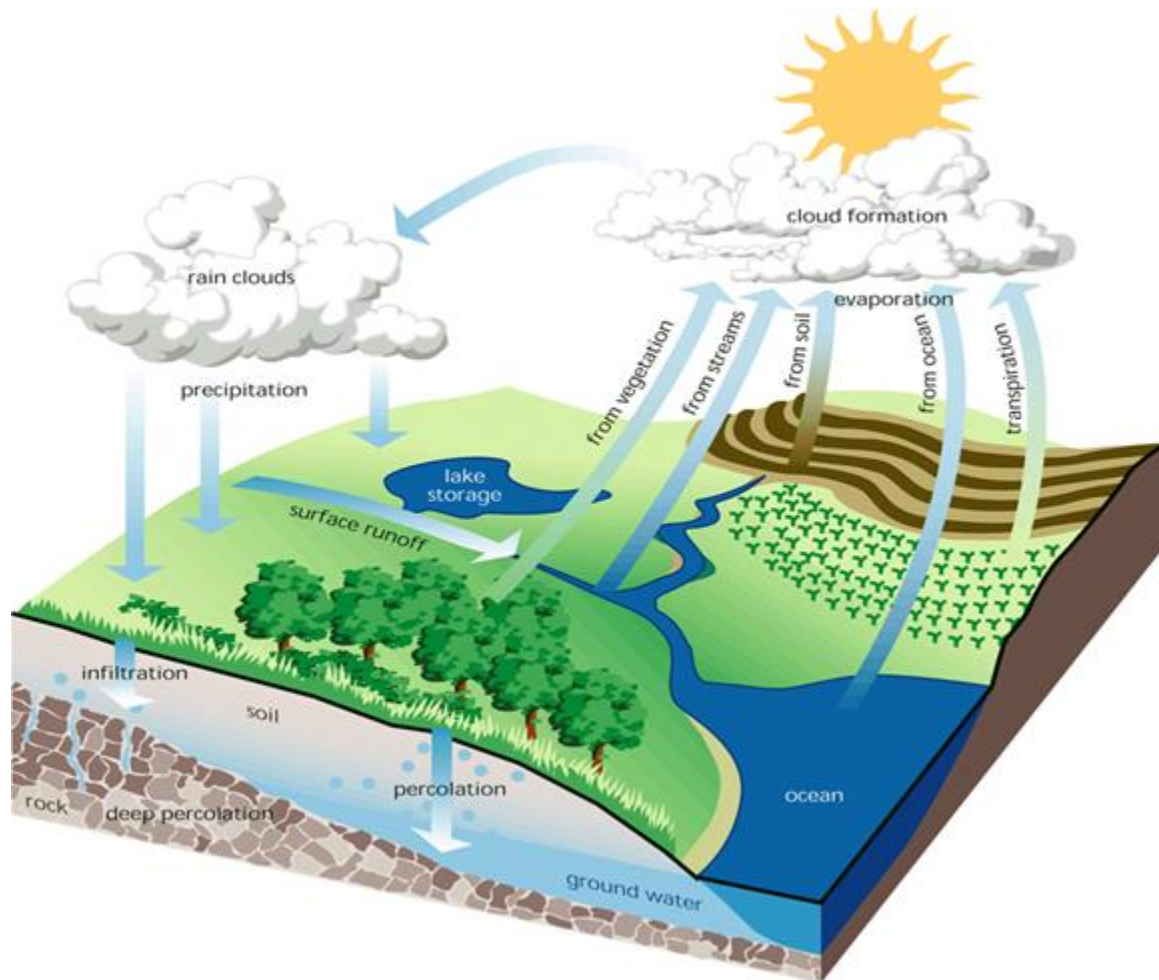
-  Prime Farmland
-  Statewide Important Farmland



Source: Bucks County Board of Assessment & Planning Commission Data 2018



FIGURE 2. HYDROLOGICAL CYCLE



Source: Department of Natural Resource Ecology and Management (NREM) at Iowa State University. Illustration by Tom Schultz

Surface water quality standards are established and enforced by the U.S. Environmental Protection Agency (EPA), PaDEP, and the Delaware River Basin Commission (DRBC). These standards are designed to safeguard streams, rivers, and lakes and consist of use designations (e.g., drinking, agriculture or recreation), criteria necessary to protect those uses from pollutants, and an anti-degradation policy to maintain and protect existing uses and high quality waters. Further discussion of water resources protection takes place in Chapter 13 – Water and Sewer.

Floodplains and Alluvial Soils

Floodplains are relatively flat or low-lying areas adjacent to surface waters where flooding has occurred in the past and will likely occur in the future. During periods of heavy rains and high stream flow, floodplains provide temporary storage for floodwaters, reducing flooding threats to adjacent areas and providing a slower, more consistent flow of water. Floodplain soils, or alluvial soils, are eroded soils from previous floods that were deposited along the banks of streams or other watercourses. Many of East Rockhill's scenic areas are found within the floodplain of stream valleys, with their lush vegetation, steep slopes, and attractive open space. There are approximately 693 acres (or about 8 percent of the area in the township) floodplains East Rockhill Township (see Map 7).

The township adopted floodplain regulations in a stand-alone floodplain ordinance in 2015, which replaced the previous regulations found in the zoning ordinance. This was done to protect the integrity of natural resources in a floodplain area and to ensure that regulations and terms used to regulate floodplains are consistent with standards set by the Federal Emergency Management Agency (FEMA). The ordinance prohibits any new construction, including fill, development, or other encroachments within a floodplain, unless it can be demonstrated that the proposed development would not result in any increase in flood levels. Permitted land uses within a designated floodplain include only agricultural and public and private recreational uses.

Riparian Buffer Zones

Development and activities that remove vegetation from stream corridors create a variety of negative consequences on watercourses. Without the vegetative buffer, runoff from adjacent properties 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 waters when it rains, which can impair surface water quality.

Limiting development within a certain distance of a water body is a way of reducing these impacts to streams. A riparian buffer zone is the normally vegetated or wooded area occurring along a streamside. Generally, the larger the buffer, the more it is able to naturally protect the watercourse and species that depend on it by filtering runoff before it reaches the water body.

Section 1900 of the township's zoning ordinance establishes the Riparian Buffer Overlay Zone (RBOZ) that controls activities within two designated zones, Zone One and Zone Two. Zone One begins at the edge of a stream channel and occupies a minimum width of 30 feet. Zone Two begins at the outer edge of Zone One and occupies a minimum width of 60 feet in addition to Zone One. Where the 100-year floodplain extends greater than 90 feet from the waterway, Zone Two extends to the outer edge of the 100-year floodplain. Township officials should review these provisions to determine if an expansion of Zone 1 to a minimum 50 feet and Zone 2 to a minimum of 90 feet would provide greater protection to the township's stream corridors.

Given that the areas directly adjacent to stream corridors are most vulnerable, the use of lands within Zone One are strictly limited. Uses within Zone One include unpaved trails, fishing areas, wildlife sanctuaries, agriculture, and maintenance of vegetation. Culverts, recreational trails, railroads, and other utility crossings are permitted by conditional use approval. Uses permitted by right in Zone Two include all uses permitted in Zone One and the reconstruction of a nonconforming building or structure. Accessory structures and uses and recreational uses are permitted by special exception in Zone Two.

The restoration and revegetation of the riparian buffer is also required for all uses within the RBOZ whether permitted by right, special exception, or conditional use and in cases where a subdivision or land development is proposed. The revegetation plan includes requirements for ground cover and trees and shrubs.





Wetlands

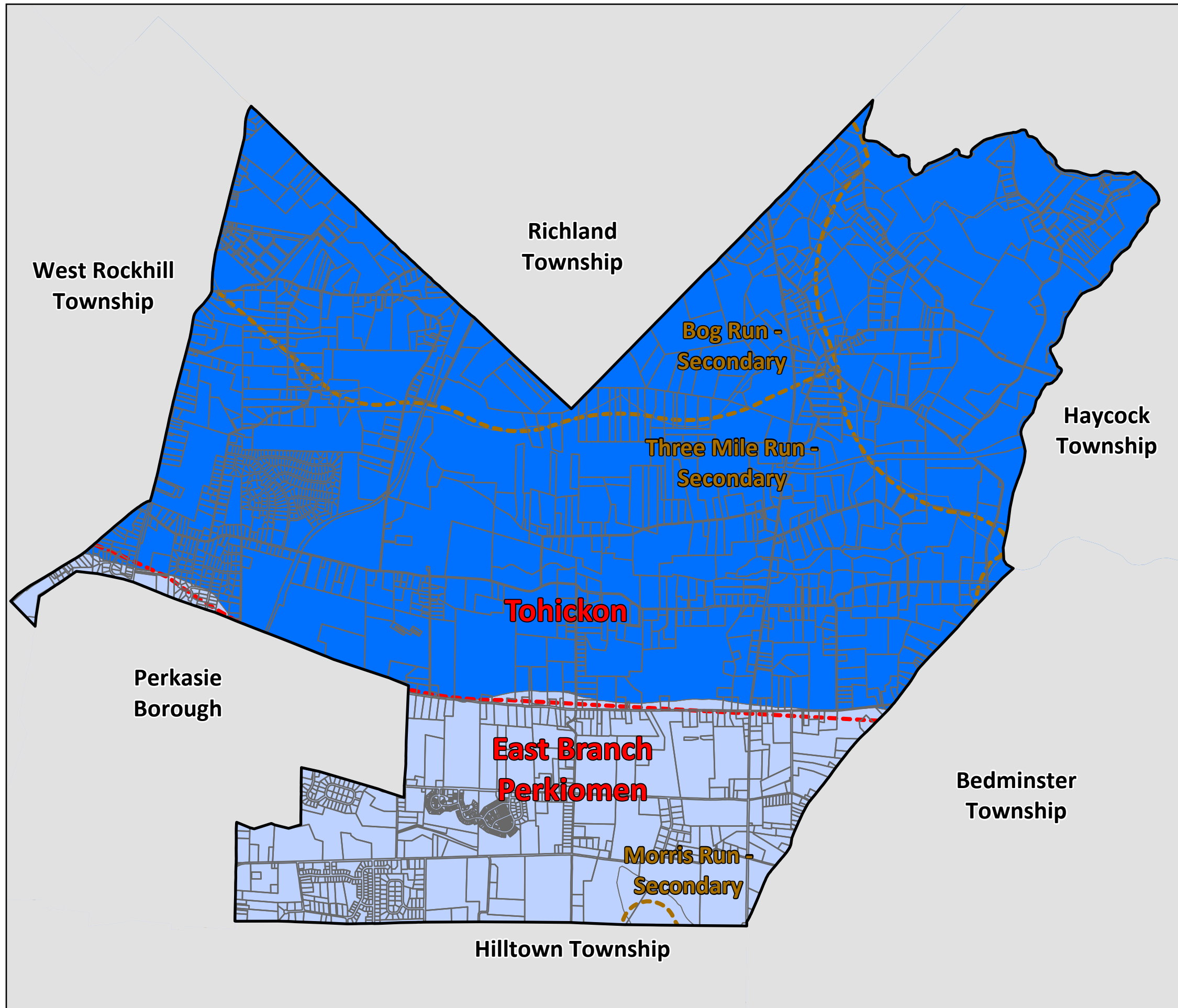
Typically, wetlands occur as marshes, swamps, and bogs. Often, they are saturated lands or areas that display a seasonal high water table. Wetlands are important resources providing habitat for wildlife, filtering stormwater runoff and improving water quality, reducing potential flood damage, and increasing

Map 6 - Watersheds

East Rockhill Township
Comprehensive Plan Update 2020

Watershed Classifications

-  Primary
-  Secondary
-  Tohickon Watershed
-  East Branch Perkiomen Watershed

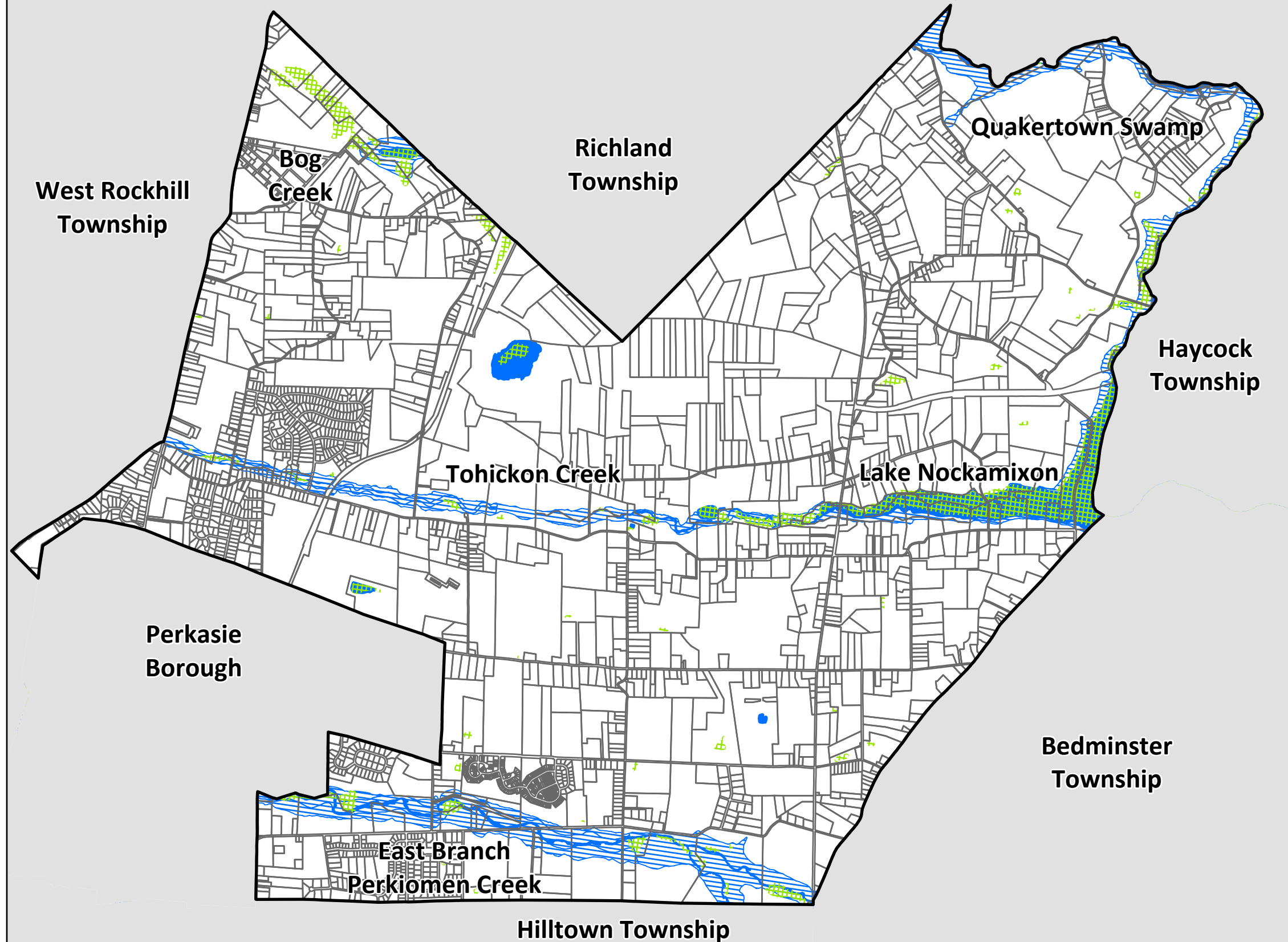





Source: Bucks County Board of Assessment & Planning Commission Data 2018



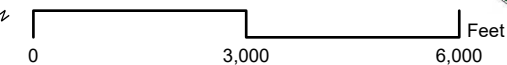



Map 7 - Floodplains and Wetlands

East Rockhill Township
Comprehensive Plan Update 2020



-  Wetlands
-  Watercourses/Waterbodies
-  Floodplains

Source: Bucks County Board of Assessment & Planning Commission Data 2018



groundwater recharge. Wetland areas greater than 10 acres in size are dispersed throughout the Pennridge Area, though many are located along the area’s streams. There are a few concentrations of larger wetland areas in the headwater area of Bog Creek in East Rockhill Township, which are portions of the Quakertown (Great) Swamp (see Map 7).

The Quakertown Swamp is one of the few significant large wetlands in upper Bucks County. It is a palustrine nonglacial bog that provides a critical wildlife habitat and is a natural plant community for numerous wetland species. Seasonally high water tables and large areas subject to occasional ponding or puddling identify this region as a remnant of the original great swamp. The majority of this significant natural feature is located in Richland and East Rockhill townships, but a small portion is located in northeastern part of West Rockhill Township.

The natural resource protection standards in the township zoning ordinance (Sections 27-1900) includes provisions for the preservation of hydrologic resources. Encroachment and disturbances are prohibited within floodplain and floodplain soils, streams, watercourses, lake, ponds, wetlands, and riparian buffer zones, except as noted below on Table 8. A maximum of 20 percent disturbance is allowed for lake and pond shorelines and wetland margins for wetlands over an acre in size, as shown the table below.

TABLE 8. HYDROLOGIC RESOURCES REGULATIONS

Hydrologic Resource	Allowable Disturbances
Floodplain/Floodplain Soils	None*
Streams, Watercourses, Lakes, and Ponds	None**
Lake or Pond Shorelines	No more than 20 percent
Wetlands	None**
Wetlands Margins Wetlands 1 acre and larger	No more than 20 percent
Riparian Buffer Zones	None***

Source: East Rockhill Township Ordinances

Significant Natural Areas

Bucks County contains a diversity of unique natural features. These natural features harbor a wide range of flora and fauna, some of which are not found anywhere else in Pennsylvania. In 2011, an update to a 1999 countywide natural resource inventory was performed to identify and rank the most significant natural areas remaining in the county, including East Rockhill Township. This survey, titled Bucks County, Pennsylvania, Natural Areas Inventory Update was conducted by the Morris Arboretum of the University of Pennsylvania for the Bucks County Commissioners, and is intended to provide guidance natural resource protections, allocation of open space funds, and preparing municipal zoning ordinances.

The Inventory identified 13 distinct conservation landscapes that make up approximately 40 percent of the land area of the county. Portions of East Rockhill Township fall within the Nockamixon – Haycock Conservation Landscapes.

The Nockamixon – Haycock Conservation Landscape includes Nockamixon State Park and hundreds of acres of state gamelands and has been identified as a critical habitat for many species of birds. Within East Rockhill, this landscape includes the Quakertown Swamp area, which includes a range of wetland habitats and was identified as a highest priority for conservation.

In addition to protecting lands from development activities which may impact natural resources, the inventory also recommends that municipalities take action to manage deer population which may overgraze on vegetation, and to manage invasive plant and animal species, which impact the ability of native species to thrive in their natural habitats.

Threats to Wildlife

Wildlife is continually subjected to the following threats:

- **Habitat destruction:** Occurs due to changes in land use development and increased human contact. The result is diminished habitat areas for food and breeding.
- **Habitat fragmentation:** As land use changes, developed parcels separate existing habitat areas, which may interfere with feeding, migration, and breeding of wildlife species.
- **Habitat pollution:** Responsible for degrading the air, water, and soil of habitat areas.
- **Nonnative competition:** The introduction of nonnative species (plant or animal) results in pressures for food and breeding areas.

Wildlife communities are best sustained through proactive protection activities, such as conservation easements, that maintain areas that are linked and not fragmented. By managing existing wildlife areas, habitat remains undisturbed. These proactive protection measures are far less costly than attempting to reestablish a single species or recreate a habitat after it declines to a point requiring a protective status.

Invasive Species

Invasive species are plants or animals that are not native to a particular area, but have been introduced into that area typically through human actions, intentional or unintentional, and can cause significant damage to the local environment. When new species are brought into a new habitat, they can disrupt the local ecosystem by eating the native species, or out compete native plants and animals for other natural resources.

Often an invasive species can spread very quickly, as it may not have any natural predators in the new environment to keep its growth in check. When this happens, the native species die off and it can have impacts on all levels of the food chain and ecological cycle. This not only damages the natural environment, but can be a threat to the welfare of a community as well.

Invasive species, if uncontrolled, can degrade the environment, destroy farmlands and crops, and even be harmful to human health if the species is poisonous. Invasive species can be noxious weeds, fungi, insects, fish, and other plants and animals. Some common examples of invasive species include kudzu, gypsy moth, Dutch elm disease, European water chestnut, Japanese knotweed, thistles, and Japanese beetles. Once an invasive species is present in a new environment, they can be very difficult to remove or control. There are two recent invasive species that are having a significant impact in Bucks County; the emerald ash borer, and the spotted lanternfly. As its name implies, the emerald ash borer feeds on the leaves of ash trees, and its larvae feed on its inner bark. This results in these beetles killing many of the ash trees on which they feed. Green ash and black ash trees are the preferred host of the beetles, but they also feed on and plant larvae in white ash trees, all three of which are common species in Pennsylvania. The loss of these ash trees can cause significant damage to the ecosystem.

The township's subdivision and land development ordinance (Section 515) currently permits *Fraxinus americana* (white ash) and *Fraxinus pennsylvanica* (green ash) trees to be planted as street trees and for buffer plantings. Property owners with ash trees would have the burden and expense of treating and/or removing and replacing these trees once they become infested, or these trees may not be replaced at all. Therefore, consideration should be given to removing the *Fraxinus* species from township tree lists.

Another species causing damage in Bucks County and nearby areas is the spotted lanternfly. The spotted lanternfly can potentially severely impact industries such as fruit growing and logging. The U.S. Department of Agriculture has awarded Pennsylvania with over \$5 million dollars in funds since 2014 to aid in the attempts to control and mitigate the spotted lanternfly. The state has contributed millions in additional funds as well. The funds are being used to provide public education and outreach about the issue, conduct research to learn about the species and its spread in the state, and to determine the most effective means of containing the spread and treating effected areas. These measures include spraying insecticides, and removing certain trees along transportation corridors and truck stops, where the risk of insects or eggs spreading by "hitch-hiking" on vehicles is high.

Bucks County, Berks County, Lehigh County, and Montgomery County are all currently under quarantine by the State Department of Agriculture to prevent the spread of this pest. Under the quarantine, wood products or vegetation that might contain spotted lantern flies are not permitted to be transported out of the quarantine zone. Items such as brush, packing materials, firewood, tree parts, and plants are required to have been inspected and certified before they are transported. Enforcement of this quarantine is limited though. Much of the inspections occur at the level of larger quantities of commercial goods that are shipped in bulk, which are screened by the producers prior to shipping. Individual items or people travelling are not inspected generally.

The *Ailanthus altissima* or tree of heaven, is the preferred tree for spotted lanternflies to attack, and is currently not a permitted species of landscape or street tree by the township's subdivision and land development ordinance. There are, however, many ailanthus trees which grow in the wild throughout the Philadelphia region, having been introduced to the area in the late 18th century from China by nurserymen who planted it as a common street tree due to its fast growing nature.



EMERALD ASH BORER



SPOTTED LANTERN FLY

Resident Survey Results

Although not specifically referenced in the questions or the comments, the general tone of the responses indicated a strong desire to maintain the rural character and natural resources of the community.

Rural lifestyle and natural features were ranked as top reasons why residents choose to live in East Rockhill.

About 65 percent of respondents noted that natural resource protection is of high importance and 54 percent of respondents noted environmental sustainability is of high importance.

Recommendations

- Evaluate and possibly amend the steep slope regulations in the zoning ordinance to incorporate additional protection measures or allowances for limited disturbance areas.
- Review forestry regulations to provide more restrictive clear-cutting standards.
- Evaluate and possibly amend the riparian buffer regulations in the zoning ordinance to determine if an expansion of Zone 1 and Zone 2 would provide greater protection to the township's stream corridors.
- Remove Fraxinus tree species from the tree lists in the subdivision and land development ordinance, due to their vulnerability to the emerald ash borer.

Housing

Encouraging a wide array of housing options is crucial to providing the fundamental needs of the township’s residents. The following analysis assesses the present condition of housing stock, as well as past and future growth. This chapter also reviews the strengths and weaknesses of the housing market and how the township can meet the housing needs of the community.

Housing Composition

In 2000, East Rockhill Township had a total of 1,883 housing units, which was an increase of 819 units since 1980. In more recent decades, the township’s housing stock has continued to grow, reaching 2,016 housing units by 2017. According to the most recent estimates by the American Community Survey, the number of housing units increased by 6.6 percent from 2000 to 2017.

TABLE 9. HOUSING UNITS BY TYPE, 2000 — 2017

Housing Units by Type	2000		2017	
	Units	Percent	Units	Percent
Single-family detached	1,396	74.1	1,716	85.1
Single-family attached	252	13.4	233	11.6
Twins or Duplexes	37	2	10	0.5
Multifamily	116	6.1	47	2.3
Mobile homes	67	3.6	10	0.5
Seasonal units	15	0.8	0	0
Total	1,883	100	2,016	100

US Census, 2000. American Community Survey (ACS) 5-year estimates, 2013-2017

The 2013-2017 American Community Survey (ACS) 5-year estimates provide a sampled approximation of the different types of housing units in East Rockhill Township (see Table 9). Because of the township’s rural and suburban setting, most of the township’s housing units consist of single-family detached dwelling units. Of the total number of units, approximately 1,716, or 85.1 percent, are single-family detached. Single-family attached units (townhouses) comprise 11.6 percent of the housing stock, while twins or duplexes make up 0.5 percent, multifamily homes 2.3 percent, and mobile homes 0.5 percent. These figures, while the most recent estimates, are not to be taken as exact counts. The margin of error and variability of ACS estimates, especially with figures in single or double digits, may be as much as 20 percent or higher. These figures should be taken as “ballpark figures” and not precise measurements.

TABLE 10. HOUSING OCCUPANCY STATUS

Housing Occupancy Status	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Total housing units	2,016	100	248,873	100
Occupied housing units	2,003	99.3	235,909	94.8
Vacant housing units	13	0.7	12,964	5.2
Homeowner vacancy rate	0	(x)	0.9	(x)
Rental vacancy rate	0	(x)	5.4	(x)

American Community Survey 5-year estimates, 2013-2017

Of the 2,016 housing units in the township, 2,003, or 99.3 percent, are occupied (see Table 10). The township's occupancy rate is higher than the countywide average by nearly 5 percent. Of the township's occupied units, 1,543, or 77 percent are owner-occupied, meaning approximately 23 percent of the occupied dwellings are renter-occupied. These estimates are on par with the countywide averages (see Table 11). The average household size of owner-occupied units in the township (2.85) is very similar to that of the countywide average (2.75). The average household size of renter-occupied units in the township is 2.89, whereas the countywide average is 2.16. In East Rockhill Township, there is little distinction between the sizes of owner-occupied, or renter-occupied, dwelling units, which may be indicative of a predominantly single-family detached rental stock.

TABLE 11. HOUSING TENURE

Housing Tenure	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Occupied housing units	2,003	100	235,909	100
Owner-occupied	1,543	77	180,670	76.6
Renter-occupied	460	23	55,239	23.4
Average household size of owner-occupied unit	2.85	(x)	2.75	(x)
Average household size of renter-occupied unit	2.78	(x)	2.16	(x)

American Community Survey 5-year estimates, 2013-2017

TABLE 12. HOUSING UNITS, YEAR BUILT

Year Built	Housing Units	Percent
2014 or later	3	0.2
2010 to 2013	38	1.9
2000 to 2009	148	7.3
1990 to 1999	517	25.6
1980 to 1989	378	18.7
1970 to 1979	202	10
1960 to 1969	227	11.3
1950 to 1959	163	8.1
1940 to 1949	36	1.8
1939 or earlier	304	15.1
Total housing units	2,016	100

American Community Survey 5-year estimates, 2013-2017

The ACS data also provides an indication of the age of the housing stock in the township (see Table 12). It is estimated that 25 percent of the units were constructed prior to 1960 and 40.1 percent of the units were built between 1960 and 1989. Approximately 35 percent of the housing units in the township were constructed between 1990 and present day. The construction of housing units has dramatically slowed between 2000 and 2018.

Table 13 shows that two-thirds (65.1 percent) of East Rockhill Township's owner-occupied units are with an outstanding mortgage. This is just below the county average as a whole. Many homeowners who bought homes in the 1990s and 2000s likely have not yet paid off their mortgages. About 35 percent of East Rockhill housing units are without a mortgage. These homeowners either paid cash for their homes, have lived in their home long enough to have paid off any mortgage debt, or inherited a family home that had no mortgage debt.

TABLE 13. MORTGAGE STATUS OF HOUSING UNITS

Mortgage Status	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Owner-occupied units	1,543	100	180,670	100
Housing units with a mortgage	1,005	65.1	123,126	68.1
Housing units without a mortgage	538	34.9	57,544	31.9

American Community Survey 5-year estimates, 2013-2017

Housing Value and Affordability

Home values, and therefore housing prices, in East Rockhill have generally closely mirrored those of the county overall. Similar to other municipalities around the county, East Rockhill experienced a spike in construction and subsequent housing prices throughout the 2000s. After the crash of the housing market in 2008, housing prices in the county declined. Housing prices in the Philadelphia region have recovered, and now exceed their pre-recession levels of 2008, which represented a significant increase from home values in the 1990s.

According to the 2013-2017 ACS estimates, the median value of an East Rockhill home is \$309,100 (see Table 14). The median value is reflective of most homes in the township, as just over three quarters of all owner-occupied units are valued between \$200,000 and \$499,999. The township’s housing unit value is increasing proportionately and concurrently with the countywide averages. The median value of an owner-occupied unit in Bucks County is \$315,700, which is only \$6,000 more than the township’s median value. Two thirds of housing units throughout the county are valued between \$200,000 to \$499,999.

TABLE 14. VALUE OF OWNER-OCCUPIED HOUSING UNITS

Value of Owner-Occupied Housing	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Owner-occupied units	1,543	100	180,670	100
Less than \$50,000	42	2.7	6,349	3.5
\$50,000 to \$99,999	0	0.0	2,263	1.3
\$100,000 to \$149,999	88	5.7	6,100	3.4
\$150,000 to \$199,999	54	3.5	16,890	9.3
\$200,000 to \$299,999	544	35.3	52,213	28.9
\$300,000 to \$499,999	602	39.0	66,767	37.0
\$500,000 to \$999,999	213	13.8	26,621	14.7
\$1,000,000 or more	0	0.0	3,467	1.9
Median Value	309,100	(x)	315,700	(x)

American Community Survey 5-year estimates, 2013-2017

Housing affordability will be an issue for the township in the coming years if demand is high for homes in rural and suburban locations like East Rockhill and home prices continue to rise. While housing values and prices have been increasing in the previous decades, the impacts of housing affordability is not necessarily shared equally by all residents of the township.

General standards determined by the U.S. Department of Housing and Urban Development (HUD) consider housing to be affordable to a household if that household is spending 30 percent of their income or less on housing. A household that is spending greater than 30 percent of their income is considered cost burdened. Using this metric, a snapshot of general housing affordability for different income groups can be considered.

TABLE 15. FINANCIAL CHARACTERISTICS OF HOUSEHOLDS IN THE PAST 12 MONTHS

Household Income In the Past 12 Months	East Rockhill Township			Bucks County		
	Total Occupied	Owner Occupied	Renter Occupied	Total Occupied	Owner Occupied	Renter Occupied
	Percent	Percent	Percent	Percent	Percent	Percent
Occupied housing units	2,003	1,543	460	235,909	180,670	55,239
Less than \$5,000	0.7	1.0	0.0	1.7	1.2	3.6
\$5,000 to \$9,999	1.9	0.0	8.5	1.6	0.8	4.4
\$10,000 to \$14,999	0.5	0.6	0.0	2.7	1.4	6.8
\$15,000 to \$19,999	7.6	5.1	16.1	3.2	2.3	6.4
\$20,000 to \$24,999	2.0	1.6	3.5	3.3	2.5	6.2
\$25,000 to \$34,999	4.4	2.5	10.7	6.6	5.1	11.4
\$35,000 to \$49,999	11.6	10.7	14.6	10.3	8.2	17.3
\$50,000 to \$74,999	18.3	15.2	28.7	16.5	15.5	19.6
\$75,000 to \$99,999	13.3	15.3	6.7	13.2	14.0	10.8
\$100,000 to \$149,999	17.1	20.7	4.8	19.1	22.3	8.4
\$150,000 or more	22.5	27.2	6.5	21.7	26.8	5.1
Median household-income (dollars)	\$79,082	\$97,614	\$46,685	\$82,031	\$98,256	\$44,093

American Community Survey 5-year estimates, 2013-2017

As Table 15, Financial Characteristics of Households illustrates, there is an income gap between the households in the township that own their home and those who rent. The median household income for owner-occupied households is over \$50,000 more than that for renter households. The median household income of total-occupied and owner-occupied housing units in the township is practically identical to the estimates for Bucks County as a whole. The data shows that higher income households are much more likely to own their home compared to lower income households.

TABLE 16. MONTHLY HOUSING COSTS

Monthly Housing Costs	East Rockhill			Bucks County		
	Total Occupied	Owner Occupied	Rental Occupied	Total Occupied	Owner Occupied	Rental Occupied
	Percent	Percent	Percent	Percent	Percent	Percent
Less than \$300	0.9	1.2	0	1.7	1.3	3
\$300 to \$499	7.5	9.7	0	4	4.1	3.7
\$500 to \$799	11.4	14.4	1.5	12.2	13.5	7.8
\$800 to \$999	10.5	7.3	21.5	10.9	9	17
\$1,000 to \$1,499	13.4	8.5	28.7	22.4	16.7	40.9
\$1,500 to \$1,999	27.2	25.3	33.5	17.5	18.3	14.6
\$2,000 to \$2,499	8.5	11	0	12.4	14.5	5.5
\$2,500 to \$2,999	11.7	15.2	0	7.8	9.7	1.8
\$3,000 or more	5.4	7	0	10.3	12.9	1.8
No cash rent	3.4	(x)	14.8	0.9	(x)	3.9
Median (dollars)	\$1,591	\$1,711	\$1,382	\$1,463	\$1,639	\$1,171

American Community Survey 5-year estimates, 2013-2017

Despite this gap in income, the difference between the costs owning a home and renting a home are not as wide. Table 16: Monthly Housing Costs shows that the median monthly costs for owner-occupied properties is \$1,711 while median costs to rent a home is \$1,382. Monthly homeownership costs are slightly above the median of the county, as are renter costs.

TABLE 17. HOUSEHOLD INCOME AND POVERTY STATUS

Municipality	Median Household Income	Percent Below Poverty Line in Past 12 Months
East Rockhill Township	\$79,082	10.5
Bedminster Township	\$82,411	2.6
Haycock Township	\$89,792	2.1
Hilltown Township	\$94,964	5.9
Richland Township	\$66,129	5.3
West Rockhill Township	\$69,401	7.6
Perkasie Borough	\$73,470	7.2
Sellersville Borough	\$66,063	9.1
Bucks County	\$82,031	6.1

American Community Survey 5-year estimates, 2013-2017

Relative to surrounding communities, East Rockhill has higher levels of households living in poverty (10.5 percent) (see Table 17). Poverty guidelines (2019), as determined by the U.S. Department of Health and Human Services, list a range of incomes from \$12,490 to \$43,430 that could be considered the threshold for poverty status and are dependent on the size of the household. A household of two persons would need to have an annual income of less than \$21,130 to be considered living in poverty, while a household of five persons could earn up to \$37,720.

For households with lower incomes and in particular those with poverty level incomes, there are a number of resources which provide housing assistance, either through direct provisions of housing in the form of a public housing project. These developments are largely funded by the Department of Housing and Urban Development (HUD) and awarding of assistance is subject to income restrictions.

The Section 8 Housing Choice Voucher Program, which allow households to rent market rate apartments at subsidized rent levels, is administered through the Bucks County Housing Authority, and there are approximately 2,676 active vouchers in Bucks County. In order to qualify for a Housing Choice Voucher, a household’s income may not exceed 50 percent of the area median income, which for 2017 in Bucks County for a family of four was \$41,600. The average value of a Section 8 Housing Choice Voucher, which provides a direct payment to landlords to subsidize a tenant’s rent, is \$648 a month in Bucks County as of 2017. A recipient of a voucher is responsible for paying the balance of the rent, and is required to rent a housing unit that costs no more than the established fair market value for the region, so there is a cap on the price of a house or apartment that can be rented using voucher funds. The Housing Authority currently has a waiting list of over 2,000 households for these housing choice vouchers.

In addition to the Housing Choice Vouchers, which allow a user to choose their own homes, there are several housing developments that have units which are available only for qualified low-income families. Just like the vouchers, being awarded a housing unit in a project-based affordable housing development

is subject to income restrictions and availability. Several of these public projects have been developed to target a specific segment of the low-income population, such as seniors or the mentally or physically disabled. The project-based affordable housing developments in the central and upper Bucks County region are:

- Meadow Glen – Hilltown, 91-, two- and three-bedroom units.
- Grundy House – Quakertown, 152 senior (age 62+) one- and two-bedroom units.
- Sellersville Heights – Sellersville, 33 one- and two-bedroom units.
- Grundy Manor – Telford, 120 senior (age 62+) one-bedroom units.
- Shadywood Village – Perkasio, 128 senior (age 62+) one-bedroom units.
- Penn Gardens – Sellersville, 20 one-bedroom units, for low-income adults (eighteen years of age or older) who have a severe and persistent mental illness, but are able to live independently. (Administered by Penn Foundation, HOME)
- Grundy Hall – Doylestown, 152 senior (62+) one- and two-bedroom units.

The Low-Income Housing Tax Credit (LIHTC) Program is another source of funding for affordable housing. The LIHTC provides tax credit funding to help finance the construction of affordable housing, or to provide a subsidy for developments that set aside a portion, typically 10 percent to 20 percent, of the overall number of homes being built as income-restricted units. Administration of these units are usually overseen by non-profits and are somewhat different from the Section 8 housing units. The following developments near the township have been funded through LIHTC:

- Olde Towne Manor – Perkasio, 15 senior (age 62+) one-bedroom units. (Bucks County Housing Development Corp.)
- Sellersville Court – Sellersville, 20 three- and four-bedroom units. (Grosse & Quade Management Co.)
- Penn Villa – Hilltown, 23 units for adults with mental illnesses and persons with co-occurring mental illnesses and substance use disorders. (Administered by the Penn Foundation.)

In addition to the above mentioned programs which are federally funded, Bucks County offers several programs which can assist current and future tenants and homeowners to make housing more affordable:

- The County offers up to \$15,000 in the form of a no-interest loan to homeowners to allow them to repair their homes through the Housing Rehabilitation Program. Homeowners must be low- to moderate- income to qualify.
- First-time homebuyers may also be eligible for up to \$10,000 in down payment and/or closing cost assistance through the County's Housing Trust Fund
- Housing Link is the County's housing crisis hotline, and will assist those with critical housing needs navigate the various resources available. The number is 1-800-810-4434.
- The Bucks County Homeless Shelter is located in Levittown and is run by Family Services Association. During the winter months, Code Blue shelters can be found throughout Bucks County. Information about Code Blue Shelters can be found on the Bucks County website or by calling Housing Link.

Zoning

While almost 90 percent of the township’s housing stock is composed of single-family homes, the township’s zoning ordinance does permit a reasonable range of housing types in a reasonable range of districts, as mandated by the Pennsylvania Municipalities Planning Code (MPC). Section 604(4) of the code requires that the provisions of the zoning ordinance be designed:

To provide for the use of land within the municipality for residential housing of various dwelling types encompassing all basic forms of housing, including single-family and two-dwelling units, and a reasonable range of multifamily dwellings in various arrangements, mobile homes, and mobile home parks, provided, however, that no zoning ordinance shall be deemed invalid for the failure to provide for any other specific dwelling types.

Single-family detached homes are permitted in all districts other than the C-E Cultural-Educational, C-O Commercial-Office, E Extraction, and I-1 and I-2 Industrial districts. Single-family detached cluster housing is permitted in the RP Resource Protection, RR Rural Residential, S Suburban, and R-1 Residential zoning districts. Those districts in which single-family detached housing is a permitted use cover a majority of the township.

Mobile home parks are permitted by special exception in the R-1 Residential District and as a conditional use in the E Extraction District. Life care and full care facilities are permitted in the R-1 Residential and C-E Cultural-Educational districts and are permitted by conditional use in the S Suburban District. Rooming houses are permitted by special exception in the VC Village Commercial District. Group homes are permitted by special exception in the Resource Protection, Rural Residential, Village Residential and Suburban districts.

Table 18 provides a summary of the major housing types as permitted in the various zoning districts.

TABLE 18. PERMITTED HOUSING

		East Rockhill Zoning Districts											
Housing Type		AP	RP	RR	S	R-1	VR	VC	C-E	C-O	I-1	I-2	E
B1	Detached Dwelling	P	P	P	P	P	P	P					
B2	Cluster Subdivision		P	P	P	P							
B3	Performance Standard Development				C	C	P						
B4	Mobile Home Park					S							C
B5	Group Home		C	C	C		C						
B6	Life Care Facility				C	P			P				
B7	Full Care Facility				C	P			P				
B8	Rooming or Boarding House							S					
B9	Residential Conversion	C	C	C		C	C	C	C				
B10a	Accessory Professional Offices	P	P	P	P	P	P	P	P		P	P	
B10b	Accessory Personal Services	P	P	P	P	P	P	P	P		P	P	
B10c	Accessory Instructional Services	P	P	P	P	P	P	P	P		P	P	
B10d	Accessory Home Crafts	P	P	P	P	P	P	P	P		P	P	
B10e	Accessory Family Day Care	S	S	S	S	S	S	S	S		P	P	
B10f	Accessory Trades, Business	C	C	C	C	C	C	C	C		P	P	
B10g	Accessory Repair Service & Other	S	S	S	S	S	S	S	S		P	P	
B11	Residential Accessory Building	P	P	P	P	P	P	P	P		P	P	
B12	Garage or Yard Sales	P	P	P	P	P	P	P	P		P	P	
B13	Age-Qualified Development				C								

Use Regulations Key	
P	A use permitted by right
S	A use permitted by special exception
C	A use permitted as a conditional use

Table of Zoning Districts	
AP	Agricultural Preservation
RP	Resource Protection
RR	Rural Residential
S	Suburban
R-1	Residential
VR	Village Residential
VC	Village Commercial
C-E	Cultural-Educational
C-O	Commercial-Office
I-1	Industrial-1
I-2	Industrial-2
E	Extraction

Land Use B3, or Performance Standard Development combines several house types, including single-family detached units, village homes, twins, duplexes, multiplexes, townhouses, and apartments, into one development to help ensure design and quality standards throughout the permitting districts, as well as ensuring that a diverse selection of housing types is available in the township. The use requires the provision of open space and limits density and impervious surfaces.

The Performance Standard Development Use is a conditional use in the S Suburban and R-1 Residential districts and is permitted by right in the VR Village Residential District. Permitting Performance Standard Development as a conditional use allows for the Board of Supervisors to oversee proper implementation of higher-density development.

The I-1 Industrial, I-2 Industrial, and C-O Commercial Office districts allow very few opportunities for residential development. The C-O Commercial-Office District is the only district that does not allow any type of dwelling unit. The I-1 Industrial and I-2 Industrial districts allow accessory dwelling units, as provided by the Accessory Home Occupation (B10) Use.

The Rooming or Boarding House (B8) Use is only permitted as a special exception in the VC Village Commercial District. Rooming or boarding houses are intended to be used as dormitories, fraternities or sororities, or by groups for charitable, educational or philanthropic purposes.

The Residential Conversion (B9) Use is permitted as a conditional use in the VC Village Commercial District. Residential conversions are existing buildings that are converted into two or more dwellings or an accessory building converted into one or more dwelling units. Residential conversions are a conditional use in almost all of the districts that permit an accessory residential uses.

The Group Home (B5) Use is a permitted conditional use in the RP Residential Protection, RR Rural Residential, S Suburban, and VR Village Residential districts. The purpose of this use is to create a setting which most nearly approximates traditional familial living arrangements for handicapped, elderly, disabled, or persons who might otherwise be confronted with institutionalization.

Of the township's 13 residential land uses, three have been adopted in the last decade. Accessory Home Occupation (B10) and Garage and Yard Sales (B12) are permitted by right in all districts except for C-O Commercial Office and E Extraction. Age-Qualified Development (B13) is a conditional use in the Suburban District.

Age-Qualified developments are intended for persons 55 years of age or older and permits a variety of housing types specifically designed for an active adult population. Whenever a lot or unit is sold, resold, rented, or otherwise occupied, at least one of the occupants shall be 55 years of age or older. With differing dimensional requirements, detached dwellings, twins, and townhouses are permitted to be used as age-qualified housing units. A mix of dwelling unit types is necessary to promote a balanced community. The number of dwellings in a development determines the minimum number of required dwelling unit types. For example, if a development has 60 units or less, only one type of dwelling unit is required. However, if a development has over 150 units, all three permitted types of dwelling units must be present.

Housing Development Patterns

The housing stock in East Rockhill is comprised of a majority of single-family homes on lots of 3 or more acres. While this type of subdivision is the primary form of housing in the township, there are attached and multifamily dwellings located in the S Suburban and R-1 Residential zoning districts. This type of housing in East Rockhill may appeal to homeowners who desire rural, small town living and prefer the greater affordability and lessened maintenance responsibilities of townhouses or multifamily.

As indicated in Chapter 3 – Demographics, segments of the township's population are aging. The age cohorts that substantially increased in population between 2000 and 2010 were between the ages of 45 to 64. Baby-boomers and empty-nesters looking to downsize and reduce time and effort needed to maintain a large lot may not be looking for a single-family unit. Adult residents who desire to stay in the township may seek multifamily apartments or condominium developments, as well as age-restricted or assisted living dwellings.

Age-Restricted Housing

The township zoning ordinance provides for age-oriented development types. Life care facilities, full care facilities, and age-qualified developments are permitted in the township. The life care facility or “assisted living” land use is intended for individuals requiring certain support facilities, including personal care boarding in excess of eight residents. Full care facilities are intended to be used exclusively for individuals requiring skilled full time care. Currently, there are no age-qualified developments or full care facilities in East Rockhill. The life care facility and full care facility uses are permitted by right in the R-1 Residential and C-E Cultural-Educational districts and are permitted as a conditional use in the S Suburban District. Age-qualified developments are permitted as a conditional use in the S Suburban District. Independent living units, assisted living facilities, and continuing care retirement communities are located nearby in Perkasio Borough and West Rockhill Township.

Village Zoning

Typically, a village is viewed as a small, concentrated settlement that is dominated by older single-family homes, interspersed with nonresidential buildings such as businesses, churches, and post offices. The structures are usually spaced closely together, at crossroads, capturing the image of the village as an identifiable place.

Good village zoning works to emulate and enhance village design cues. Important considerations include the placement of buildings close to the street, a sufficient village density, an emphasis on edges, and a focus on pedestrian-friendly uses and connectivity.

The township’s zoning ordinance provides two districts to support the existing villages. The VR Village Residential District and the VC Village Commercial District are designed to preserve the character of the township’s villages by ensuring that any building which is to be erected, altered or used will be in conformance with the design regulations. The design regulations in the VC Village Commercial District are intended to protect and preserve the character of the village center by employing design, scale, materials and architecture that are consistent with the historic character of the villages. Facilities shall be planned and designed as a single complex with an architectural theme that is acceptable to the township. The VR Village Residential District follows similar design regulations, emphasizing that construction should be low density and provide a single and uniform layout with an architectural theme that is comparable to the existing structures and acceptable to the township Board of Supervisors and Planning Commission. The villages of Keelersville and Rockhill Station are included in the VR Village Residential District and Rich Hill village is within the VC Village Commercial District. The village of Hagersville is included in both the VR Village Residential and VC Village Commercial districts.

Short-Term Rentals

A recent trend which has impacted local housing is the boom in using residential properties as short-term rentals. The idea of a home being rented short-term for a few nights or a few weeks at a time has been common, mainly in tourist areas and resort towns, but the concept has been spreading to many residential areas in cities and even rural locales. Websites such as Airbnb and VRBO have helped make it very simple for a property owner to rent out either their entire property, or a room in their house to guests for any number of days or weeks. For some this has been a way to provide additional income by occasionally renting out a spare room, while other properties are utilized only as a short-term rental vacation property.

For the latter this can present issues for a residential community, as a home will effectively function as if it were a hotel or boarding house, with new guests coming and going. This often occurs within a residential district that is not zoned to permit that type of use of a property.

On April 26, 2019, the Pennsylvania State Supreme Court made a decision in the case of *Slice of Life vs. Hamilton Township and Hamilton Township Zoning Hearing Board*, which dealt with the transient use of a single family home in the Poconos. The decision essentially said that the purely transient use of a house is not a permitted use in a residential district limiting use to single-family homes by a “single housekeeping unit.” The township should consider amending the zoning ordinance to address short-term rentals in East Rockhill.

Housing Forecasts

The amount of residential growth in the township is dependent on the growth of the Philadelphia and Lehigh Valley regions. As those regions are anticipated to grow, some of that growth will likely occur in East Rockhill Township. The desirability of the area, the availability of goods and services, land availability for future development, proximity of regional transportation networks, and the accessibility to regional employment will all impact that growth. Housing development is also dependent on the perceived supply and demand of housing in the area. If developers perceive a strong demand and low supply of housing in the township, a large number of units will be built. Although recent trends show greater demand for compact, urban living, the demand for single-family detached housing on larger lots will continue to be a large component of the township’s future housing composition.

TABLE 19. PROJECTED HOUSING UNIT GROWTH

Projected Growth	2010	2020	2030	2040	2045
Housing Units	2,120	2,221	2,322	2,423	2,474
Amount Change	x	101	101	101	51

US Census, 2010. Delaware Valley Regional Planning Commission Population Forecasts, 2015-2045

The population projections provided in Chapter 3 – Demographics, estimate that the township will have gained approximately 986 people between 2010 and 2045. Simple linear projections based on average household size and forecasted population growth suggest that township could add 354 dwelling units to its housing stock during this time (see Table 19). On average, approximately 10 dwelling units could be constructed per year.

Any forecast of future growth is tentative and subject to a given set of assumptions holding true for a defined period of time and the constraints of the projection model employed. These projections should provide a rough estimate of the range of anticipated housing growth. The nature of that growth will be dependent on future housing markets and the growth management policies and programs of the township.

Resident Survey Results

Affordability of housing was noted in the comments as being an issue for residents, particularly affordable senior housing opportunities. However, 36 percent of respondents noted that senior housing opportunities are of low importance. Furthermore, 41 percent of respondents noted that a mix of housing stock is of low importance.

When asked what type of development would be supported in the township, 31 percent of respondents said they would support residential (single-family, twins, duplexes) development. Only 5 percent of respondents said they would support residential (multifamily, apartments, townhouses) development.

Recommendations

- Periodically review the density requirements of the R-1 Residential and S Suburban districts to ensure adequate standards to accommodate anticipated population growth.
- Ensure strict enforcement of the building code and zoning ordinance.
- Amend the zoning ordinance to address short-term rentals in the township.

Nonresidential Development and Economic Characteristics

Composition

East Rockhill Township's commercial development is focused primarily along the arterial corridors of Route 313, Ridge Road and North Fifth Street, as well as the village districts. The commercial businesses within these areas include retail businesses, restaurants, taverns, and auto-oriented businesses, such as gas stations and repair shops. North Fifth Street and Ridge Road provide access to the commercial uses in Keelersville and Hagersville villages, respectively, as well as provide easy transportation to the businesses located within Perkasio and Sellersville boroughs. Route 313 connects East Rockhill residents to Quakertown to the north and Doylestown to the south.

Two of the largest nonresidential land uses in the township are the Pennridge Airport and the Rock Hill Quarry. The airport, located in the western portion of the township, is within the Pennridge Industrial Park. The Pennridge Industrial Park contains manufacturing operations and is slated to increase its industrial prowess with the proposed addition of two to six 100,000-square-foot buildings. North of the Pennridge Industrial Park is the Rock Hill Quarry.

Resident Employment

According to the most recent estimates from the U.S. Census Bureau's American Community Survey (ACS), around 70 percent of the township's population age 16 or older participates in the labor force (see Table 20). This is just above the overall labor force participation rate for Bucks County as a whole. However, the unemployment rate for both East Rockhill and Bucks County is between 5 and 6 percent. The U.S. Census Bureau defines labor force as all people classified in the civilian labor force, plus members of the U.S. Armed Forces (people on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard). The civilian labor force consists of all non-institutionalized civilians who are either employed or unemployed. The term "employed" refers to all civilians 16 years old and over who are currently working or have employment but are on a leave of absence. All civilians 16 years old and over are classified as unemployed if they are actively looking for a job for at least four weeks and were available to accept a job during this time. Civilians considered not in the labor force consist mainly of students, stay at home parents, retired workers, seasonal workers, institutionalized people, and people doing only incidental unpaid family work.

TABLE 20. EMPLOYMENT STATUS

Employment Status	East Rockhill Township		Bucks County	
	Number	Percent	Number	Percent
Population 16 years & over	4,562	100	511,295	100
In labor force	3,231	70.8	345,693	67.6
Civilian labor force	3,231	70.8	345,501	67.6
Employed	3,044	66.7	326,994	64
Unemployed	187	4.1	18,507	3.6
Armed Forces	0	0	192	0
Not in labor force	1,331	29.2	165,602	32.4
Civilian labor force	3,231	100	345,501	100
Unemployment Rate	(x)	5.8	(x)	5.4

Source: American Community Survey 5-year estimates, 2013-2017

The majority of residents of East Rockhill are employed by private companies in positions that pay either a salary or hourly wage (see Table 21). Just under 10 percent of residents work in a government job, and only 4 percent of the population is self-employed. Of the 3,044 estimated laborers in the township, 36 percent are working in management or professional occupations (e.g., engineers, physicians, and executives) (see Table 22). About 15 percent of the workforce is in service occupations (e.g., retail workers, home health aides, police and EMS), nearly 30 percent of the township's employed population work in sales and office occupations (e.g., auto sales, administration), 9 percent work in natural resources, construction, and maintenance jobs, and 12 percent work in production, transportation, and material moving occupations (e.g., machinists, drivers, and welders).

TABLE 21. CLASS OF WORKER

Class of Worker	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Civilian employed population 16 years & over	3,044	100	326,994	100
Private wage & salary	2,631	86.4	280,856	85.9
Government workers	290	9.5	28,625	8.8
Self-employed in own not incorporated business workers	123	4	16,939	5.2
Unpaid family workers	0	0	574	0.2

Source: American Community Survey 5-year estimates, 2013-2017

TABLE 22. OCCUPATION

Occupation	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Civilian employed population 16 years & over	3,044	100	326,994	100
Management, business, science, & arts occupations	1,093	35.9	141,074	43.1
Service occupations	446	14.7	45,479	13.9
Sales & office occupations	875	28.7	82,443	25.2
Natural resources, construction, & maintenance occupations	274	9	25,656	7.8
Production, transportation, & material moving occupations	356	11.7	32,342	9.9

Source: American Community Survey 5-year estimates, 2013-2017

Resident employment can also be broken down by industry. The following table, Table 23, shows the types of industries in which township residents are employed, which differs from the previous tables which were organized by the type of occupation regardless of industry. According to the estimates from the ACS, over 21 percent of employed residents work in the Manufacturing industry and 17 percent work in the Education Services and Health Care industries. A large driver of this employment could be the presence of Grandview Hospital. Located in West Rockhill Township, the hospital and all the accompanying medical offices and services serve as a large regional employer. In conjunction with Pennridge High School and the Bucks County Community College campus, these institutions may explain the employment numbers in the Education and Health Care industries. Outside of Manufacturing and Education and Healthcare, 14 percent of the employed township residents work in Professional, Scientific, Administrative, or Waste Management industries. This is the next largest industry by number of resident employees and the only other industry to be represented by over 10 percent of the working population.

TABLE 23. INDUSTRY

Industry	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Civilian employed population 16 years and over	3,044	100	326,994	100
Agriculture, forestry, fishing, hunting, or mining	18	0.6	1,719	0.5
Construction	237	7.8	21,653	6.6
Manufacturing	649	21.3	38,913	11.9
Wholesale trade	173	5.7	11,803	3.6
Retail trade	278	9.1	39,707	12.1
Transportation, warehousing, or utilities	32	1.1	12,686	3.9
Information	67	2.2	7,045	2.2
Finance, insurance, or real estate	227	7.5	24,987	7.6
Professional, scientific, administrative, or waste management	411	13.5	40,653	12.4
Educational services & health care	517	17	78,311	23.9
Arts, entertainment, or recreation	270	8.9	24,952	7.6
Other services (except public administration)	49	1.6	14,217	4.3
Public Administration	116	3.8	10,348	3.2

Source: American Community Survey 5-year estimates, 2013-2017

Employment Projections

The Delaware Valley Regional Planning Commission produces population and employment projection figures for the entire Philadelphia metropolitan region, broken down into projections for each municipality within the region (see Table 24). According to their projections, East Rockhill Township is expected to add 560 jobs by the year 2045. This would be a 21 percent increase in the employment base in the township. Compared to projections for the county, which is also projected to grow in terms of employment, the rate of projected growth in East Rockhill is nearly double. The projections are rough figures for overall employment. There is no distinction or detailed analysis of whether this growth will be in any particular industry or occupation.

TABLE 24. EMPLOYMENT PROJECTIONS

Year	East Rockhill	Bucks County
2015	2,140	322,731
2020	2,259	329,645
2025	2,335	337,203
2030	2,411	344,859
2035	2,520	351,310
2040	2,636	356,671
2045	2,700	361,124

Source: Delaware Valley Regional Planning Commission (DVRPC)

Commuter Characteristics

The majority of workers who live in East Rockhill Township get to their place of employment by driving alone (see Table 25). This is unsurprising given the rural nature of the township. Nearly 85 percent of residents commute regularly by driving themselves in a personal car or truck. Almost 7 percent of residents get to work by carpooling, which would likely indicate that there are many residents who live near each other and work in the same location. Almost 4 percent of residents work from home and, according to Census estimates, 1 percent of the township regularly walks to work. Approximately 72 people commute to work by “other means,” which may include taxis and ride sharing services such as Uber or Lyft. The average commute time for East Rockhill residents is 33 minutes.

TABLE 25. MODE OF COMMUTE

Mode of Commute	East Rockhill		Bucks County	
	Estimate	Percent	Estimate	Percent
Workers 16 years and over	3,002	100	320,937	100
Car, truck, or van - drove alone	2,538	84.5	262,838	81.9
Car, truck, or van - carpooled	198	6.6	22,618	7
Public transportation (excluding taxicab)	41	1.4	10,576	3.3
Walked	36	1.2	5,806	1.8
Other means	72	2.4	2,697	0.8
Worked at home	117	3.9	16,402	5.1
Mean travel time to work (minutes)	33.1	(x)	29.8	(x)

Source: American Community Survey 5-year estimates, 2013-2017

According to the U.S. Census Bureau Transportation Planning Products (CTPP) 2006-2010 commute statistics, which estimate the origin and destination of commuters, only around 20 percent of people employed in East Rockhill also reside in the township (see Table 26). Of the estimated 1,154 people who work in East Rockhill, 8 percent of workers commute from Perkasio Borough (see Table 27). About 53 percent of workers commute from other municipalities within Bucks County and 7 percent commute from Montgomery County. Of the employed East Rockhill Township residents, 9 percent commute to Perkasio Borough, 40 percent commute to other municipalities in Bucks County for work, 30 percent commute to Montgomery County, and 3 percent commute to Philadelphia.

TABLE 26. PLACE OF RESIDENCE FOR PEOPLE WORKING IN EAST ROCKHILL TOWNSHIP

Place of Residence for People Working in East Rockhill Township									
Place of Residence	Total Worker	Drove Alone	Car Pool	Bus	Rail	Bike	Walk	Other	Home
East Rockhill Township	220	105	0	0	0	0	0	0	115
Sellersville Borough	45	45	0	0	0	0	0	0	0
Perkasie Borough	95	95	0	0	0	0	0	0	0
Bethlehem City	0	0	0	0	0	0	0	0	0
Doylestown Borough	0	0	0	0	0	0	0	0	0
Philadelphia City	0	0	0	0	0	0	0	0	0
Other Bucks County	610	582	18	10	0	0	0	0	0
Montgomery County	84	74	10	0	0	0	0	0	0
New Jersey	4	4	0	0	0	0	0	0	0
Other	96	81	15	0	0	0	0	0	0
Total	1,154	986	43	10	0	0	0	0	115

Source: US Census Bureau CTPP Commute Characteristics 5-year estimates, 2006-2010

TABLE 27. PLACE OF EMPLOYMENT FOR PEOPLE LIVING IN EAST ROCKHILL TOWNSHIP

Place of Employment for People Living in East Rockhill Township									
Work Place	Total Worker	Drove Alone	Car Pool	Bus	Rail	Bike	Walk	Other	Home
East Rockhill Township	220	105	0	0	0	0	0	0	115
Sellersville Borough	80	65	15	0	0	0	0	0	0
Perkasie Borough	255	155	100	0	0	0	0	0	0
Bethlehem City	55	55	0	0	0	0	0	0	0
Doylestown Borough	55	35	20	0	0	0	0	0	0
Philadelphia City	75	60	15	0	0	0	0	0	0
Other Bucks County	1,194	1,045	145	0	0	0	0	4	0
Montgomery County	889	824	65	0	0	0	0	0	0
New Jersey	20	20	0	0	0	0	0	0	0
Other	155	130	25	0	0	0	0	0	0
Total	2,998	2,494	385	0	0	0	0	4	115

Source: US Census Bureau CTPP Commute Characteristics 5-year estimates, 2006-2010

Zoning

In addition to market conditions, zoning largely determines where nonresidential uses will be located and at what level of intensity they may be developed. The township’s zoning ordinance, which was updated in 2015, permits a wide range of commercial, industrial, agricultural, and institutional uses throughout

the township. The township's zoning plan is focused on directing more intensive land uses to specific locations where supportive infrastructure may be available and prioritizing agriculture preservation and protecting natural resources in other areas.

To this end, the purpose of each zoning district is to support one of the aforementioned directives. The Resource Protection (RP), Rural Residential (RR), Agricultural Preservation (AP), Village Residential (VR) and Village Commercial (VC) are committed to limiting development and preserving the natural resources and rural character of the township. These districts are located in the central, northern, and eastern areas of East Rockhill.

The Suburban (S), Residential (R-1), Cultural-Educational (C-E), Commercial-Office (C-O), Industrial-1 (I-1), Industrial-2 (I-2) and Extraction (E) districts are areas designated for more intense development. These districts make up a smaller portion of the township and are located in the south of the township, bordering Sellersville and Perkasie boroughs, where existing infrastructure was already in place to support intense development.

Commercial & Consumer Service Uses

The township's commercial development is generally restricted to the C-O Commercial-Office, VC Village Commercial, and C-E Cultural-Educational districts. However, there is limited vacant land area remaining in these zoning districts. The C-E Cultural-Educational District is located along Fifth Street and is the site of the Pennridge High School and Middle School. There are two C-O Commercial-Office districts: one contains the Bucks County Community College–Upper County Campus and Glenwood Village Shopping Center and the other contains the township's sewer treatment plant. The three VC Village Commercial districts located in Hagersville and Rich Hill are completely built out. While there are limited vacant lands available for future development in the C-O Commercial-Office and VC Village Commercial districts, there does exist a potential for some infill or redevelopment.

Agricultural Uses

Agricultural uses include farming, forestry, nursery, horse riding academy, agricultural retail, and kennel. These are generally permitted within the AP Agricultural Preservation, RP Resource Protection, and RR Rural Residential districts. Some agricultural uses are permitted within the S Suburban, I-1 Industrial-1, and E Extraction districts.

Institutional Uses

These uses, which include places of worship, public and private schools, libraries, hospitals, and nursing homes, are permitted mostly within the C-E Cultural-Educational, AP Agricultural Preservation, RP Resource Protection, and RR Rural Residential districts. Some institutional uses permitted in the township are only permitted as a conditional use or special exception.

Office Uses

Medical offices, veterinary offices, and office parks are permitted in the I-1 Industrial-1, I-2 Industrial-2, and C-O Commercial-Office districts. Medical and veterinary offices are permitted as a conditional use in the VC Village Commercial District, and veterinary offices are permitted in the RP Resource Protection and RR Rural Residential districts.

Utility, Service & Transportation Uses

The township's ordinance has a special group of uses for public utilities and related infrastructure such as telecommunications facilities, airports, and emergency services facilities. These uses are only permitted as a conditional use throughout the township. Terminals and airports/heliports are only permitted in the I-1 Industrial-1 and I-2 Industrial-2 districts. Terminals may be permitted as a conditional use in the C-O Commercial-Office District.

Industrial Uses

Industrial uses, which are often the uses likely to produce noise, odors, dust and other potential nuisance emission, generally are required to be separated from residential areas. These are uses such as manufacturing, junkyards, waste facilities and fuel storage. These uses are only allowed in the I-1 Industrial-1 and I-2 Industrial-2 districts as either a permitted use or special exception.

Extraction Uses

As detailed in the zoning ordinance, these uses are intended to permit the extraction of gravel, shale, clay, stone or similar operations. The two extraction uses permitted in East Rockhill, H12 Extractive Operations and I5 Oil and Gas Drilling, are permitted by special exception. The rehabilitation of land during the extractive operation and at the time operations are ended will be required. Other uses are permitted by right in the E Extraction District, including but not limited to I1 Nonresidential Accessory Building, I3 Temporary Structure, and I8 Towers, Masts, etc.

Medical Marijuana Uses

In 2016, the Medical Marijuana Act was passed in Pennsylvania. The law established medical marijuana as a legal method of treatment that can be prescribed to patients. The state found scientific evidence that suggests medical marijuana is one potential therapy that may mitigate suffering in some patients and also enhance their quality of life. In recent years, several municipalities around the state and in Bucks County have amended their ordinances to incorporate medical marijuana land uses, such as medical marijuana dispensary and medical marijuana grower/processor. Including these land uses in the township zoning ordinance provides the township with the ability to control where the uses are permitted. The township should consider amending the zoning ordinance to address medical marijuana land uses.

Residential Survey Results

Respondents did not want to see development in general, but were a little less averse to single-family residential and commercial or retail development than they were to industrial and multifamily development. Several comments discussed the desire for more senior living opportunities.

Recommendations

- Consider amending the zoning ordinance to only allow Use E2 Veterinary Office to be permitted as a conditional use or special exception in the RP Resource Protection and RR Rural Residential districts. Use E2 Veterinary Office is currently permitted by right in the aforementioned zoning districts.
- Consider amending the zoning ordinance to address medical marijuana land uses, such as medical marijuana dispensary and medical marijuana grower/processor.

Community Facilities and Services

Municipal Administration

The township's administration building is located on Ridge Road, approximately one mile west of Dublin Pike (PA 313), at the 15.31-acre municipal complex. The offices of the township manager and other administrative staff are within the administration building. This is also the location which houses the public meeting room for elected and appointed boards and commissions of the township, including the Board of Supervisors, Planning Commission, Zoning Hearing Board, and Park and Recreation Board.

The township manager oversees the day-to-day operations of the township and currently serves as the Open Records Officer and Zoning Officer. Other township staff includes an administrative assistant and an accounting clerk.

Public Works

The township's Public Works Department maintains public infrastructure in the township such as township owned properties, streets, and the public sewer system. The department's facilities are located at the municipal complex on Ridge Road. The department ensures that the township's 36 miles of roadway are maintained in safe conditions for driving and are plowed during winter storms. Maintenance of the township's open space and parkland are also the responsibility of the department. The Director of Public Works oversees the day-to-day operations of the department currently working alongside a crew, including seasonal, part-time help.

Police Services

Police services are provided to both East Rockhill and West Rockhill township residents by the joint Pennridge Regional Police Department. The Pennridge Regional Police Department is located along Ridge Road in West Rockhill Township near the intersection with Bethlehem Pike. The department is staffed by 11 officers, one administrative aide, and the Chief of Police. The department provides 24-hour coverage of both townships and employs the following police units and programs:

- Traffic Safety and Accident Reconstruction
- Bicycle Patrol
- Criminal Investigation

- Tactical Team and Youth Services Unit
- Youth Aid Panel
- Prescription Drug Take Back
- Personal Property Inventory
- Motor Carrier Enforcement

East Rockhill Township contributes funding for the department through public safety expenditures. The Police Department is overseen by a three-person commission made up of representatives from both East and West Rockhill townships.

Fire Protection

Municipal governments are required to provide fire protection services, and in Bucks County, this responsibility is primarily delegated to local volunteer fire companies. East Rockhill Township is serviced by five volunteer fire companies: Dublin Volunteer Fire Company, Haycock Fire Company No. 1, Perkasio Fire Company, Quakertown Fire Company No. 1, and Sellersville Fire Department. The Perkasio Fire Company currently has a substation at the East Rockhill Township building where an engine, mini-pumper with rescue trailer and a command vehicle are housed. East Rockhill Township provides a portion of the funding for each of the five fire companies.

Emergency Medical Services

Emergency medical services are provided in East Rockhill by Upper Bucks Regional EMS and Medic 151 (Grand View Health). There are two forms of emergency medical services—basic life support (BLS) and advanced life support (ALS). Basic life support service can include first aid and basic pre-hospital patient care and transport. Advanced life support service includes enhanced pre-hospital care consisting of adjunctive equipment, administration of medication and fluids, and condition stabilizing treatment. Both Upper Bucks Regional EMS and Medic 151 provide ALS and BLS services.

Healthcare

Healthcare service is a major factor impacting the quality of life for people of any location, but particularly for East Rockhill with its high population of older residents. Grand View Health on Lawn Avenue in West Rockhill Township is the major provider of medical and healthcare services for the township and surrounding municipalities.

Founded in 1913 as Grand View Hospital, it provides a full range of medical services, including emergency care, birth and maternity care, rehabilitation programs, pediatric medicine, diagnostic services, cardiology care, home and hospice care, and behavioral health services. Grand View is a private, not-for-profit hospital. The hospital has about 250 beds in its main campus, and has several other out-patient facilities all near the intersection of Lawn Avenue and Route 309.

In addition to the Grand View Health Campus along Lawn Avenue, there are several other service providers that complement the hospital facilities. These include St. Luke's Hospital in Quakertown and the Penn Foundation, a mental health and substance abuse treatment center located on Lawn Avenue across from Grand View. Also nearby are many medical offices, dentist offices, outpatient treatment centers,

pharmacies, and other healthcare industry related amenities. Largely due to Grand View Health, the Lawn Avenue corridor between Sellersville Borough and Route 309 has become a hub for healthcare in Upper Bucks. (For a discussion of continuing care retirement communities, assisted living, and nursing home care, see Chapter 6 - Housing.)

Schools

East Rockhill Township is located within the Pennridge School District, which serves seven additional municipalities in the Upper Bucks County including the boroughs of Dublin, Perkasio, Sellersville, and Silverdale; and the townships of Bedminster, Hilltown, and West Rockhill. Enrollment figures for the 2017/2018 school year in the district are:

Elementary (seven schools, grades K–5) – 3,179
 Middle (three schools, grades 6–8) – 1,761
 High (one school, grades 9–12) – 2,350

The district boundary lines for attendance at the seven elementary schools and three middle schools in the region do not necessarily follow municipal boundaries, but are based on local population and school capacity. Most elementary school-aged children in East Rockhill attend Robert B. Deibler Elementary School, which is located on West Schwenkmill Road within the township. Students also attend Patricia A. Guth Elementary School on North 7th Street in Perkasio and M.M. Seylar Elementary School on Callowhill Road in Hilltown Township.

All of East Rockhill's middle-school-aged residents attend Pennridge North Middle School, located in the township on North 5th Street. High-school-aged public school students in all eight municipalities attend Pennridge High School on North 5th Street in East Rockhill, on the border with Perkasio Borough. Evening school education is provided for adult learners at the high school as well.

The Pennridge School District also operates the Upper Bucks Technical School on Ridge Road in Bedminster, which provides public vocational/technical education to students.

The Souderton Charter School Collaborative also provides an alternative public education opportunity for students in grades K-8. The school accepts students from all local school districts, but students from the Souderton Area School District are given priority.

Buxmont Academy & Community Service Foundation provide an alternative public education opportunity in Sellersville. The school is for students in grades 6-12 and accepts troubled and at-risk youth in the eastern Pennsylvania region.

There are also private educational institutions located in the area that are available to residents of East Rockhill. These schools are typically religiously affiliated, such as Upper Bucks Christian School, Faith Christian Academy, and St. Isidore School.

The need for new school facilities in the region will be dependent on demographic trends not just in East Rockhill, but in all eight of the municipalities within the school district.

In fall 1999, the Bucks County Community College opened a campus to serve the upper Bucks County region. The 14-acre campus site located at 1 Hillendale Drive behind the Glenwood Shopping Center is adjacent to the township-owned open space along the East Branch of the Perkiomen Creek. The facility offers 19 lecture and seminar classrooms, interactive videoconferencing, library, five computer labs, and a community outdoor amphitheater. Courses offered include opportunities for associate's degrees and continuing education programs.

Libraries

There are no public libraries located within the township, but residents are afforded access to libraries within the Bucks County Free Library system. The county operates seven branch libraries and 11 additional member libraries which are open to the public. Two of the branch libraries are in neighboring municipalities of East Rockhill. The Samuel Pierce Branch of the Bucks County Free Library is located on Arthur Avenue in Perkasio, and the James A. Michener Branch of the Bucks County Free Library is located on West Mill Street in Quakertown.

Both library branches offer access to collections of tens of thousands of books, magazines, DVDs, music CDs and print articles, in addition to the hundreds of thousands of other materials available through library loans throughout the Bucks County Free Library System. Computer stations with internet access are provided at both locations, and each library has digital equipment such as copiers, scanners, printers and other digital media devices that are available for use. Both libraries offer a number of regular events and programs such as children's story times, book clubs, and instructional classes. The Michener Branch in Quakertown also has a meeting room with a capacity of 150 people that is open for non-commercial meeting purposes.

Parks

There are several public park spaces in the township that provide access to recreation, open space, and leisure activities. These parklands are further discussed in Chapter 9 - Parks, Recreation and Open Space.

Telecommunications

Telecommunication is the transmission of voice, video, or data, which primarily involves cable, fiber-optic, satellite, or wireless (cellular) phone technologies. Wireless phones have become almost a necessity of modern life, and these devices require a vast network of modern equipment in order to function properly. Wireless communications antennae are needed to receive and transmit data in all directions, and these antennae generally need to be located in higher areas such as a tower in order to provide the greatest range of coverage. Each wireless carrier (e.g., Verizon, Sprint, AT&T) provides their own antennae in locations that best suit the needs of their network of facilities. Growth of the telecommunications industry has been driven by increasing advancement of technology and has resulted in greater business and consumer demand. Telecommunications will continue to be an integral part of the municipal infrastructure.

Many communities have started to realize that telecommunications will be an integral part of the municipal infrastructure just as water, sewer, and electric are now. Planning for telecommunication systems allows for control of the right-of-way, public property, aesthetics, and enhanced quality of life.

Effective telecommunications infrastructure promotes economic development, household use, and broader emergency and municipal communications. As the telecommunications environment matures and technology changes and service needs increase, more antennae and cables may be needed to meet resident and business demand. Because wireless communications facilities are not considered standard utilities, the township has authority to regulate their location, whether collocating on existing structures or within public right-of-way or on municipal land.

Zoning

The township's zoning ordinance permits or prohibits specific community facilities in each of the established land use districts. The following is a summary of which districts permit each of the above referenced community facilities:

Emergency Services

Within the township's zoning ordinance, Use G2 (Emergency Facilities) includes fire, ambulance, rescue and other emergency services of a municipal or volunteer nature. The Emergency Facilities use is permitted by conditional use in all township zoning districts.

Healthcare

Hospitals (Use C4) and Nursing Homes (Use C5) are permitted by right in the C-E Cultural-Educational District, which is located along North 5th Street east of the border with Perkasio Borough. Hospitals (Use C4) are also permitted by special exception in the RP Resource Protection and RR Rural Residential districts. The township also provides use regulations for Life Care Facility (Use B6) and Full Care Facility (Use B7) and permits both by conditional use in the S Suburban District and by right in the R-1 Residential and C-E Cultural-Educational districts. Use E2 (Medical Office) is permitted by right in the C-O Commercial-Office, Industrial-1 and Industrial-2 districts and by conditional use in the VC Village Commercial District.

Schools

Schools (Use C2), are permitted by conditional use in the RP Resource Protection, RR Rural Residential, and C-O Commercial-Office districts and by right in the R-1 Residential, VR Village Residential, and C-E Cultural-Educational districts. Commercial Schools (Use F1), which are trade schools, or instructional studios are permitted by special exception in the VC Village Commercial District and by right in the C-O Commercial-Office District.

Libraries

Libraries and Museums (Use C3) are permitted by right in the C-E Cultural-Educational District.

Parks

Recreational Facilities (Use D1) are permitted by right in the AP Agricultural Preservation, RP Resource Protection, RR Rural Residential, and C-E Cultural-Educational districts and by conditional use in the S Suburban, R-1 Residential, C-O Commercial-Office, Industrial-1, and Industrial-2 districts.

Telecommunications

Wireless Telecommunications Facilities (WTF) (Use G4) are permitted in all zones in the township by conditional use. The zoning ordinance regulating such facilities was amended in 2014, and while they are permitted in all districts, there are a number of restrictions on their location. Tower based WTF are

permitted only along Old Bethlehem Pike and Dublin Pike or attached to a tower or structure existing as of January 6, 2014. Applicants are also required to demonstrate a gap in coverage and to co-locate with existing infrastructure to the greatest extent feasible, and new equipment is required to be designed to blend in to the environment as well in order to minimize visual impacts.

Resident Survey Results

A significant number of respondents commented that various taxes are too high. However, there was a willingness to pay for police/fire/EMS services. Crime and public safety was ranked as the most important issue in the township.

Recommendations

- Evaluate protective services and township facilities for adequacy on a periodic basis.
- Continue with, and evaluate the potential for, additional shared services and facilities with adjacent municipalities.

Parks, Recreation, Farmland, and Open Space

Parks, recreation, agriculture, and open space resources are an important part of the identity of East Rockhill Township and are one of the key quality of life features offered to residents. Open space contributes to the township's rural character, preserves the natural ecosystems upon which people and wildlife depend, and provides an attractive setting in which to live and work. Park and recreation facilities allow space for residents to interact and exercise, and provide a space for civic life. Farmland and agriculture, much like open space, contributes to the rural character and bucolic setting of East Rockhill, while also providing a source of produce.

The following provides a brief inventory and description of all parks and recreation areas, protected open space, and protected agricultural lands in the township. There are about 1,600 acres of protected lands and 3,300 acres of lands with limited protection within East Rockhill. These protected lands come in several forms, including publicly owned parks, private open space that is protected by a conservation easement, protected farmlands, and open space as a result of a residential subdivision.

The location and extent of each of these lands are illustrated in Map 8.

Parks and Recreation Areas

State Parks and Gamelands

The Commonwealth of Pennsylvania owns significant land in East Rockhill in the form of State Parkland and State Gameland. Nockamixon State Park is located within portions of East Rockhill, Haycock, Nockamixon, and Bedminster townships. The park is located in the northeastern portion of East Rockhill Township and has facilities for a variety of activities, including hiking, biking, horseback riding, swimming, hunting, boating, fishing, and picnicking. There are about 388 acres of state parkland within the township.

East Rockhill is also the site of State Gameland No. 139. Located between Hill and Rockhill roads, this land is open to the public for hunting during prescribed seasons. The total area of State Gameland No. 139 is about 131 acres. The total acreage of state property in the township is about 519 acres.

Municipal Parks and Recreation Lands

The township owns and operates several municipal parks and recreation lands within its borders (see Table 28). The Willard H. Markey Centennial Park located on Ridge Road contains 92.5 acres with facilities

that include soccer fields, football fields, multi-purpose fields, volleyball courts, play equipment, a pavilion, picnic areas, a skateboard park, and a golf driving range.

The Mood's Covered Bridge Park is located at 1100 Branch Road. Amenities include a walking and bike trail that joins Perkasio and Sellersville trails, along with athletic fields.

The Iron Bridge Park is located at 1450 Branch Road. Amenities include the Mervin C. Bryan walking and bike trail that joins Perkasio and Sellersville trails, pavilion with picnic tables, athletic fields, and basketball court.

Mood's Covered Bridge Park and Iron Bridge Park are part of the Sellersville-Perkasio-East Rockhill Bicycle/Walking Path System. This linear park that follows the East Branch Perkiomen Creek from Sellersville through Perkasio and into the township, passing through Lake Lenape Park in Sellersville and Kulp Park in Perkasio before entering East Rockhill.

TABLE 28. TOWNSHIP-OWNED PARKS AND RECREATION AREAS

Name	Location	Facilities	Acreage	Ownership
Willard H. Markey Centennial Park	1418 Ridge Road	Pavilion, play equipment, picnic areas, golf driving range, volleyball courts, skate park, and soccer, football, and multi-purpose fields	92.5 acres	Public
Mood's Covered Bridge Park	1100 Branch Road	Multi-purpose fields and trails	46 acres	Public
Iron Bridge Park/Mervin C. Bryan Walking Path	1450 Branch Road	Pavilion, athletic fields, basketball court, stream corridor preservation, walking path, and greenway preservation	63.8 acres	Public

Source: East Rockhill Township and BCPC Data 2019

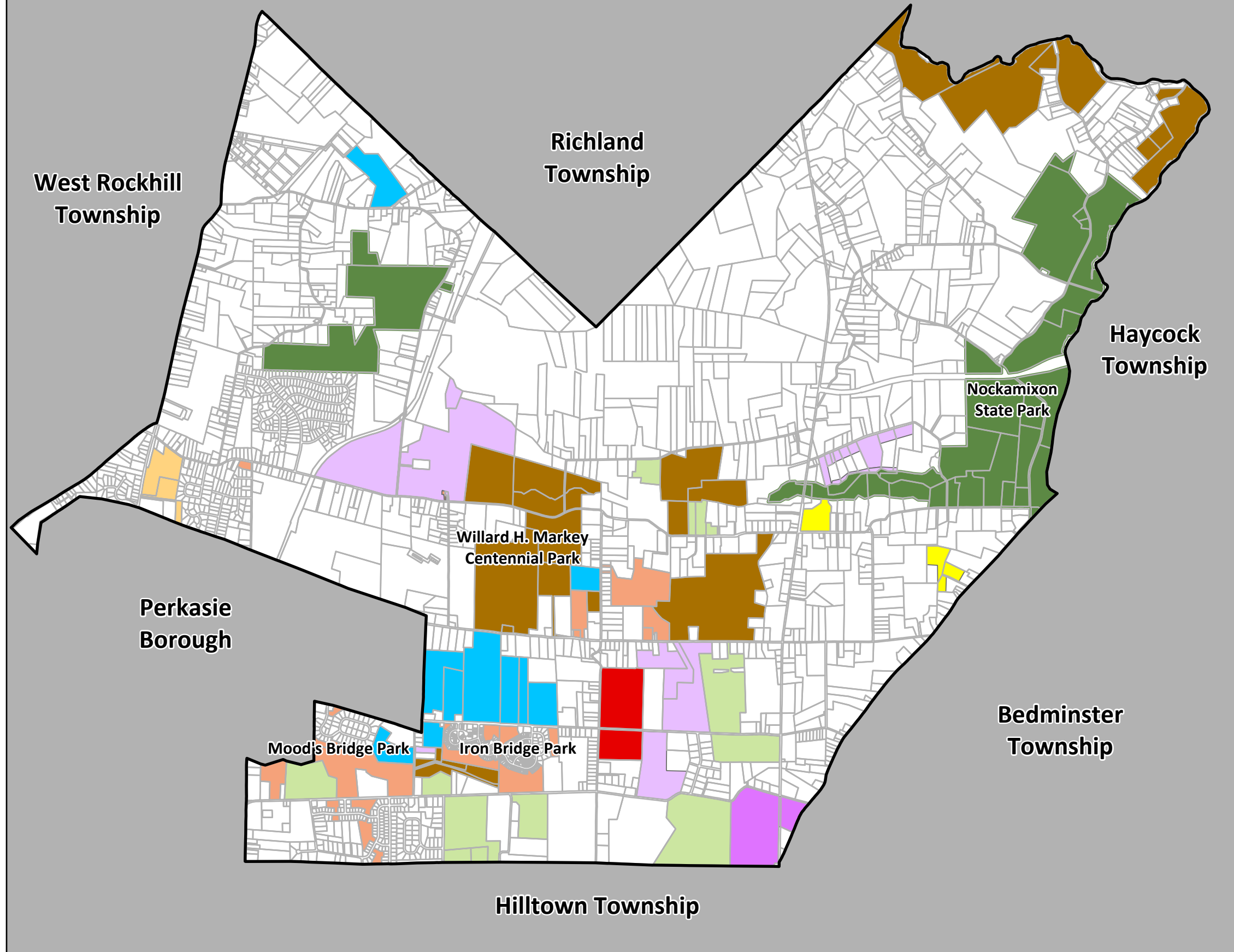
The township's subdivision and land development ordinance (SALDO), which governs all applications for subdivision or land development, requires that recreation facilities be provided by all residential developments in the township. Section 525 of the SALDO requires 1,500 square feet of recreation land per dwelling unit be provided for all residential subdivisions of 25 or more dwelling units. Nonresidential developments are required to provide 1,400 square feet of recreation land for every 4,000 square feet of building area proposed. This recreation space may be on-site or at an off-site location if approved by the township. A developer has the option of paying a fee-in-lieu of providing the required recreation spaces.

Public and Private Schools

Public school facilities in East Rockhill include Pennridge High School, Pennridge North Middle School, and Robert B. Deibler Elementary School. The Pennridge High School/North Middle School campus is located at the corner of Blooming Glen Road and North Fifth Street and totals 141.4 acres. Recreational facilities include a stadium, pool, track, soccer fields, baseball fields, and tennis courts. The Robert B. Deibler Elementary School contains 12 acres and is located on Schwenkmill Road. The site includes softball and baseball fields and playground equipment.

Map 8 - Parks and Recreation, Farmland, and Open Space

East Rockhill Township
Comprehensive Plan Update 2020



- Township-Owned Lands
- Township-Owned Lands with Joint Conservation Easements
- Conservation Easements Held by Township
- Agricultural Preservation Easements Held by Township
- Agricultural Security Area
- Lands with Conservation Easements Held by Heritage Conservancy
- School Facilities
- Borough/Utility-Owned Lands
- Agricultural Preservation County-Owned
- State-Owned Lands

Source: Bucks County Board of Assessment & Planning Commission Data 2018

BCPC
Bucks County Planning Commission

The Upper Bucks Christian School (and Bethel Baptist Church) is a private facility located on Rockhill Road, containing 27.6 acres. There is a soccer field, a baseball field and playgrounds on the site. Lastly, the Bucks County Community College—Upper County Campus, located adjacent to the Glenwood Village Shopping Center, consists of 14.4 acres and includes an outdoor amphitheater. The campus is also adjacent to and shares a parking lot with Mood’s Covered Bridge Park. The total land area for school facilities is about 195.4 acres.

Private Recreational Areas

Other types of parks include private recreational areas, such as golf courses, camps and campgrounds, and nature preserves. There are several private recreational facilities within the township including the Tohickon Family Campground on Covered Bridge Road, and Branch Valley Fish and Game on North Ridge Road. In total, there is approximately 208 acres of private recreational lands.

Open Space

Open space includes lands that are legally protected by way of an easement, deed restriction, restrictive covenant, or other encumbrance on the title of the land that prevents them from being used or developed in a way that is not consistent with their protected purpose. Some of these protected lands are also publicly owned, or owned and managed by a not-for-profit organization.

Township owned open space includes the Gross Farm, approximately 31 acres, and the adjacent to the Hildebrand Site, approximately 110 acres, located along North Ridge Road. The 18-acre Moore Tract is adjacent to Markey Centennial Park. These and other township owned open space properties are summarized in Table 29.

The majority of open space areas in East Rockhill are not publicly-owned or managed, but are private properties that are protected by a conservation easement in some form (see Table 30). A conservation easement is a legal agreement that restricts an owner’s use of the property, or a portion of the property, to that of open space or agricultural use. This is essentially purchasing the rights to use a property but not purchasing the actual property. This easement would then apply to all future owners of the property, rendering the land protected. The township currently has approximately 582 acres of lands that are protected by way of a conservation easement.

While most properties are protected from almost all development, the degree of protection, and what development may be permitted on a portion of a property, is determined by the specific language agreed upon in the individual conservation easement, which may differ from property to property.

TABLE 29. TOWNSHIP-OWNED PROTECTED OPEN SPACE

Tax Parcel	Name	Location	Use	Acres
12-020-093	Dell Drive Basin	Three Mile Run Road/Tunnel Road	Detention Basin	1.5
12-9-94-2	East Rockhill Township Sewage Pumping Station	Three Mile Run Road/School House Road	Utility	0.3
12-13-6-1	East Rockhill Township Sewage Pumping Station	506 Branch Road	Utility	10.2
12-9-197	Gross Property	North Ridge Road	Open Space/Existing Farm	31.3
12-014-035	High Tract	Branch Road/Blooming Glen Road	Existing Farm	9.5
12-9-190	Hildebrand Site	North Ridge Road	Open Space/Existing Farm	110.7
12-9-92-1, 12-9-157, and 12-9-093	Three Mile Run Road Sites #1-3	Three Mile Run Road	Forested/ Passive Recreation	87.8
12-29-159	5th Street Basin	Cedarbrook Crossing (5th Street)	Detention Basin	4

Source: East Rockhill Township and BCPC Data 2019

TABLE 30. OPEN SPACE WITH CONSERVATION EASEMENTS

Tax Parcel	Name	Location	Acres
12-9-244-2	Chadwick/ERJ Enterprises	North Ridge Road	10.48
12-6-39, -40, -41, -42	Camp TOHI LLC	Richlandtown Road/Ax Handle Road	132.04
12-14-23-1	Hopper	Blooming Glen Road	7
12-006-058	Buck	8043 Richlandtown Road	30
12-14-037	Petit Horse Farm	1801 North Fifth Street	35.5
12-9-255, -255-1	Rufe	1890 and 1900 North Fifth Street	45
12-9-9, -89, -94	Perkasie Regional Authority	Three Mile Run Road and Rockhill Road	167.6
12-9-121-1	Hange	1980 Three Mile Run Road	8.33
12-9- 92, -103	Landis/Law	1240 and 1301 West Rock Road	31.5
12-11-040	Clymer Mill Estates	East Rock Road	26.7
12-9-110, -110-3	Yaffa Faro	1801 West Rock Road	55
12-6-61, -84, -85, -89	Tohickon Family Campground (Clover D, Inc.)	Covered Bridge Road	32.96

Source: East Rockhill Township and BCPC Data 2019

Open Space within Residential Developments

The township's zoning ordinance establishes a minimum open space ratio for detached dwelling cluster subdivision, performance standard development, and mobile home park uses, which varies based upon the use. The required open space is required to be maintained as open space in perpetuity and as such is considered protected open space.

All protected open space within residential developments is subject to the restrictions of Section 1903 of the zoning ordinance. The requirements of this section include provisions that the open space within the Rural Residential Zoning District be preserved for agricultural use. Open space in other zoning districts should be close to all residences, with greenways leading to major recreation areas. Section 1903 provides for several forms of ownership and protection of the required open space including common ownership by a homeowners association, fee-simple dedication to the township or private conservation organization, dedication of easements, or deed restrictions.

Open space associated with residential developments that were dedicated to the township is as follows: Pines at Pennridge (15.5 acres), Creek View (2.4 acres), Country Hunt (59.5 acres) and Pines II (8.5 acres). About 46 acres of the dedicated open space within Pines of Pennridge is part of Iron Bridge Park/Mervin C. Bryan Walking Path.

Excluding the 46 acres with the Pines of Pennridge development dedicated to the Iron Bridge Park/Mervin C. Bryan Walking path, there are nearly 40 acres of protected open space within residential subdivisions in the township.

Farmland

Agricultural Security Areas

The Agricultural Security Area (ASA) program was created by the Agricultural Security Area Law (Act 43 of 1981) to protect the agricultural industry from increasing development pressure. ASAs are intended to promote more permanent and viable farming operations by strengthening the farmer's sense of security in his right to farm. Enrollment into an Agricultural Security Area (ASA) suggests a significant commitment by property owners for ongoing farmland preservation.

For properties to be eligible for enrollment into an ASA, the aggregate total of all the properties must be a minimum of 250 acres in viable farmland, and the zoning district in which these properties are located must permit agricultural uses. Individual parcels comprising a designated ASA must be at least 10 acres in area and at least 50 percent of which contains Class 1–4 soils. Respective property owners must petition the township supervisors in order to gain approval into the program. Consequently, once enrolled into an ASA, farmers gain the following benefits:

- Protection from municipal nuisance ordinances which restrict odors and noise in a community;
- Protection from governmental acquisitions of land through condemnation or eminent domain;
- Lands proposed for such action within an ASA must first be approved by Agricultural Lands Condemnation Approval Board;
- Eligibility for preservation through the county's agricultural easement purchase program.

While East Rockhill does not have its own ASA, farmland within the township can be part of the Hilltown and Bedminster townships' ASAs. Presently, there are 16 parcels in East Rockhill Township enrolled into an ASA totaling approximately 508 acres.

Approval for a property into an ASA does not, however, permanently protect the land as farmland. A property in an ASA does not have restrictions on the use of the land, and the owner retains all rights to use the land in accordance with local zoning. Inclusion in an ASA only protects and encourages agricultural uses. It is not a legal requirement to use the property for agricultural purposes in perpetuity.

Agricultural Conservation Easements

Once a property is accepted within an ASA, it may be eligible for permanent protection by the county's agricultural easement preservation program. In May 1989, the Bucks County Commissioners appointed a nine-member board to develop and oversee a county farmland preservation program. The Bucks County

Agricultural Land Preservation Program (BCALPP) seeks to acquire agricultural conservation easements on viable farmland within the county.

An agricultural conservation easement secured through acquisition is a legally binding document which is filed in the land records for the deed of a farm property, restricting its use substantially to agricultural and directly associated uses. As an easement in gross, restrictions are binding upon the owners and future owners, carrying with the land. A conservation easement allows a landowner to protect his farmland for agricultural uses while retaining private ownership of the farm.

The BCALPP compensates farmers for the difference between the fair market value (development value) and the agricultural value of their land. To be eligible for this program, the following criteria must be satisfied for eligibility:

- size restriction: 50 acres (minimum)
- location: within an approved agricultural security area (ASA)
- soil criteria: at least 50 percent Class 1–4 soils
- harvest criteria: at least 50 percent harvested cropland/pastureland
- plan approval: approved USDA Soil Conservation Plan in effect

Once a farm is accepted into the program, the property owner may sell or convey a conservation easement and receive cash for the respective development rights. The easement prohibits the development of the property. As of 2018, over 17,400 acres of agricultural land in Bucks County, consisting of 220 farms, have been preserved through the BCALPP.

Two farms in East Rockhill Township have been preserved using conservation easements from the BCALPP. The 70.0-acre Harris Farm on Branch Road was preserved in 2010 and the 64.58-acre Springer Farm on Dublin Pike/Branch Road was preserved in 2016.

In addition to the farms preserved under the BCALPP there are two properties that have set aside agricultural preservation easements within the Agricultural Preservation District. The Gulla Farm subdivision located on the western side of Old Bethlehem Pike has 13 acres of preserved land. Lake Wind Farm subdivision located on the northeastern corner of Three Mile Run Road and Dublin Pike (Route 313) has 11 acres preserved. Collectively, there is 24 acres of land containing agricultural preservation easements held by East Rockhill.

Additionally, the Heritage Conservancy with the assistance from East Rockhill, obtained a conservation/façade easement on the Musselman Farm. A façade easement preserves a historic structure by restricting changes to the exterior of the building (including front, sides, rear, and height) and prohibits any change to the exterior of the building inconsistent with its historical character. Located on the northwestern and northeastern corner of Schwenkmill and North Fifth Street, the property consists of two parcels totaling 60.8 acres. The agreement stipulates that no residential activities (with the exception of the existing dwelling unit) are permitted on the site.

Lands with Limited Protection

Lands with limited protection are areas that are in open space use or farmlands and are prevented from being developed by policies which provide incentives and encourage owners to keep their property as

open space or farmland. However the owner of the land still reserves the legal right to develop the land at any time in the future (in accordance with the parameters of the underlying zoning). So the resources are encouraged to be preserved, but not protected perpetuity. These are lands such as those in an ASA as noted above, or those with preferential tax status. Other limited protected lands include those which are not legally protected as farmland or open space, but are owned by a public entity or utility making them less subject to development pressure and unlikely to be developed. The lands with limited protections in the township are as follows:

- Act 319 lands – 116 properties – 2,167 acres
- Agricultural security area – 16 properties – 328 acres

There is some considerable overlap in these numbers. Properties that are assessed as Act 319 lands may also be part of an Agricultural Security Area, or be protected by a conservation easement. As shown in the Park and Open Space Resources Map, many properties may fall into multiple categories of protection. Because of this, using the sum of the totals of all the different types of protections of lands would yield a misleading result, and would indicate a greater acreage of land than is actually protected.

Lands with Preferential Assessment/Act 319

Numerous residents within the township have registered their properties with the county under the Pennsylvania Farmland and Forest Land Assessment Act of 1974 (Act 319). Bucks County has entered into voluntary covenants with owners who have valuable open space resources in order to preserve open space. Under this program the property is assessed by the county based on the agricultural use value rather than the fair market value. As a result, the property owner is afforded a potentially significant savings through preferential property tax assessment as a financial incentive to maintain the land as open space. Act 319, also known as the “Clean and Green Act,” is available to landowners for the following uses: agricultural use, agricultural preserve, and forest preserve. Enrollment in this program is continuous unless dissolved by the landowner or eligibility requirements are not met.

Lands covenanted under Acts 319 are considered only to have limited protection because the property owners have the right to terminate the agreement at any time. However, if they choose to do so, the property owner must pay a penalty in the form of rollback taxes (i.e., the difference between the preferential assessment value and the fair market or development value) and accumulated interest. Although covenanted lands are only temporarily protected, it shows a willingness of landowners to maintain their properties in open space. In total, there are about 2,808 acres of land covenanted under Act 319 within the township.

Other Lands with Limited Protection

Some parcels owned by government or quasigovernment agencies also qualify as temporarily protected. Although there is no legal mechanism protecting them as open space, they are unlikely to change due to being owned by a public entity, and thus can also be considered in an indirect way to be protected lands.

Various utility easements traverse East Rockhill Township, including easements for gas lines, telephone cable, electric power lines, oil pipelines, and water and sewer lines. These linear land areas are typically not owned in fee-simple ownership, but rather consist of easements placed over private property. Therefore, the total acreage for these easements is not included, although those lands may also be considered protected to some degree.

Trails and Greenways

A greenway is a linear open space area established along either a natural corridor, such as a riverfront, stream valley, or ridgeline; or along an abandoned railroad right-of-way, a canal, scenic road, or other route. Greenways provide numerous benefits to their surrounding communities. In addition to preserving natural resources, greenways may also provide safe, non-motorized transportation routes to schools, commercial centers, residential developments, and recreational areas. Segments of a proposed greenway network can be designed to be a multimodal trail system that can accommodate different users such as bicyclists, hikers, and joggers. By linking individual parks together, linear trails can create a unified park system throughout a municipality and even beyond its borders.

As a member in the Pennridge Area Coordinating Committee (PACC), East Rockhill Township is among the eight municipalities that developed the 2000 Pennridge Area Greenway Plan. The plan evaluates the feasibility of developing a linear park throughout the Pennridge Area. Recommended greenway routes within the plan incorporate streams, existing trails, floodplains, on-road bike routes, and off-road linkages. East Rockhill has incorporated and expanded upon the greenway plan within each of its planning efforts including the 2009 East Rockhill Township Open Space Plan and the 2006 East Rockhill Township Comprehensive Plan.

Among the proposed greenways for the entire Pennridge Area, six are located within or along the East Rockhill Township municipal boundary and one spur route (Markey Park Connector Trail) was added to provide a key connection to Willard Markey Park and other points of interest in the area. The following recommended greenway routes are based upon the Pennridge Area Greenway Plan and then modified or expanded in the 2009 Open Space Plan to satisfy East Rockhill's specific needs.

The East Branch Perkiomen–Deep Run Greenway extends from Bedminster Township, where Deep Run branches from the Tohickon Creek to along the East Branch of the Perkiomen Creek, to townships in Montgomery County. Points of interest along the greenway corridor include: the Pines at Pennridge, Moods Covered Bridge, Village of Glenwood Shopping Center, Upper County Campus of Bucks County Community College, and Pennridge High School/North Middle School Campus. The Mervin C. Bryan Walking Path traverses a 2-mile linear park within the 46-acre stream corridor preservation area that extends along the East Branch of the Perkiomen Creek between East Callowhill and Schwenkmill roads, with links to Creekview Subdivision, Country Hunt Subdivision, and Pines of Pennridge Subdivision. A link to Bridgeview Subdivision has been explored and an easement has been established.

The Tohickon Creek Greenway follows the Tohickon Creek stream corridor and extends from Stover-Myers Mill to the Richland Township border. Nockamixon State Park and Quakertown Swamp are significant features along this link, which has the potential to become a high-use corridor.

Plumstead–East Rockhill Greenway is situated along the Texas-Eastern pipeline right of way located through Bedminster and East Rockhill townships, and would serve as an off-road link to the East and West Rockhill areas. The utility right of way is free of trees and is generally flat the entire length of the corridor. The Willard H. Markey Centennial Park and East Rockhill Township open space would be accessible through a spur route along an unnamed tributary of Three Mile Run.

Three Mile Run Greenway utilizes the Three Mile Run stream corridor and connects residents of East and West Rockhill townships with Nockamixon State Park. The greenway follows the Three Mile Run

corridor providing a potential trail connection between Nockamixon State Park, the Liberty Bell Trail, and West Rockhill Township.

Willard H. Markey Park Connector Trail would provide an additional spur route and would travel through the Willard H. Markey Centennial Park, Pennridge Senior High School, and the Pines at Pennridge. This spur would connect the Three Mile Run Greenway with the East Branch Perkiomen–Deep Run Greenway.

A lateral spur route would connect Markey Park and the Hildebrand/Gross site. Township officials are considering the implementation of walking trails, park benches, and other passive recreational facilities on the Hildebrand/Gross site as an extension of the existing trail system, utilizing selected segments of the proposed municipal golf course cart path system.

Liberty Bell Trail is currently only a half-mile trail within the Borough of Hatfield in Montgomery County. The proposed full Liberty Bell Trail would loosely follow the historic path that was taken by the Liberty Bell during the Revolutionary War when it was moved from Philadelphia to Allentown for safe keeping. It also generally would follow the path of the former trolley line of the same name that ran from Montgomery County to Allentown through Quakertown. This proposed trail, which is undergoing a feasibility study, would follow Old Bethlehem Pike within East Rockhill, and would eventually connect with the Saucon Trail in Lehigh County to the north, and the Schuylkill River Trail in Montgomery County to the southwest.

Pennsylvania Highlands Greenway

Although no specific route has been determined at this time, there is a proposal to develop a trail within the Pennsylvania Highlands region from Riegelsville on the Delaware River, along the Appalachian Mountains to the Maryland border. This trail would extend the 130-mile long trail in the New York and New Jersey Highlands regions. Upper Bucks County, including East Rockhill Township, is within this Highlands region and portions of the trail could be located in the township.

Planning for Open Space and Park and Recreation Development

Open space and park and recreation planning has been at the forefront of the township’s planning efforts for the past two decades. The most recent efforts include the 2009 East Rockhill Township Open Space Plan and the 2006 East Rockhill Township Park and Recreation Plan. The Park and Recreation Board manages the implementation of the Open Space Plan and participates in planning and implementing fundraisers for park programs. The eight-member board (seven voting and one non-voting) are appointed by the Board of Supervisors for four-year terms.

2009 East Rockhill Township Open Space Plan

The East Rockhill Township Open Space Plan, developed by the township and the Open Space Plan Committee in 2009, is the township’s guiding document for the provision of open space and recreational resources. That plan listed the following goals, which still provide direction for the township and its open space of resources:

- Preserve the intrinsic value of East Rockhill Township’s open space resources by preserving and protecting its natural, cultural, historic, and scenic resources.

- Provide appropriate active and passive recreational facilities on township open space lands.
- Coordinate open space planning with East Rockhill’s park and recreational planning program.

To implement these goals, the plan made recommendations for natural resource protection, agricultural preservation, historic and scenic resources, the greenway and trail network, land acquisition, government administration and cooperation. Key recommendations include:

- Develop road linkages to park and recreation facilities along designated scenic roadways to accentuate hiking, biking, and tourism opportunities.
- Place a priority on establishing linkages between the township’s many historical, cultural, scenic, and natural resources. Such links can be established on existing roadways, through acquired easements along stream corridors, through significant open space and park acquisitions, or by way of dedicated land through subdivision and land development.
- Continue the planning and implementation of the Recommended Greenway Routes, including on-road and off-road linkages while ensuring these facilities are designed to provide adequate safety measures for its users.
- Revise the subdivision and land development ordinance to add “Trail Development” requirements to the recreation facilities listed (as recommended in the 2006 Park and Recreation Plan).
- Continue to obtain access easements along the township’s recommended greenway/trail network (when possible) through the subdivision and land development process.

2006 Parks and Recreation Plan

In November 2005, the Board of Supervisors began the process of implementing the recommendations from the 2005 comprehensive plan update with the preparation of 2006 East Rockhill Park and Recreation Plan. One of the primary objectives of this plan is to provide compliance with the provisions of the Pennsylvania Municipalities Planning Code (MPC) with regard to mandatory dedication of recreation land and fee in lieu of this land to meet the recreational needs of future residents. That plan listed the following goals, which still provide direction for the township’s park and recreation resources:

- Provide park and recreational facilities that satisfy the needs of East Rockhill’s residents.
- Coordinate park and recreational planning with East Rockhill’s land use and open space planning program.
- Maintain safe and functional park/recreational facilities that meet the needs of residents of all ages and physical abilities.
- Provide the financial resources necessary to support East Rockhill’s park and recreation program.

To implement these goals, the plan made recommendations for ordinance amendments, park facilities and services, open space and resource planning, greenway and trail planning, and means of acquisition. Key recommendations include:

- Acquire suitable land for and develop a park and recreational facilities to satisfy existing and future park and recreation needs (as defined by NRPA standards).

- Where appropriate, encourage developers of residential subdivisions to develop park and recreational facilities that meet the recommendations of this plan, such as providing certain park types and providing linkages between township resources.
- Develop road linkages to park and recreation facilities along designated scenic roadways to accentuate hiking, biking, and tourism opportunities.
- Place a priority on establishing linkages between the township's many historical, cultural, scenic, and natural resources. Such links can be established on existing roadways, through acquired easements along stream corridors, through significant open space and park acquisitions, or by way of dedicated land through subdivision and land development.
- Obtain access easements along the township's designated greenway/trail linkages network (when possible) as subdivision and land development review process.

Bucks County Open Space and Greenways Plan

In 2011, Bucks County developed a plan for developing an interconnected series of trails and greenways throughout the county, and providing connections to regional trail systems. The county greenways plan also identified in West Rockhill the Liberty Bell Trail and the greenway along the East Branch of the Perkiomen Creek as vital regional trails that would facilitate a countywide network of accessible recreation paths.

Bucks County Bicycle Master Plan (2012)

In 2008, Bucks County created a Bicycle Task Force for the development of Bucks County Bicycle Plan. The purpose of the plan is to inventory existing conditions, advance opportunities for the improvement and expansion of a broader network of multimodal routes serving existing residential and business areas of the County, enhance the outreach and education of bicycle safety and leverage the existing recreational resources in the communities at large. The plan identified priority roadways for bike lanes, compatible shoulders, and shared-use paths. Three of the bike routes traverse East Rockhill:

- East/West Cross County Spine - Quakertown to Washington Crossing (approximately 30 miles) along Routes 663 and 313
- Perkasio to Nockamixon State Park - This trail spine will connect Perkasio to the east/west cross county on-road spine, as well as Nockamixon State Park.
- Liberty Bell Trail - This trail spine would be a segment of the Liberty Bell Trail, which is planned as a 25-mile rail trail corridor which will ultimately connect Quakertown with East Norriton Township in Montgomery County.

Resident Survey Results

People are interested in trails and walking/hiking/biking paths. Trails was the by far the highest response as to what facilities residents would like to see more of.

Nearly 30 percent of respondents said that farmland preservation was of high importance.

About 87 percent of respondents said that the current quality of parks and recreation services was excellent or good

The rural character of the township has attracted new residents and is an important part of resident's quality of life.

Respondents want to see improvements to the driving range and showed interest in a golf course. Pickleball courts, disc golf course, tennis courts, and bocce courts were other activities that were mentioned.

When asked what programs or activities they would like to see more of within the township, 29 percent of respondents said that they would like to see a farmers market in East Rockhill. Respondents would also like to see other events such as food or beer festivals which promote and support the rural and agricultural character of the township.

Other positive responses include wanting to see more trails throughout the township. There was very little desire for tennis courts or skate parks.

Recommendations

- Continue to carry out the planning and implementation of the greenway routes established in the 2009 East Rockhill Township Open Space Plan.
- Provide park and recreational facility improvements or additions to East Rockhill's park system that were identified in the 2019 resident survey.
- Monitor the progress of the Liberty Bell Trail, currently undergoing a feasibility study.
- Work with farmers to preserve priority farms through the Bucks County Agricultural Preservation Program or conservation easement purchase.
- Continue to preserve and acquire open space using funds from the township's open space tax.
- Consider an agritourism ordinance to encourage the economic vitality of farming operations.
- Encourage farming operations to be flexible and generate revenue through additional means such as community-supported agriculture opportunities (CSAs).

Historic and Scenic Resources

Historic preservation is an inherently sustainable activity that maximizes the use of existing materials and infrastructure, reduces waste, and preserves the historic character of older places. By preserving historic structures, we are able to share the very spaces and environments in which the generations before us have lived. Cultural and historic resources provide a tangible connection to the past and are crucial in creating a sense of time and place by understanding settlement patterns and the heritage of a community. In addition to solidifying a community's past, preservation can strengthen a community's future. Historic resources create vibrant, cultural destinations that can be centerpieces of community life. Historic preservation activities can be a tool to boost economy and quality of life.

Historic Resources

Cultural and historic resources bring an allure to East Rockhill Township by providing physical connections to the past. They are crucial in creating a sense of time and place by representing settlement patterns and the heritage of a community. The following resources contribute character to the township and are part of what makes East Rockhill unique to Bucks County.



A historic resource survey that was conducted by the Heritage Conservancy in 1992 that highlighted two historic bridges in East Rockhill Township. The historic Mood's Covered Bridge, built in 1874, crosses the East Branch of one of the principal watersheds in the northwest portion of Bucks County, the Perkiomen Creek. On June 22, 2004, a fire destroyed the covered part of the bridge, but did not structurally damage the bridge deck. Initially, PennDOT repaired the deck to reopen the Bridge to motor vehicle use. PennDOT subsequently agreed to rebuild the covered bridge, contingent upon Bucks County assuming ownership. The Mood's Covered Bridge was rebuilt and dedicated to the county in the spring of 2008.

Sheard's Mill Covered Bridge, built in 1873, spans the Tohickon Creek on Covered Bridge Road between East Rockhill and Haycock Townships. One of Bucks County's longer bridges, it is 130 feet long and 15 feet wide. The bridge was added to the National Register of Historic Places in December of 1980. Many covered bridges were built near mills for the convenience of farmers. This bridge was named after Levi Sheard, owner of the nearby Sheard's Clymer's Grist Mill.



The Sheard's-Clymer's Grist Mill used water power to grind the grain (corn, rye, or wheat) into meal for sale to local farmers and the general public. While it is uncertain when the mill was originally built, the earliest deeds date back to 1798. In 1844, Levi Sheard purchased the mill; it was later sold to John and Rubin Clymer and ceased operation in 1971. In 2004, the Heritage Conservancy, with support of East Rockhill Township, applied for listing on the National Register of Historic Places for Sheard's-Clymer's Grist Mill. The mill was recognized as a nationally significant

historic resource when it was added to the register in 2007.

Headman Pottery produced its well-known sgraffito ware in the early 1800s on Muskrat Road, near the intersection with Rockhill Road near the village of Rich Hill. Peter Headman was one of the last potters to make the now scarce "tulip ware" of Pennsylvania German tradition.

Built in 1846, Hager House, on Old Bethlehem Road serves as a classic example of an early Bucks County farmhouse.

Villages of East Rockhill Township

There are still over one hundred identifiable villages remaining in Bucks County, but many have been lost or overshadowed by growth and development. A village is a relatively small clustered settlement, often dominated by older homes and other structures. Frequently, the houses are closely spaced on small lots with dwellings set close to the road establishing the village as a distinguishable place.

The villages of Bucks County can be grouped into three basic categories: hamlets, residential villages, and commercial villages. Hamlets are the smallest type of village, consisting of a few houses at a crossroads or in close proximity to each other. Hamlets generally have no commercial uses or services.

Historic villages are a unique resource, and once they are lost, are irreplaceable. While municipalities cannot prevent growth, they can alleviate the effects that development can have on the villages through appropriate land use policies and regulations. Future development next to a village may have a negative impact on historic resources unless appropriate village planning techniques are applied. There may be a need to add or delete certain permitted uses or revise the area and dimensional requirements for the village zoning district. Additionally, residents can work together to maintain or improve the positive aspects of their village. Township officials should determine if separate village planning studies or specific preservation techniques (see pg. 71, Methods of Preservation) should be implemented in order to preserve and enhance the historic character of these cultural resources.

East Rockhill currently encompasses four villages: Hagersville, Keelersville, Rich Hill, and Rockhill Station:

Hagersville: Located on the border of East Rockhill and Bedminster Townships, most properties in the village front Old Bethlehem Road and Fifth Street between Old Bethlehem Road and Dublin Pike (PA Route 313). This village was named in honor of a prominent local politician, Colonel George Hager. The Hager

family was actively involved with public affairs throughout central and upper Bucks County. Samuel Hager, who was one of the most active family members, founded Perkasio Borough. By the 1870s, Hagersville had a population of 150 and was a lively settlement with a store, hotel, blacksmith shop, wheelwright shop, and two coach factories. Today, Hagersville is a quiet and quaint village. Several of the homes are quite old and are well maintained and preserved. Most of the older homes are found near the center of Hagersville, while newer homes generally spread out on either side of the village center. Two relatively large apartment buildings in the village center contrast with the architectural style of the older village houses.

Keelersville: Named after the Keeler family, the village is located in both East Rockhill and Bedminster townships. The original section of Keelersville is along Old Bethlehem Road, north of Ridge Road. During the start of the 20th century, Keelersville consisted of a store, hotel, shops, a large tannery, and a leather factory. Two historic one-room schoolhouses are also found in the village. This is a residential community with a riding stable and club as commercial uses.

Rich Hill: Located on the border of East Rockhill, West Rockhill, and Richland Townships, Rich Hill developed along Old Bethlehem Pike, and was bypassed when PA Route 309 was built. The village has remained a small, residential community, consisting of a few houses at the crossroads of Rich Hill Road and Old Bethlehem Pike. The stone houses found at the intersection are quite large and have been well maintained over the years. Large shade trees enhance the setting of the picturesque village.

Rockhill Station: Located along North Rockhill Road, this village takes its name from the mountainous ridge that extends across the northwestern parts of East and West Rockhill Townships. The area of the township where Rockhill Station is located was largely uninhabited 150 years ago and was marked as “woodlands and rocks” on the atlases and maps of that time. Rockhill station is the only village in the township that is not located at a road intersection, and it is the only one that is not partially located in another municipality. Rockhill Station boasts the only confirmed discovery of gold in Bucks County. All of the dozen or so buildings in Rockhill Station are wood-framed and masonry residences. Although none of the buildings are distinguished architecturally, the buildings have a consistency of scale that gives the village a uniform character. Distinct boundaries are formed by the woods, quarry, and railroad tracks.

Methods of Preservation

National Register of Historic Places

The National Register of Historic Places is the official list of the nation’s cultural resources, providing recognition that buildings or districts have historic, architectural, or archeological significance. The register was established by the National Historic Preservation Act of 1966 and is maintained by the National Park Service. The Pennsylvania State Historic Preservation Office manages the National Register program. The National Register is part of a nationwide program to coordinate and support public and private efforts to identify and protect resources of significance in American history, architecture, engineering, and culture. A “resource” worthy of preserving can be defined as a historic building, structure, district, site, or object. To be considered eligible for the National Register, a resource must have significance to historic events or persons, architecture, archaeology, engineering, and culture at the national, state, or local level. Its physical remains must also reflect the significance of the property; this resource should have integrity in location, design, setting, materials, feeling, workmanship, and

association. Nominations for listing are administered through the Pennsylvania Historical and Museum Commission. National Register listing restricts potential alteration or demolition of historic resources through activities involving the federal government, but does not limit the rights of private property owners.

East Rockhill has two sites that are listed on the National Register, Sheard's Mill Covered Bridge listed in 1980 and Sheard's-Clymer's Grist Mill listed in 2007 (see Map 9). The National Park Service can offer tax cuts and other assistance for National Register properties as a fiscal incentive to promote preservation and revitalization of the local community's unique cultural history. East Rockhill Township may consider developing survey plans in order to identify significant and undesignated resources, and determine which resources could be viable nominations for the National Register of Historic Places.

State Historic Preservation Office (SHPO)

In addition to the National Register, the state of Pennsylvania also has an official office for historic preservation. A department within the Pennsylvania Historic Museum Commission (PHMC), the state historic preservation office administers the federal historic preservation program within the state, and all official state historic preservation programs and activities. Every five years, the office develops a statewide historic preservation plan and provides assistance to local governments to develop and implement their own historic preservation planning initiatives.

The State Historic Preservation Office also offers its own set of incentives for historic preservation projects. Through the state's Department of Community and Economic Development, the state has its own historic preservation tax credit program, which is similar to the tax credit program through the National Park Service. One of the primary financial incentives for preservation through the state is the awarding of Keystone Historic Preservation Grants. These grants are available to local governments, and not-for-profit organizations to help with funding for planning projects or small construction projects for publicly accessible properties that are either listed on the National Register, or deemed eligible for listing on the National Register.

Historic Districts

A commonly used planning strategy for historic preservation is the adoption of ordinances that establish historic districts. The Pennsylvania Historical and Museum Commission (PHMC) must approve historic districts before local regulations can be enforced. This planning strategy is most appropriate in those municipalities that have concentrations of historic structures or sites (such as villages). A local historic district ordinance designates an area containing historic structures and protects it by (1) limiting the type of alterations that may be made to existing buildings, (2) reviewing proposed demolitions, and (3) ensuring compatible design of new construction. Act 167, the state Historic District Act of 1961, provides authorization for Pennsylvania municipalities to designate historic districts and regulate the alteration of buildings within them based on the historic context. Historic districts created under the authority of Act 167 are not zoning districts, but rather a review process separate from zoning concerns.

The creation of historic districts has many benefits; historic buildings have a unique character and heritage, providing a source of pride to residents. The character of historic neighborhoods is valued as an attractive environment and some communities have capitalized on their historic character to promote economic development and tourism.

Communities creating historic districts must follow procedures outlined in Act 167 for regulating alterations to structures within the districts. A local historical architectural review board (HARB) must be appointed and must consist of an architect, a real estate broker, a municipal inspector, and at least two citizens with an interest in, or knowledge of historic preservation. The HARB reviews and advises the governing body who then makes the decision to approve or deny the proposal. In determining if a change is appropriate, the HARB and governing body may consider its visibility from the public right-of-way, and general design, arrangement, texture, material, and color of the building or structure and its relation to the historic character of the district.

Local historic districts provide the credibility that may be lacking in the nomination of a district to the National Register of Historic Places. A local historic district ordinance provides a means for limiting the amount of change that can occur to historic structures. The National Register program is a credible way to identify a community's historic resources while the local district designation can further protect and enhance them. Thus, what the National Register helps identify, the local district helps protect.

Zoning Requirements

While historic districts are useful methods of protecting historic buildings, often a municipality's historic structures or sites are not necessarily located within an easily defined district. A historic preservation overlay zoning ordinance can contain provisions to encourage property owners of historically significant properties to use and maintain significant historic structures in order to protect a township's individual landmarks throughout the township, without being located within a designated historic district.

The preservation of individual structured or landmarks through zoning can be more difficult than protecting buildings in a historic district, but such ordinances have been used successfully by many communities. The ability to use zoning to protect historic resources is found in the Pennsylvania Municipalities Planning (MPC). Section 605(2)(vi) allows municipalities to pass ordinances for the, "regulation, restriction, or prohibition of uses and structures at, along or near places having unique historical, architectural, or patriotic interest or value." This authorizes municipalities to apply standards differing from those of the base zoning district.

Historic preservation overlay zoning can allow for additional uses within historic buildings, in order to encourage the continued use of a historic resource, rather than demolition. Additional uses are often permitted by special exception only, and standards for uses would have to be met to protect surrounding areas. Historic preservation overlay ordinances can also require local historic commission to review proposed demolitions and alterations to historic structures, require the preparation of impact statements for proposed subdivisions and land developments, and require the placement of buffering adjacent to historic properties. However, the extent to which zoning regulations may be used to preserve historic resources is limited. Historic buildings derive their character not only from the setback and bulk regulations that zoning can control, but also from the materials used to construct them and the design and pattern of their façade. The MPC does not authorize the regulation of the design of development through zoning.

Demolition Regulations

The regulation of demolition is an important part of a community's effort to preserve historic resources. Demolition by neglect is the destruction of a building through abandonment or lack of maintenance. Property owners may use this type of long-term neglect to avoid historic preservation demolition regulations. A municipality can use property maintenance codes to help prevent demolition by neglect.

Enforcing laws that require buildings to be secure from vandalism and prevent blight can put pressure on owners to maintain their properties.

A demolition delay ordinance requires a waiting period after the submission of a request for a demolition permit. Many ordinances require a delay for structures of more than 500 square feet and older than 50 years. A delay provides time for research about the architectural or historical significance of the property and time to develop alternatives for preservation, or to document the property if demolition cannot be averted.

Village Planning

While the villages of East Rockhill Township do not currently have historical designation, there may be a need to explore village protection strategies and techniques. The preparation of a village planning study can establish a community vision and a set of standards for public improvements and guidelines for future action. In addition, a new historic resource inventory and study of the municipality may help to strengthen the efforts of protecting and maintaining the rural character of East Rockhill Township.

Scenic Resources

Scenic resources are distinguished by special geologic formations, pristine landscapes, agricultural settings, natural resources, and historic structures. Scenic roads are segments of roadway that contain natural, historic, or cultural resources in proximity or contain an area of concentrated scenic vistas. Scenic vistas are points along a roadway that have sweeping views of the landscape. Scenic resources may be depleted or overshadowed by inappropriate development activities.

The East Rockhill Township Open Space and Recreation Plan identifies two scenic wooded vistas centrally located in the township. Immediately below the Richland Township border, the first vista is roughly bordered by Rockhill Road to the west, Route 313 to the north, and Three Mile Road to the east. The second vista occurs east of Ridge Road and is bordered by Route 313 and Blooming Glen Road.

The 2000 Pennridge Area Greenway Plan classifies scenic roads and scenic vistas. Within East Rockhill Township, there are six scenic roads identified as follows:

- Three Mile Run Road—Railroad tracks to Schwenkmill Road; includes views of the Three Mile Run Stream Corridor
- Branch Road—PA Route 313 to Blooming Glen Road; includes views of the East Branch Perkiomen
- Rockhill Road—Three Mile Run to Old Bethlehem Pike
- Hill Road—Just north of Stone Edge Road to Rockhill Road
- West Rock Road—Just east of utility right-of-way to PA Route 313
- Richlandtown Road—Covered Bridge Road to Sterner Road







Two scenic vistas identified in the Pennridge Area Greenway Plan within East Rockhill Township are as follows:

- Dublin Pike (Route 313)—Looking northeast towards Lake Nockamixon and looking southeast along Three Mile Run corridor.

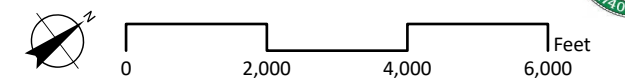
Map 9 - Historic and Scenic Resources

East Rockhill Township
Comprehensive Plan Update 2020



-  National Register of Historic Places Sites
-  Potential Sites for the National Register of Historic Places
-  Villages
-  Gateways
-  Scenic Vistas
-  Scenic Roads

Source: Bucks County Board of Assessment & Planning Commission Data 2018



- Mountain View Drive—Looking northwest along Tohickon Creek corridor and looking southeast towards Lake Nockamixon.

Four other scenic vistas have been identified in the East Rockhill Township Open Space Plan. Heritage Conservancy’s publication, Route 113 Lasting Landscape identifies a scenic vista along North Fifth Street between Schwenkmill Road and Dublin Pike, and another scenic vista along Ridge Road between Schoolhouse and Schwenkmill roads.

To emphasize the importance of preserving a community’s inherent scenic qualities, the township may wish to establish scenic overlay provisions to encourage compatible land uses that complement the existing rural character and provide protection of scenic vistas from roadways, entrances to historic villages, and overall scenic character of the township.

The overlay district concept does not affect the underlying use, density, or area and dimensional requirements, nor is it intended to reduce the development opportunity of the site; however, applicants must provide a scenic resource map, visual analysis, and satisfy performance standards when proposing development within a scenic overlay district.

Resident Survey Results

While people stated a very strong desire to keep the township rural and protect the character of town as it is, historic preservation was not cited as a major concern of the township. About 35 percent of respondents said that historic preservation is an issue of high importance and 13 percent of respondents said it is an issue of low importance.

Recommendations

- Develop design guidelines to ensure that the township can guide and limit the type of alterations that may be made to existing buildings in the villages.
- Implement village signage in order to raise public awareness of the villages and preserve village character.
- Establish scenic overlay provisions to encourage compatible land uses that complements the existing rural character and provide protection of scenic vistas from roadways, entrances to historic villages, and overall scenic character of the township.
- Consider amending the township’s demolition regulations to require a waiting period after the submission of a request for a demolition permit and allow time to research the significance of older properties and develop alternatives.
- Consider adopting a historic preservation overlay zoning ordinance which would allow for additional uses within historic buildings. A historic preservation overlay zoning ordinance would encourage the continued use of a historic resource and can provide an alternative to demolition.
- Consider conducting a historic site survey in order to identify significant and undesignated resources and determine whether township resources could be viable nominations for the National Register of Historic Places.

Transportation and Circulation

A transportation system comprises a network of roads, highways, rail lines, airports, bikeways, and pedestrian paths that facilitate the movement of people and goods from one place to another. It is one of the vital pieces of infrastructure that allows for personal mobility and access to housing, employment, and all other aspects of daily life. The fundamental makeup of this system within a region can significantly impact land use decisions as the connections to a particular property can either facilitate or hinder its use as a residential, commercial, or industrial property. The transportation network also significantly impacts the environment, economy, and general quality of life within a municipality.

How well a transportation network functions within a given municipality is dependent on a number of things, including the actions taken by neighboring communities and those of larger regional bodies such as PennDOT. Major changes in adjacent municipalities, while beyond the control of East Rockhill, can have an impact on the roadway network in the township. Large new developments in Sellersville, Richland, Perkasie, or Hilltown for example, could produce additional traffic through East Rockhill. Improvements on state highways, or construction of new highways and expressways can facilitate traffic into the township, or potentially direct traffic away from the township, depending on the new connectivity provided by the project.

East Rockhill Township is a rural area. As such, it is dependent on its system of roads and streets for its transportation needs. The relatively low density of development as well as limited access to any public transportation options leaves little choice but for residents of East Rockhill to travel primarily by car to and from almost all destinations. However, changes in land use patterns in the future could make alternative transportation options more feasible. The types and intensity of land use will affect the stability of the transportation network. Likewise, the type and size of the network will affect the rate, pattern, and intensity of growth in the community. Future land use in the township is dependent on the transportation network, and its ability to carry future traffic volumes at a reasonable level of service.

Regional Network

The primary regional roads in East Rockhill are Dublin Pike (Route 313), Ridge Road (Route 563), Fifth Street, and Mountain View Drive (Route 563). Motorists traveling into, through, or out of the township will likely use one of these four roads, as these are the main roads that connect with adjacent municipalities and the larger transportation network. Also influential on the growth and development of the township are regional roads in relatively close proximity. These include Route 309 and the Northeast Extension of the Pennsylvania Turnpike (Interstate 476) to the west, Route 663 to the northwest, Route 113 to the south, and Route 611 to the east. The Northeast Extension of the Pennsylvania Turnpike connects northeastern Pennsylvania with southeastern Pennsylvania. Since 1996, the township has used

the PA Route 313/663 Corridor Transportation Improvement Plan as a guide for roadway network planning in this corridor. The primary suggestion in this plan was for the municipalities in the study area to adopt an arterial corridor overlay ordinance to implement access management controls along Route 313/663. The township should develop and adopt an arterial corridor overlay ordinance to ensure that the functionality of the 313/663 corridor is maintained.

Street Classification

East Rockhill's transportation system is a hierarchical network of local roads feeding highways. The township's subdivision and land development ordinance classifies each of the streets within East Rockhill into one of four functional categories: arterial, major collector, minor collector, or local access. Each of these categories of roads is intended to provide a different level of service and is required to be designed for a different carrying capacity of traffic and vehicles. Generally, the higher classification streets are state highways and are maintained by PennDOT, while the lower classification streets are maintained by the municipality. East Rockhill's functional street classification is shown in Map 10.

Arterial

- Dublin Pike (Route 313)

Arterial highways are designed to carry large volumes of traffic and to connect major business and employment centers. The classification includes highways that provide intra-county or inter-municipal traffic of substantial volumes where the average trip lengths are usually 5 miles or greater. Generally these highways should accommodate operating speeds of 35 to 55 miles per hour. Dublin Pike (Route 313) is the sole arterial in East Rockhill. The subdivision and land development ordinance requires that a minimum right-of-way and cartway widths for arterials be 100 feet and 34 feet, respectively.

The number and location of access points onto arterial streets should be strictly limited because the proliferation of turning movement at individual driveways to properties will degrade the function of an arterial street. Access management techniques should be considered by the township to protect the function of arterial highways. Techniques such as reverse-frontage access roads, marginal access roads, or shared access driveways should be provided for properties fronting on arterial roads. New access points should be well spaced so that functionality on the arterial can be maintained.

The need for roadway improvements such as turning lanes, acceleration and deceleration lanes, shoulder improvements, and intersection improvements should be evaluated for all major developments.

Major Collector

- Ridge Road (Route 563)
- Mountain View Drive (Route 563)
- Fifth Street

The function of collector roads is to carry moderate volumes of traffic between arterial streets and local access streets with limited access to abutting properties. They function as inter-neighborhood and inter-township roadways and are designed for through traffic. They may serve as traffic corridors connecting residential areas with employment areas and shopping areas. Generally, these streets will accommodate operating speeds of between 35 and 45 miles per hour.

Minor Collector

- Park Avenue
- Callowhill Road
- Rockhill Road
- Three Mile Run Road (proposed to be local access, east of Route 313)
- Branch Road
- Blooming Glen Road
- West Schwenkmill Road
- Old Bethlehem Pike
- Old Bethlehem Road (proposed to be local access)
- Sternermill Road
- Richlandtown Road

The subdivision and land development ordinance requires a minimum right-of-way width for major and minor collectors of 80 feet and 60 feet, respectively. The minimum cartway width for both minor and major collectors is 28 feet. Ridge Road, Fifth Street, and Mountain View Drive are state-owned and maintained while the remaining collector streets are owned and maintained by the township. Many of the collector streets in the township are located in a rural setting and improvements should be considerate of the surrounding context. Cartway paving should be limited to only improvements necessary to maintain the safety of the road and lanes for turning, acceleration, and deceleration.

Local Access

- All other roads

Old Bethlehem Road and Three Mile Run Road are currently classified as minor collector roads. The two roads are narrow and the speed limit is determined by PennDOT. Three Mile Run Road becomes narrower on the east side of Route 313. The township should consider reclassifying Old Bethlehem Road and Three Mile Run Road east of Route 313 as local access roads instead of minor collector roads. This would give the township more control over the speed limits on these two roads. The township should also consider renaming the portion of Three Mile Run Road east of Route 313 “East Three Mile Run Road” to allow the reclassification of this portion of the road. Such changes in road classification would require amendments of Section 1717 of the zoning ordinance and Section 506 of the subdivision and land development ordinance.

All other streets not classified as an arterial or collector are classified as local access streets. This classification is intended to include streets and roads that provide direct access to abutting land and connections to higher classes of roadways. Traffic volumes will be low and travel distances generally short. These streets and roads should be designed for operating speeds of 25 miles per hour or less.

The subdivision and land development ordinance requires a minimum right-of-way width of 50 feet and cartway width of 24 feet. Local access streets are owned and maintained by the township. Through-traffic on local access streets should be discouraged. New local access streets should be designed to discourage fast-moving traffic and limit the amount of traffic generated by uses along the street. Traffic calming techniques and the design of local access to discourage through traffic should be explored in appropriate locations.

Roadway Network and Maintenance

Several entities are responsible for the maintenance of the township’s roadway network. Either the state or township can own a roadway segment. Depending on the owner, the maintenance for a road falls to

PennDOT’s maintenance division or the township’s public works department. Typical maintenance includes pothole repair, snow removal and resurfacing. Examples of notable state and township roads are:

State

- Dublin Pike (Route 313)
- Mountain View Drive (Route 563)
- Ridge Road (Route 563)
- Fifth Street (Route 4039)

Township

- Branch Road
- West Schwenkmill Road
- Three Mile Run (west of Route 313)

The township’s bridges can be owned and maintained by either the state, township, private companies, or the county. Again, the maintenance of these bridges will fall to PennDOT’s maintenance division, township’s public works department, the private company’s maintenance division, or the county’s general services department. In total there are 13 bridges within the township. PennDOT inspects each bridge every two years to ensure it is meeting state and federal standards.

Owner	Road	Crossed Feature
PennDOT	Dublin Pike	East Perkiomen Creek
PennDOT	Dublin Pike	Threemile Run
PennDOT	Dublin Pike	Threemile Run
PennDOT	Dublin Pike	Buck Run
Bucks County	Blooming Glen Road	East Perkiomen Creek
Bucks County	Covered Bridge Road	Tohickon Creek
Bucks County	Old Bethlehem Pike	Threemile Run
Bucks County	W. Schwenkmill Road	East Perkiomen Creek
Bucks County	W. Rock Road	Threemile Run
Bucks County	Hill Road	Threemile Run
Bucks County	Branch Road	East Perkiomen Creek
CSX-SEPTA	Rockhill Road	CSX-SEPTA Bethlehem Branch
East Rockhill Township	Rockhill Road	Threemile Run

Traffic signals are dispersed throughout the township at key locations to help manage the flow of traffic and goods that leave and enter the township on a daily basis. It is the responsibility of the township to maintain the signals within the township. PennDOT designs and issues permit to township to ensure they meet state and federal standards.

Traffic Calming

One way to enhance pedestrian and bicyclist safety is through a technique known as traffic calming. Traffic calming uses physical and psychological changes to the roadway to reduce speeding and cut-through volumes, enhancing the safety of both pedestrians and bicyclists. Traffic calming measures (e.g., speed tables, raised or textured crosswalks, on-street parking, and raised median islands) can be used to accomplish these goals.

In Pennsylvania, traffic calming measures can be constructed on township residential streets, collector streets with primarily residential uses, and arterials that serve as downtown or commercial areas (with posted speeds of 40 mph or less). The township must follow PennDOT’s recommended study and approval

process when traffic calming measures are proposed along a state road or when state, federal, or liquid fuels funds are to be used to fund such measures.

To address traffic speeds and pedestrian safety within the region, officials should work with PennDOT, neighboring municipalities, and the Penndel Regional Police to develop a Traffic Calming Plan for the region.

Transportation Improvement Program Projects

The Delaware Valley Regional Planning Commission (DVRPC) produced the FY 2019 Transportation Improvement Program (TIP) for Pennsylvania for Bucks, Montgomery, Chester, Delaware and Philadelphia counties. All projects that intend to use federal funds, along with all non-federally funded projects that are regionally significant must be listed on TIP. DVRPC and its member governments that responds to transportation needs of the region prepare the TIP program by and ensure they comply with federal and state policies. Projects can be multi-modal; that is, they include bicycle, pedestrian, Intelligent Transportation Systems (ITS), and freight related projects, as well as traditional highway and public transit improvement projects.

In the southeastern Pennsylvania region, the TIP contains over 400 projects totaling more than \$5.5 billion over the four-year span of the program. The list of transportation priorities are financially constrained by the Fixing America's Surface Transportation Act (FAST Act). East Rockhill Township does not have any projects listed on the FY2019 TIP.

East Rockhill Township itself, or in conjunction with county agencies and regional partners should consider in-depth transportation studies that have as an objective the identification and evaluation of potential traffic flow problems within the region. An adequately funded and comprehensive study would help the township prioritize, develop, and orderly plan for improvements that may be necessary to the existing township road system. One of the goals of these studies should be to identify a list of potential improvement projects that should be added to Regional Transportation Improvement Program (TIP). East Rockhill should work with the Bucks County Planning Commission to assist in the identification of potential TIP projects.

Pedestrian and Bikeway System

Pedestrian and bicycle facilities are an important part of the transportation network that provide residents a non-motorized means of travel for commuting and recreational purposes. When asked to identify recreational facilities and activities they would like to see improved, most surveys performed around the region indicate that residents want access to walking trails and bicycling facilities in their community.

Like many upper Bucks County communities, East Rockhill is a popular place for bicycle enthusiasts. The potential exists for arterials to function as a regional on-road recreational linkage for bicyclist if conditions are favorable. East Rockhill could potentially benefit by the installation of bike lanes and the identification of bike routes. In 2000, East Rockhill Township adopted the Penndel Area Greenway Plan, 2000. This plan presented several bikeways for the township, including both on and off road connections. To help promote the development of the trails in the township, the township should work with DVRPC and other funding agencies to pursue grant opportunities that will assist in the completion of the trails shown in the plan.

A bike lane is an established lane on the roadway for use by bicycles only. Bike lanes are designated with signage and striping. Bicycle routes, which are the least expensive option for creating on-road linkages, make use of the existing road surface. Along bicycle routes, bicyclists and pedestrians must share the road with vehicles. In addition, the township could require developers to provide a bike lane along roads where bike routes have been designated; much in the way developers are required to provide road improvements along roads where their development proposals are situated. No matter what the system employed, adequate route signing should always be provided to supply directional information to users of the system.

Bucks County Bicycle Master Plan

Bucks County has adopted the Bucks County Bicycle Master Plan, 2012. The purpose of the plan is to inventory existing conditions, advance opportunities for the improvement and expansion of a broader network of multimodal routes serving existing residential and business areas of the county, enhance the outreach and education of bicycle safety, and leverage the existing recreational resources in the communities at large.

This document is a master plan for an interconnected network of bicycle facilities for Bucks County and the region. It is a valuable resource for municipalities in planning and implementing bicycle facilities across the county. It identifies priority roadways for bike lanes and shared-use paths.

The plan identifies East/West Cross County Spine (Route 313) and Mountain View Drive as priority roadways within the township. This plan also identifies the Liberty Bell Trail and the Perkasio to Nockamixon State Park as off-road connections. The Liberty Bell Trail is planned as a 25-mile trail corridor which will ultimately connect Quakertown with East Norriton Township in Montgomery County. The corridor partially follows along the Liberty Bell Trolley Route (Old Bethlehem Pike). The Perkasio to Nockamixon State Park trail spine will connect Perkasio to the East/West Cross County on-road spine, as well as Nockamixon State Park.

As part of an ongoing planning effort, township officials should continue to pursue the implementation of the designated bicycle routes including on-road and off-road linkages while ensuring these facilities are designed to provide adequate safety measures for its users.

Public Transportation

Aside from long distance bus services offered by Greyhound and Trans-Bridge, which run along Route 313, there is no public transportation in East Rockhill Township. Previously, the area was served by the SEPTA regional rail line to Quakertown. That service was discontinued in 1981 due to declining ridership. The nearly two miles of rail line that still runs through the township now serve as a limited capacity freight line, currently leased from SEPTA by East Penn Railroad, LLC. Previous studies have identified the Quakertown regional rail line as a potential candidate for reactivation for passenger service, but to date no formal proposals or projects have been put forth and no type of public transportation is proposed for the area.

Airport Facilities

Penridge Airport is a civilian airport located north of Ridge Road between Tunnel and Schoolhouse roads. It serves private aircraft and small aircraft charter operations. Although privately owned, the airport facility has utilized state grants for maintenance and improvements, and, consequently, is subject to public funding restrictions and regulations. The airport has a paved runway 4,215 feet long, making it an important facility to aviation in the area.

Penridge Airport does not serve scheduled passenger service and is classified as a General Aviation Airport. Airplanes that use the runway at Penridge are limited to a gross registered weight of less than 50,000 pounds. Although the daily operations are under 100 takeoffs and landings, it is the largest airport between Philadelphia and Allentown.

Currently, the zoning ordinance contains Airport Area Protection Standards for an overlay district that is intended to protect the surrounding properties from obstructions (e.g., structure, growth, or other objects that exceed the established height limit) that have the potential for endangering life and property of users of the Penridge Airport. The ordinance establishes airport zones and maximum heights for structures and trees within each zone. It also identifies use restrictions related to electrical interference with navigational signals or radio communications, lighting, or uses that would otherwise endanger or interfere with the operation of aircrafts using the airport.

As an element of East Rockhill's transportation network, the Penridge Airport provides personal and recreational use. Penridge Airport leases space to a skydiving business called Skydive Philadelphia. Skydive Philadelphia offers skydiving to the public seasonally and provides training in the off-season. Potential conflicts may occur with the surrounding residential land uses if the airport is used beyond its capacity or if airport regulations do not adequately address all accessory activities.

Resident Survey Results

Many people noted issues with speeding, speed limits, road maintenance and traffic.

About 46 percent of respondents identified traffic congestion as an issue of high importance and 12 percent of respondents identified traffic congestion as an issue of low importance.

About 92 percent of respondents noted that if the township were to spend more money, the township should direct funds towards roadway maintenance and improvements.

Recommendations

- Develop a regional transportation improvement program and work with the Bucks County Planning Commission to assist in the identification of potential Regional TIP projects.
- Use access management techniques to ensure that the function and capacity of the transportation network is maintained.

- Work with PennDOT and the Pennridge Regional Police to develop a Traffic Calming Plan for the region.
- Identify potential bicycle infrastructure improvements in the township, as proposed in the Bucks County Bicycle Master Plan.
- Continue the development of the township trail network.
- Promote balanced development around the Pennridge Airport to ensure that the quality of life is maintained for the surrounding neighborhoods, while creating a safe and modern airport facility.
- Consider adopting an arterial corridor overlay ordinance to ensure that the functionality of the Route 313 / Route 663 corridor is maintained.
- Consider reclassifying Three Mile Run Road (east of Rt. 313) and Old Bethlehem Road as local access roads instead of minor collector roads. Consider renaming the portion of Three Mile Run Road east of Route 313 “East Three Mile Run Road” to allow the reclassification of this portion of the road.

Hazard Mitigation

Hazard mitigation planning is integral to a community as it addresses both natural hazards and those caused by human activity. Stakeholders such as emergency management personnel, elected officials, businesses, institutions, and local historical and environmental organizations collaborate to support proactive efforts that will minimize risks to life and property. Hazardous incidents and disasters can stretch local resources and budgets. The pre-disaster planning process is essential to mitigating the impacts of such events.

The Disaster Mitigation Act of 2000 requires local and county governments to have an official mitigation plan in order to receive federal disaster mitigation funds. Bucks County adopted its Hazard Mitigation Plan Update (HMPU) in 2016 to identify and assess areas of vulnerability in municipalities, and prioritize the mitigation strategies with an implementation schedule. The updated plan is a pre-disaster plan that guides the county towards comprehensive multi-hazard mitigation, while respecting the needs and character of municipal communities. It is a blueprint for reducing property damage and saving lives from future disasters and enhancing community resiliency following an event. Furthermore, the approved plan qualifies Bucks County and its municipalities for pre- and post-disaster grant funding.

East Rockhill Township had two representatives who actively participated in the 2015-2016 planning process by attending meetings, completing assessment surveys, and submitting comments. The Board of Supervisors of East Rockhill Township adopted this plan on October 11, 2016. The Federal Emergency Management Agency (FEMA) approved East Rockhill Township in August 30, 2017, as a National Flood Insurance Program (NFIP) Participating Municipality, thus allowing the township to apply for federal disaster assistance if needed. East Rockhill's Emergency Management Plan was adopted with Resolution 2015-07.

Risk Assessment

The Bucks County 2016 HMPU identified the following 21 hazards as being prevalent throughout or in parts of the county:

Natural Hazards	Human-Made Hazards
Drought	Dam Failure
Earthquake	Environmental Hazards
Extreme Temperature	Structure Collapse (Infrastructure)
Flood, Flash Flood, Ice Jam	Terrorism*
Hailstorm	Transportation Accident
Hurricane, Tropical Storm, Nor'easter	Urban Fire and Explosion
Landslide	Utility Interruption
Lightning Strike	
Pandemic*	
Radon Exposure*	
Subsidence, Sinkhole	
Tornado, Windstorm	
Wildfire	
Winter Storm	

Source: Bucks County 2016 Hazard Mitigation Plan Update

The methodology for assessing risk factors assigns a weighted value for probability, impact, spatial extent, warning time, and duration. In assessing risks for East Rockhill Township, it was noted that the township’s highest ranked hazards are (1) winter storms and (2) hurricanes, tropical storms, and Nor’easters. The moderately ranked hazards are (1) pandemic and (2) terrorism, and the low ranked hazard is radon. None of these hazards in the assessment are valued greater than those hazards for the county as a whole.

From this assessment, it appears that mitigation activities should be directed toward weather-related events. Recommended mitigation strategies for protecting property and life under such hazards include increasing resident awareness of emergency actions, reviewing the floodplain ordinance, incorporating snow removal and emergency access logistics with new development planning, and securing access to generator power.

One unique feature of East Rockhill Township is the Rockhill Quarry. Through the extraction process for valuable stone, less valuable rocks and soil are also removed from the ground. This overburden is usually stacked up into a nearby spoil heap. Such spoil heaps may block or bury water bodies, affecting local hydrology with water quality or flow. The large pit(s) left behind from this man-made quarry activity often fill with groundwater. Leveling the spoil heaps, filling in holes and re-grassing where possible can be mitigation strategies when the quarry is no longer active. There also remains the possibility of environmental hazards to assess and mitigate, depending on the results of asbestos testing and DEP review.

Another distinctive characteristic in East Rockhill Township is the Pennridge Airport. If development is to occur on the 220 acres, planning for sound structures that can withstand strong weather events should

be considered. Fuel spills that require emergency response and potential infrastructure damage from storms are possible hazards that can disrupt various modes of transportation and damage property.

The HMPU identifies East Rockhill Township as a participant in the National Flood Insurance Program with local floodplain management regulations. A majority (69 percent) of the township's historical properties (1 building and 8 structures) are in the Special Flood Hazard Area (SFHA). The SFHA is defined by FEMA as the "land area covered by the floodwaters of the base flood on NFIP maps."

East Rockhill Township's floodplain ordinance, Chapter 8 of the Code of Ordinances, Township of East Rockhill was updated in 2016. The ordinance contains provisions for the protection of floodplain areas that comply with the National Flood Insurance Program and the Pennsylvania Floodplain Management Act. The ordinance contains specifications that limit the expansion and enlargement of existing structures unless undertaken in compliance with pre-construction and pre-development floodplain permits. This includes strict limits on alteration or relocation of a watercourse, elevation and floodproofing requirements, and design and construction standards, including those for manufactured homes and recreational vehicles.

The township's website page on FEMA Flood Plain Maps is comprehensive and has valuable resources for homeowners, directing them to recent flood plain maps, relevant federal, state, and county government agencies, and flood insurance information.

Mitigation Action Plan

The Bucks County 2016 Hazard Mitigation Plan recommends specific municipal actions based on the priorities of hazards. Of all the mitigation actions listed for the 2016 Hazard Mitigation Plan, East Rockhill is identified for the following general actions:

Priority	Action	Implementation Schedule
High	Proceed with grant applications for flooding	Within 2 years (2018)
High	Evaluate and perform mitigation projects including acquisition, elevation, foundation and building stabilization, and securing access to generator power	Continuously for next 5 years (2021)
High	Limit development in high hazard areas; Evaluate and integrate snow removal and emergency access logistics with new development planning	Continuously for next 5 years (2021)
Medium	Obtain information for structures with highest relative vulnerability to determine best property protection methods	Within 5 years (2021)
Medium	Provide adequate and consistent enforcement of ordinances and codes within and between jurisdictions; train municipal building inspectors as needed	Continuously for next 5 years (2021)
Medium	Review and update floodplain ordinance on annual basis	Ongoing
Medium	Increase awareness by residents of actions to take before, during and after an emergency; Educate as to hazards and mitigation opportunities	Continuously for next 5 years (2021)
Medium	Consider implementing activities to secure "Firewise" designation (National Fire Protection Association) to reduce losses from wildfires	Continuously for next 5 years (2021)
Medium	Implement projects to manage stormwater effectively	Continuously for next 5 years (2021)

Source: Bucks County 2016 Hazard Mitigation Plan

The HMPU is a living document, and it requires continuous monitoring. Like all of the municipalities in Bucks County, East Rockhill Township should have a designated representative from the community, such as the local emergency management coordinator, to regularly review mitigation activities and hazard events. This person will be integral to the future planning process when the HMPU is again updated. The Bucks County Planning Commission will begin that process in 2019, collaborating with municipal representatives and the Bucks County Emergency Management Agency.

Recommendations

- Continue to regularly monitor the mitigation activities and hazard events listed in the HMPU.
- Increase resident awareness of emergency actions in weather-related emergencies
- Review, on an annual basis, and update, as needed, the township floodplain ordinance.
- Participate in the update to the Bucks County HMPU.

Water and Sewer

The coordination of water resources, wastewater facilities, stormwater management planning and land use planning is a vital component of the comprehensive plan, and all are part of the township's interrelated water system. Water and wastewater facilities are key factors in determining the location, nature and density of future development. Periodic assessment of water resources, wastewater disposal methods and service areas is necessary to ensure that adequate facilities can be provided to satisfy future growth and development needs. Effective stormwater management practices can ensure that water quality is protected, peak stormwater flows are controlled, and groundwater recharge is enhanced.

Almost as much as zoning, and perhaps more so in some ways, the availability and access to water and sewer systems influences where new development takes place and at what intensity. The development of sewer systems and water treatment systems that service entire communities has played a large part in the outward expansion of urban areas. Development capacity is limited where water and sewer must be obtained and treated on-site because a significant portion of the site must be devoted to waste storage and treatment.

The lack of appropriate water and sewage facilities can also be a significant threat to public health. Untreated or improperly treated wastewater or sewage which comes into contact with the surface of the ground, or with surface waters, allows disease organisms and harmful bacteria to grow and spread, and can contaminate extended areas. It can spread into groundwater supplies, potentially affecting large populations. Proper treatment of wastewater before it reaches drinking water sources is a key element of water systems planning and is vital to protecting public health and welfare.

Water Resources

Water resources can be broken into three primary factors—water supply, water quality, and stormwater management. The following discussion addresses the specific concerns and considerations of each.

Water Supply

Many communities are faced with the challenge of addressing potential water supply problems resulting from over withdrawal and diminishing groundwater recharge. The Pennsylvania Municipalities Planning Code directs municipalities to consider water facilities in municipal comprehensive planning, zoning, and development review functions. Section 301(b), which became effective on January 2001, states that the comprehensive plan shall include a plan for the reliable supply of water, considering current and future water resource availability, uses and limitations, including provisions adequate to protect water supply sources. Any such plan shall be generally consistent with the State Water Plan and any applicable water resource plan adopted by a river based commission.

Groundwater is the source of water supply for the majority of the property owners in the township. Although several creeks, tributaries, and Lake Nockamixon are located in East Rockhill, surface water resources are not used as a source of water supply. According to the Delaware River Basin Comprehensive Plan (2001), as of 2010, Lake Nockamixon is designated as a water supply source and is used for flow augmentation. The use of individual on-lot wells will continue to be the primary source of water for properties located outside the Development Area.¹ As discussed in the Natural Resources chapter, many of the geologic formations underlying parts of East Rockhill are not conducive to storing and transmitting large quantities of water.

Because water supply is not unlimited, the Delaware River Basin Commission (DRBC) has established Ground Water Protected Area Regulations for portions of southeastern Pennsylvania, which includes portions of Berks, Bucks (including East Rockhill Township), Chester, and Montgomery counties. Rock formations underlying much of this study area experience low recharge rates during dry years, which can lead to declines in water table levels, diminished flow in adjacent streams, and cessation of flow from springs. Many public water systems in the area relying on groundwater resources have peak or average demands which closely approach or exceed the dry period capacity of their existing wells. As a result, the DRBC must approve withdrawals in the DRBC Ground Water Protected Area that exceed a daily average withdrawal of 10,000 gallons per day during any calendar month. According to DRBC, all of Perkasio Regional Authority's (formerly Perkasio Borough Authority) wells in East Rockhill and Perkasio Borough have a net annual groundwater withdrawal that is less than the withdrawal limit of as set by Section 6.1 of the Ground Water Protection Area Regulations.

The DRBC monitors groundwater withdrawals in excess of 100,000 gallons per day (gpd) for municipalities in the Delaware River Basin located outside the designated groundwater protection area, including East Rockhill Township. Mineral extraction and agricultural activities are exempt from these reviews, however. These withdrawals must not interfere with the performance of existing supply wells, or exceed the safe yield of the source aquifer. DRBC encourages municipalities to monitor public and private water use to determine the community's sustainable groundwater yields.

Section 408 of the township's subdivision and land development ordinance requires a water resource impact study be conducted when the proposed development is not served by a public water supply and meets specific conditions based upon the size and land use proposed. The purpose of the water impact study is to determine if there is an adequate supply of water for the proposed use and to estimate the impact of additional water withdrawals on existing nearby wells, underlying aquifers, and streams. The township will not approve a water system that does not provide an adequate supply and water quality for the proposed use.

Public Water Service

Public water service in East Rockhill is now solely provided by the Perkasio Regional Authority (PRA). The North Penn Water Authority (NPWA) operated a small satellite water system in East Rockhill until the end of 2017, when the PRA purchased the NPWA's water system in East Rockhill. The NPWA operating systems included two groundwater wells and a booster station, which serviced customers in the area of the Ridge Run development.

¹ The Development Area is designated as four zoning districts—R-1, Residential, Cultural-Educational, Commercial-Office, and Industrial districts. The purpose of the Development Area is to accommodate the more intensive residential, commercial, office, and industrial uses in the most appropriate locations.

Whether development is served by on-site wells or the public water system depends on several factors, including regulatory provisions, hydrological situation, and economics. Section 519.2 of the subdivision and land development ordinance requires that all residential subdivisions of 15 lots or more, all residential subdivisions of 5 lots or more with a density of 1.8 dwelling units per acre or greater, and all nonresidential subdivisions of three lots or more be provided with public or centralized water supply and distribution systems.

The PRA supplies water to several properties in the area of Ridge Road and Old Bethlehem Pike. The Authority also provides public water service to West Rockhill Township and Perkasio Borough. The Authority owns and operates five wells in East Rockhill and two in Perkasio Borough. These wells primarily provide public water service to East Rockhill and West Rockhill townships and Perkasio Borough. The PRA Comprehensive Plan Update for the Water System (adopted October 2004) projects the average demand for the water system to increase from 0.71 to 0.89 million gallons per day by the year 2030. To assess the water source adequacy, PADEP has identified two criteria: (1) the average daily demand should not exceed the safe yield of the combined sources of supply with the largest supply not in service, and (2) the maximum daily demand should be equal or less than the safe yield of the combined sources of supply. According to PRA, both criteria have been satisfied.

The water authority increased rates by 1.5 percent in 2018. The generated funds will be used to maintain distribution lines and to offset growing electrical costs.

An issue that was not addressed in the PRA Comprehensive Plan is the issue of water not being returned to the watershed of the original withdrawal. Groundwater withdrawal from wells located in Tohickon watershed serves residences in the East Branch Perkiomen watershed. Therefore, the water is being exported to the adjacent watershed instead of recharged back to the local aquifer. A thorough hydrological study of the region's watersheds was completed as part of the Pennridge Water Resources Plan (2002). The study assessed the effect of existing and future increases in groundwater withdrawal may have on the depletion of the source aquifer. The study noted that too much groundwater withdrawal, at levels which exceed the system's ability to recover, will cause the decline in water availability and quality. Amending this issue is difficult as identifying the location of a depleted source aquifer requires time investment and can be financially cumbersome. When an area with excess groundwater withdrawal is identified, manually recharging the aquifer requires more time and financial investment. The DRBC adopted regulations that establish numerical groundwater withdrawal limits for several watersheds, including the East Perkiomen and the Tohickon. Ideally, the DRBC's regulations will balance out the groundwater withdrawal rates and the source aquifer recharge rates. The plan recommends the long-term monitoring and assessment of withdrawal and recharge in areas thought to have greater levels of groundwater withdrawal than replenishment.

Regional Water Resource Planning

For the purposes of this comprehensive plan update, the Pennridge Water Resources Plan (2002) will serve as a guide for East Rockhill's water supply plan. The Pennridge Water Resources Plan addresses the impacts on and threats to water in an area where there is a steady conversion of the natural environment to the built environment. This plan serves the eight municipalities of the Pennridge region, which include Bedminster, East Rockhill, Hilltown and West Rockhill townships, and Dublin, Perkasio, Sellersville and Silverdale boroughs. The plan provides watershed assessment to establish a long-range plan for restoring and protecting the water resources of the region. The plan has eight recommendations:

1. Form an Inter-municipal Water Resources Committee.

2. Develop a public education and awareness program.
3. Develop a model water resources management ordinance.
4. Update Municipal Act 537 Sewage Facilities Plan.
5. Establish the Pennridge Area Watershed Monitoring Program.
6. Conduct a nonpoint source pollution assessment.
7. Develop a source water protection program.
8. Prepare an Integrated Water Resources Plan (IWRP).

The Pennridge Water Resources Plan is intended to be coordinated with each municipal Act 167 stormwater management planning effort within the eight municipalities and four major watersheds of the Pennridge area. Municipal planning tools such as zoning ordinances, subdivision and land development ordinances, stormwater management ordinances, and municipal comprehensive plans are coordinated with the Pennridge Water Resources Plan. The Pennridge Area Coordinating Committee (PACC) consists of the eight municipalities in the Pennridge region noted above, as well as the Pennridge Chamber of Commerce and the Pennridge School District. The PACC acts as the inter-municipal water resource committee that was recommended by the plan, and links to many water resource educational materials are provided on the PACC's website.

Water quantity and quality remains a concern for East Rockhill residents. Water resources was ranked among the highest when residents were asked about issues of concern in the resident survey. The Pennridge Water Resources Plan recommends that a formal watershed monitoring program be put into place to establish baseline data and maintain future information concerning watershed health. It recommends that the existing water table elevation should be determined to establish the basis for long-term monitoring and assessment. The plan also recommends a GIS (Geographic Information System) database be established that would include water tables and locations, along with a long-term sampling program for water quality, to monitor the status of the area's groundwater resources.

Water Quality

Groundwater quality is continually threatened by land uses and the activities that take place on those lands. Some land uses and activities are more compatible with maintaining good water quality and some are less compatible with maintaining good water quality. Groundwater contamination from sewage and organic chemicals is the most common and serious health concern for private water supplies in East Rockhill.

Two aspects of water quality in East Rockhill need to be considered. One is the provision of potable water to properties with contaminated sources of water. In the cases of the confirmed instances of organic chemical pollution, the contaminated areas are too distant from the public water system to be a feasible alternative source of water. Similarly, most of those areas where pollution from malfunctioning on-site septic systems is likely are too distant from the existing public water system and too small to support a separate community water system. In any event, changing to an alternative water supply is an avoidance of a problem rather than its solution.

The second aspect of water quality has to do with public awareness of contamination, its occurrence, and its solution. Many pollutants are not detectable to human senses, and property owners usually do not test the quality of their water unless they suspect a problem. When tests such as those provided by the Bucks County Department of Health are made, they usually measure only the bacteriological pollutants

normally associated with contamination from failing septic systems. Most property owners would not think to test the chemical contaminants such as PFAS, TCE and PCE. A basic lack of information about the quality of water remains a problem in East Rockhill. Some common sources of groundwater contamination are summarized in Table 31.

TABLE 31 - COMMON SOURCES OF GROUNDWATER CONTAMINATION

Category	Contaminant Source	
Agricultural	Animal burial areas Animal feedlots Fertilizer storage/use	Irrigation sites Manure spreading areas/pits Pesticide storage/use
Commercial	Auto repair shops Construction areas Car washes Cemeteries Dry cleaners Gas stations Golf courses	Laundromats Paint shops Photography establishments Railroad tracks and yards Research laboratories Scrap and junkyards Storage tanks
Industrial	Asphalt plants Chemical manufacture/storage Electronics manufacture Foundries/metal fabricators Machine/metal working shops Mining and mine drainage	Petroleum production/storage Pipelines Septage lagoons and sludge Toxic and hazardous spills Wells (operating/abandoned) Wood preserving facilities
Residential	Fuel oil Furniture stripping/refinishing Household hazardous products Household lawn chemicals	Septic systems, cesspools Sewer lines Swimming pools (chemicals)
Other	Hazardous waste landfills Highway spills Municipal incinerators Municipal landfills Municipal sewer lines Open burning sites	Recycling/reduction facilities Road deicing operations Road maintenance depots Stormwater drains/basins Transfer stations

Source: US EPA 1991 *Protecting Local Groundwater Supplies Through Wellhead Protection: Publication #570/9-91-007. P 18 p.*

In 2016, the NPWA conducted routine sampling in public water supply wells and found a major contamination of per- and poly-fluorinated substances, or PFAS. Under the Hazardous Sites Clean-up Act, the PaDEP proposed interim response clean-up of the site and identified it as the Ridge Run PFAS HSCA Site. The site is located along Old Bethlehem Pike in both East Rockhill and West Rockhill townships. The site includes approximately twelve private wells and consists mostly of residential properties mixed with several commercial properties. Carbon filtration units have been found effective at reducing the levels of contamination. However, access to public water infrastructure has been identified as a permanent

solution to mitigating the contamination. The clean-up process will likely involve shutting down several private wells in the affected area.

The Bucks County Department of Health (BCDH) monitors the water quality of public supplies and enforces the water quality standards set by federal and state agencies. However, private water supplies are owned and operated by individual property owners, and the quality of the private water supply is the responsibility of the respective property owner. State laws do not require testing of private domestic water supplies, and regulatory agencies do not regularly monitor the quality of private supplies. Thus, information on water quality problems of private wells is not readily available.

The Bucks County Department of Health certifies new private wells to help prevent residents from drinking contaminated water through regulations adopted in 2011. The regulations apply to all new wells or modifications to existing wells in Bucks County. One of the key components of the program is to certify that each well is constructed to have a proper sanitary seal that can safeguard against groundwater contamination. While the well inspection only occurs at the time a well is constructed, it is still recommended that people who rely on private wells have them tested every year or so to make sure they are safe.

Amendments to the Federal Safe Drinking Water Act of 1986 requires that states create a wellhead protection program to protect the quality of groundwater used as sources of public drinking water supplies through local land use planning and other management means. This is accomplished by establishing three concentric wellhead protection zones around the wellhead. Zone 1 is the lands within a 100-foot radius of the wellhead, but may be larger depending on the local geology and hydrology and can be as large as a 400-foot radius. Zone 2 is generally the area within ½ mile of the wellhead, and Zone 3 is the area that contributes surface water or ground water to the course of the well. The closer the proximity to the wellhead, the stronger the regulatory protections. The principle behind protecting groundwater from contamination is that it is much easier, and less expensive, to prevent sources of drinking water from being contaminated in the first place than it is to restore water to a safe state after it has been contaminated.

To this end, the DEP is the primary agency for enforcing the Safe Water Drinking Act and requires water suppliers and municipalities to ensure that any potential activities which may pose a hazard to groundwater supplies are limited in areas near wells. The state also requires that for any new or expanding community water system, the municipality or authority must have ownership, or substantial control by deed restriction, of all lands in the area of Zone 1 surrounding the wellhead. The township requires certification as to capacity and quality where private water supply is to be installed for new construction prior to issuance of a building permit for the structure serviced.

Stormwater Management

Stormwater runoff is the term for rainwater that moves over the ground during and immediately following a rainfall event. The area of land through which stormwater runoff drains is referred to as a watershed. In a watershed undergoing land development and urban expansion, the amount of stormwater runoff from a rainfall event can increase dramatically. This is due to the amount of impervious land created by development and the accompanying reduction of natural grassy or wooded areas. Impervious surfaces are created when the natural landscape is covered by solid pavement, rooftops, and buildings that do not

allow stormwater runoff to penetrate the ground. Rather than soaking in to the ground (or infiltrating), stormwater rapidly flows over it.

Increases in impervious surfaces are why we get increased amounts (volume) and speeds (rate) of runoff that are responsible for some of the localized flooding and drainage problems. As development increases in a watershed, so do the problems of dealing with greater quantities of stormwater runoff. Failure to properly manage this runoff can result in more flooding; greater stream channel erosion; siltation and sedimentation; and a reduction in groundwater recharge. These problems occur on a regional and watershed level and cannot be solved by individual municipalities. It is important to recognize the watershed scope of stormwater management problems and potential solutions.

Recognizing the need to address this serious and growing problem, the Pennsylvania General Assembly enacted the Pennsylvania Stormwater Management Act (P.L. 864, No. 167, October 4, 1978). Act 167 requires DEP to designate watersheds and establish guidelines for the preparation of stormwater management plans for these watersheds. Counties are responsible for preparing the plans and developing ordinance language that municipalities must adopt to manage the volume and rate of stormwater runoff and the impact on water quality.

East Rockhill Township is located within two watersheds whose boundary approximately mirrors Ridge Road. The majority of the township is located within the Tohickon watershed northwest of Ridge Road, and the remainder of the township is located in the East Branch Perkiomen watershed southeast of Ridge Road. The major program objectives of the Tohickon Creek and East Branch Perkiomen Creek Stormwater Management Plans can be summarized as follows:

- Manage stormwater runoff created by new development activities taking into account the cumulative basinwide stormwater impacts from peak runoff rates and runoff volume;
- Preserve existing natural drainageways and watercourses and provide for proper maintenance of all stormwater management facilities;
- Maintain and/or improve existing water quality, especially in those areas which drain to existing lakes and reservoirs, by preventing additional loading of various stormwater runoff pollutants into the stream system;
- Maximize groundwater recharge where feasible and attainable throughout the watershed in an attempt to maintain the existing hydrologic regime; and
- Provide sound guidelines and methods for stormwater management for communities in the watershed.
- Purchase open space and conservation easements in order to preserve stream corridors

The East Branch Perkiomen Plan was completed in 2004. Because the East Branch Perkiomen Creek Plan is more current, some of the management criteria is more stringent than that found in the Tohickon Creek Plan. For instance, enhanced water quality and groundwater recharge criteria are found in the East Branch Plan. This is in great part to the ongoing efforts of the environmental community in Pennsylvania to find ways to minimize the damages associated with increases in stormwater runoff associated with development.

In September 2002, township officials adopted the East Rockhill Township Stormwater Management Ordinance (Ordinance No. 26 Section 3). The purpose of the ordinance is to promote health, safety, and welfare within the township by minimizing the damages of stormwater runoff. The ordinance applies to various temporary and permanent stormwater management facilities constructed as part of any regulated activity that is specified. The ordinance contains the performance standards and design criteria that are necessary or desirable from a watershed-wide perspective.

NPDES II Regulations

The National Pollutant Discharge Elimination System (NPDES) is a federal program created as an outgrowth of the Federal Clean Water Act (1972), which attempts to establish local regulations creating a nationwide reduction of the pollutants found in our nation's waterways. The purpose of the program is to reduce pollution, promote and require better stormwater management, and educate the public about water pollution. This program was amended in 1987 to include stormwater discharge regulations. The first phase of the NPDES was established in the early 1990s, and targeted large communities and industrial facilities. These entities were required to obtain permits from the state which enforce good housekeeping practices on-site and a reduction of hazardous materials kept on the premises where they could be washed off the site by rainfall and enter local waterways.

Phase II (2003) of the program is aimed at smaller urban communities, as defined by the Pennsylvania Department of Environmental Protection (DEP) based on US Census data. Small urban areas are referred to as "MS4s" (MS4 = Municipal Separate Storm Sewer System) and must obtain a state permit showing how they intend to manage pollution in the municipality. As a part of this permit, the state requires that the township provide the following minimum control measures (MCM) into their stormwater management program:

- Public education and outreach about stormwater management,
- Public involvement and participation,
- Monitor discharges in the system,
- Control construction site runoff, and
- Ensure that post-construction stormwater improvements are maintained and operate properly.

Beginning in March of 2018, NPDES permit requirements for small MS4s include the development of a Pollution Reduction Plan (PRP) for many communities. Previous regulations only required a PRP for communities within the Chesapeake Bay watershed area. A PRP requires a municipal stormwater program to identify and map all surface waters within their jurisdiction, and to identify all areas within the municipality which drain into those surface waters. Municipalities are then obligated to identify the locations where specific pollutants such as phosphorous and nitrogen are discharged into the surface waters (outfalls), and to develop strategies and best management practices for reduction the introduction of pollutants into surface waters. The township's NPDES for the MS4 permit was issued April 1, 2019, and is set to expire March 15, 2024.

Green Stormwater Infrastructure

Green stormwater infrastructure is a term that is generally used to describe several contemporary best management practices for managing stormwater runoff through natural processes that retain, absorb, or filter stormwater before it reaches a storm sewer system. This can reduce run-off caused by impervious

surfaces and help to prevent pollutants from entering surface water or the storm sewer system. The difference between traditional stormwater infrastructure and "green" infrastructure is that traditional infrastructure manages stormwater by collecting it and piping away from the site to be treated and released elsewhere, while green infrastructure attempts to retain and treat stormwater on the site by using natural vegetation so that water is absorbed and filtered by plants. Green infrastructure can be both environmentally and economically beneficial, as it reduces both pollution and the need for stormwater systems.

At a larger scale, green stormwater infrastructure can include the restoration or preservation of wetlands and floodplains. On a smaller scale, this may include rain gardens, green roofs, rain barrels, planter gardens, street trees that absorb water, the use of pervious paving materials, and vegetated detention basins. The township's website currently provides links to several documents and best management practices that East Rockhill residents could implement to reduce their stormwater impacts through green infrastructure solutions.

A tool the township uses in green stormwater management is preserving and requiring the preservation of open space. A majority of open space in East Rockhill is on private property protected by a conservation easement. The township currently has approximately 470 acres of lands that are protected by way of conservation easement. Conservation easements ensure that the preserved land will be used for open space or agricultural purposes. Therefore, the impervious surface cover will not increase and there will not be an increased burden on stormwater infrastructure. The continued efforts of the township to preserve open space is a key practice in green stormwater management.

Wastewater Facilities

Consideration of wastewater collection, treatment, and disposal are important factors in comprehensive land use planning. Coordination of the township's sewage facilities planning and land use planning is a primary aspect of this comprehensive plan. Planning for the proper types of sewage systems aids in implementing the township's land use goals and aids in ensuring the quality of the natural environment.

The proper planning for wastewater collection, treatment, and disposal is an important consideration in the comprehensive planning process for a community. Section 301(4) of the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247 as enacted and amended) requires that a plan for sewage facilities be included in a comprehensive plan. The Pennsylvania Sewage Facilities Act (Act 537) requires each municipality to have an official wastewater facilities plan, and unless proposed facilities are consistent with the plan, the DEP cannot issue permits for the facilities. However, the applicants may request plan revisions to the municipal sewage facilities plan and may appeal a municipal refusal to revise the plan.

In 1996, the township officials adopted the East Rockhill Township Wastewater Facilities Plan, replacing the Pennridge Wastewater Facilities Plan (1988) as the official Act 537 plan for the township. There have not been revisions to the Act 537 Plan since its adoption. The plan examines four study areas for adequacy of the public sewerage system to meet the projected growth in the Development Area and analyzes various alternatives for resolving failing on-lot sewage systems for two areas of the township. The recommended plan for wastewater facilities within East Rockhill Township includes the following:

- Implementation of a collection and conveyance system and construction of a treatment facility to serve the portion of the development study area (identified as Study Area B that includes the Suburban and a portion of the R-1 Residential Zoning districts) in the vicinity of Branch Road.
- Continued reliance on treatment facilities of the Pennridge Wastewater Treatment Authority (PWTA) to provide public sewer service in Study Area A (which includes areas of the S Suburban, C-O Commercial-Office, I-1 Industrial, I-2 Industrial, C-E Cultural-Educational, and R-1 Residential zoning districts).
- Extension of the public sewer collection and conveyance system to serve Study Area C in the vicinity of Ridge Road and Old Bethlehem Pike to correct malfunctioning on-site disposal systems. Treatment of effluent will be at the facilities of the PWTA.
- Increased municipal involvement in wastewater facility planning and maintenance through implementation of a public education program, the MS4 plan and the community newsletter.
- Continued monitoring of on-site sewage disposal systems within West Schwenkmill Road and Keelersville/Butler Lane Study areas. Pursue long-term goal of providing public sewer service to the Schwenkmill Road Study Area.
- Implementation of a wastewater alternative selection process for all new development to ensure utilization of cost effective and environmentally sensitive sewage disposal/ treatment facilities.

Discussion with township officials shows that there is also an issue with the on-lot sewage systems in Hagersville. Many of these plan recommendations have been implemented since the adoption of the Wastewater Facilities Act 537 Plan as discussed in the Public Sewer Service Section that follows.

Public Sewer Service

In East Rockhill, the Pennridge Wastewater Treatment Authority (PWTA) and the East Rockhill sewage treatment facility provide public sewer service to the Development Area. There are four areas of East Rockhill that are served by public sewers. Three of these areas are connected to the PWTA treatment plant in Sellersville via the south-side Interceptor that runs along the East Branch of the Perkiomen Creek. A sewer line runs eastward along Three Mile Run Road from Old Bethlehem Pike to a pumping station on Schoolhouse Road. This line also serves the properties fronting on Schoolhouse Road before it reaches the pumping station. The third area is a small section at the western end of the township between Perkasio and Sellersville boroughs. East Rockhill has 345 Equivalent Dwelling Units (or EDUs which is a gallon per day measure for the purpose of determining wastewater generation per household) remaining from 1,060 EDUs originally allocated to the township by the Pennridge Wastewater Treatment Authority (PWTA). In 2003 the PWTA sewage facility was expanded; this may result in a rerating and thus additional capacity for East Rockhill in the future.

The fourth public sewer service area, which is located in the watershed of East Branch Perkiomen Creek west of Blooming Glen Road, is served by East Rockhill's sewage treatment facility, which came on line in 1998. Properties on Blooming Glen, Branch, and Seven Corners roads are connected to the lines in this area. East Rockhill's sewage treatment facility is designed to accommodate 0.113 million gallons per day with a stream discharge to the East Branch of the Perkiomen Creek. The East Rockhill sewage treatment facility maintains a remaining capacity of 60 EDUs in 2019 and due to preservation efforts is not anticipating a need for expansion.

The sewer line on Three Mile Run presents a situation that deserves special attention. As with most of the lines in the Pennridge Area, the sewer line transports sewage to the PWTA treatment plant in Sellersville, where the treated effluent is released into the East Branch of the Perkiomen Creek. However, the properties served by the line obtain their water supply through the groundwater withdrawals from Three Mile Run watershed, which the Delaware River Basin Commission is monitoring for excessive withdrawals. Water is not being returned to the watershed of the original withdrawal. If groundwater withdrawal rates exceed the source aquifer's recharge rates, the water availability and quality will decline. Continuous long-term monitoring of the watershed will help determine what role the Three Mile Run sewer line plays in the depletion of the aquifer.

Nockamixon State Park has its own wastewater treatment plant. This plant is located outside of East Rockhill, but a sewer line lies within the township. This line does not extend beyond the park's boundaries. The plant has capacity in excess of the projected needs of the park. The wastewater treatment plant is operated by the Pennsylvania Department of Conservation and Natural Resources and treats the Upper Bucks County Technical School, the Lake House Inn, and St. Matthew's Lutheran Church.

Aside from the sewer service area designations and agreements, the extension of public sewer infrastructure to new areas is primarily determined by market economics. Constructing and installing sewer lines and treatment facilities can be very expensive. In particular, areas with steep grade changes, or areas with rocky soil can pose problems, both of which are present in East Rockhill, as that may make digging trenches to place pipes difficult, or require that mechanical pumps be used to transport sewage within the pipes. This brings high up-front costs to development, as well as significant maintenance costs in the future, as all sewer systems require maintenance and periodic repair or replacement of the sewer lines. If sufficient development potential exists, these costs may be shared among many users, lessening the cost to each individual. However, it is often the case in more rural areas that the costs of providing public sewer service to a particular area may not be affordable for just a few residents to share.

In 2006, sewer lines were extended to the Schwenkmill Road Study Area to address areas of failing on-lot systems. The Schwenkmill Road Study Area includes properties in the vicinity of West Schwenkmill Road between Ridge and Three Mile Run roads, Keelersville, Butler Lane, and Hagersville. The Act 537 plan recommended that the township educate and offer technical assistance programs to residents with failing on-lot sewage disposal systems in the Schwenkmill Road Study Area. In conjunction with the PACC, the township has achieved success in educating the public about water and sewage systems through efforts such as having water awareness day, participating in community water resource projects, and providing informational links about stormwater management and on-lot sewage systems on the township's website. The township has also achieved success in sharing water and sewage information among elected officials and municipal leaders and should continue to do so in the future. Since then, there have not been any substantial sewer line extensions.

On-Lot and Community Disposal Systems

The limited availability of adequate sewage disposal systems due to poor soils is a major limiting factor for development in East Rockhill. Adequate surface and subsurface disposal depends on the capacity of the soil to absorb and filter effluent. The filtering ability of soil is directly related to various factors including its permeability, stoniness, underlying slope, depth to bedrock, seasonal high water table, and inherent flood prone conditions. Soil conditions that do not permit the proper filtering process can lead to malfunctioning systems and potential health hazards, such as contaminated drinking water, exposed effluent, and odors. While there are no known community sewer systems or spray irrigation systems in

the township, there are ten separate holding tanks and a five alternative systems (in the form of privately owned, non-municipal sewage treatment facilities) serving individual residential and nonresidential uses in the township.

All properties in the township not connected to public sewer or not within a designated sewer service area, they are required to treat and dispose of their wastewater on the property. This is usually accomplished through the use of either a conventional septic tank, or some form of subsurface treatment, distribution and absorption system that cleans and filters wastewater before it can enter the groundwater supply.

A conventional septic tank is a water-tight concrete container buried in the ground which holds and chemically treats wastewater (effluent) before slowly distributing it to be absorbed in the soil in a disposal field. Septic tanks require regular maintenance in order to function properly. Periodically a septic tank should be pumped in order to have excess solid waste and sludge removed. If solids, greases or other sludge materials are allowed to build up, the system can clog and wastewater will not be distributed and absorbed properly.

In some instances, a wastewater treatment system can be designed to serve more than one property. A community system can be utilized to combine the effluent from multiple homes or businesses and treat it all together in one treatment site. A community system may be feasible or economical where connecting to a public sewer is unfeasible, but providing individual systems is also unfeasible due to variations in soil conditions, lack of space for each system, or any other factor. A community system functions much like the individual on-lot systems noted above, but differs primarily in its size. Community treatment systems can utilize conventional septic tanks, sand filtration, or spray or drop irrigation methods to treat and distribute wastewater. Alternative community systems can include a series of lagoons and ponds, marshes, constructed wetlands, or small package treatment plants to filter wastewater.

Where a community system functions more similarly to a public system than an individual system, it requires that the wastewater be conveyed from each property to the treatment site. This is achieved through sewer pipes connecting each lot to the treatment site. Just like the sewer pipes in a public sewer system that transport sewage from homes and businesses to the centralized wastewater treatment plant, these sewer pipes use gravity flow to convey wastewater. Where excessively hilly terrain makes a gravity flow system infeasible, the wastewater must be transported using pumps or a pressurized system.

Resident Survey Results

Water quality, water protection, and flooding were noted as very important issues. About 79 percent of respondents said that water quality/groundwater protection is an issue of high importance. Water quality/groundwater protection was noted as the second most important issue facing the township.

Recommendations

- Assist in implementing the recommendations of the Penridge Water Resources Plan, including participation in the Intermunicipal Water Resources Committee.
- Encourage green stormwater infrastructure, such as naturalized basins, use of rain barrels, and use of native landscaping.

- Continue to follow the recommendations of the current Act 537 Plan and assess the feasibility and necessity of updating the current Act 537 Plan.
- Develop a water quality and quantity baseline study for the township. Consider a formal, Geographic Information System-based watershed monitoring program for the Pennridge Area.
- Maintain compliance with the NPDES II MS4s regulations and incorporate the MCMs into the township's stormwater management programs.
- Continue participating in the PACC with the purpose of educating and information sharing.
- Continue public education and awareness programs regarding stormwater, water, and sewage.
- Consider adopting an ordinance regulating on-lot sewage systems and requiring a pumping schedule for on-lot sewage systems.
- Assess the need for and continue to provide public water and sewer connection along the Old Bethlehem Pike corridor.

Future Land Use

The primary purpose of this comprehensive plan is to set out a vision for the future of East Rockhill Township and provide the necessary tools and techniques for realizing this goal. Planning provides a framework for continuity and change in the township. The land use vision of this plan is based on the desires of the community and analysis of the resources, existing development patterns, district capacities, and infrastructure of the township, as noted in the previous chapters. Factors that affect future land uses include population growth, transportation network, infrastructure (water and sewer), natural resources, and compatibility with adjacent municipal comprehensive plans. The concepts and recommendations that follow form the basis of East Rockhill Township's land use vision and growth management strategy for the future.

Pennsylvania law requires that a municipal comprehensive plan identify areas of the township where growth and development may occur. This is required so that a full range of public infrastructure, including sewers, emergency services, schools, and other services, that may come from other public agencies not related to the municipality, can anticipate and plan accordingly to accommodate this future growth.

The future land use plan is only a concept of how the township envisions future development. It is not zoning. A zoning ordinance is the basic regulatory tool for implementing the vision of the future land use component of the comprehensive plan and can only be changed up approval by the Board of Supervisors. This chapter, the Future Land Use map and recommendations contained within this plan do not themselves change any current district boundaries, permitted uses, or dimensional standards.

However, zoning is required by law to be generally consistent with a municipal comprehensive plan. So while this plan itself is not a zoning document, it is intended to influence and inform any future zoning actions that are taken by the township Board of Supervisors. It is important to note that while a comprehensive plan is prepared periodically to chart the growth of the township, the zoning ordinance is also periodically reviewed in order to maintain validity and best implement the vision depicted in the comprehensive plan.

In the resident survey distributed as part of the comprehensive planning process, protection of natural resources, protection of water quality and groundwater, rural lifestyle, general quality of life, and crime and public safety were rated as top priorities when planning for the future of East Rockhill. This section provides a community vision for future land growth and development that address these planning priorities. Specific planning measures will be discussed that will promote the concentration of future development within appropriate areas of the township, while enhancing the preservation of its valuable natural resources, water quality, general quality of life and rural lifestyle. This section will also examine if East Rockhill is providing adequate amounts of various housing types. Various planning tools and techniques that will enhance the overall protection of the township's resources will be examined. Lastly,

a review of adjacent municipal comprehensive plans will identify the relationship and potential impacts upon the township from adjacent municipalities. The following concepts and techniques will form the basis of East Rockhill's land use vision and growth management strategy for the future.

Development District Concept

The development district concept is a planning tool used widely in Bucks County for the purpose of guiding growth. The fundamental objective of this concept is to concentrate future development in areas best equipped to handle growth (e.g., areas which contain existing or planned water and sewer service), while minimizing land use conflicts and capital costs to residents. These are areas where space is available, transportation networks are accessible, water and sewer capacity is available and environmental impacts would be minimal. To accomplish this objective, the concept calls for concentration of development into areas designated by municipal officials to accommodate future growth at densities sufficient to support necessary facilities and services. The development district concept also allows municipal officials to plan for the timely expansion of development, infrastructure, and municipal services, while preserving significant vacant, agricultural, and natural resource lands as open space.

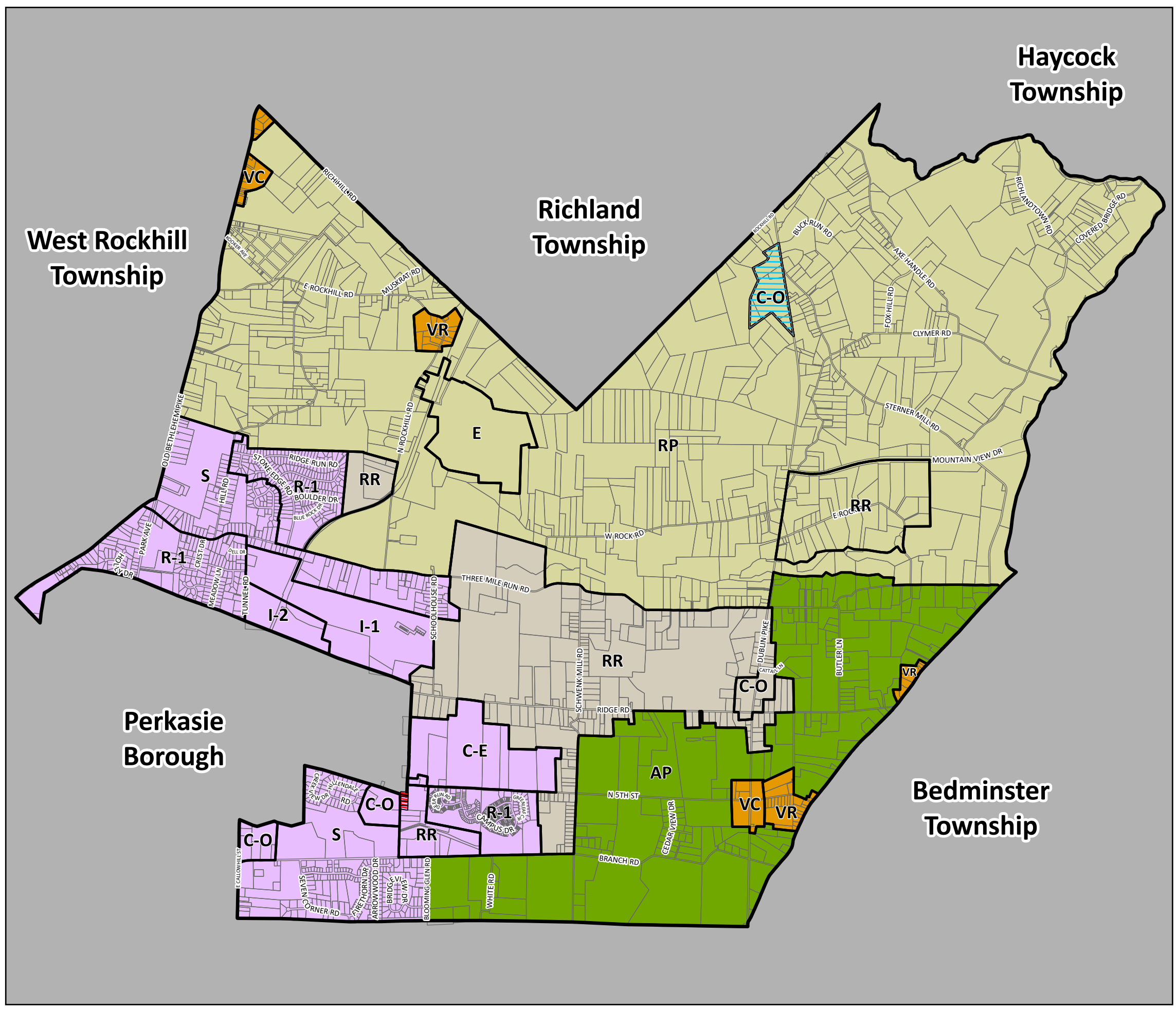
East Rockhill has employed the development district concept since the adoption of the 1987 comprehensive plan. In the past thirty years, a significant portion of the residential and nonresidential development has been concentrated into areas designated for future growth, serving as evidence that the development district concept has been an effective planning tool in East Rockhill. However, to account for new development, zoning ordinance amendments, and other planning implications, there is a need to reevaluate the development district concept. This section provides an update of the development district boundaries and future land use policies based on an analysis of current land use and zoning patterns, infrastructure and natural resources conditions.

East Rockhill Township already makes use of this principle in its current zoning map and ordinance. The township's zoning ordinance zones land with infrastructure capabilities into districts that permit more intense uses. Land in natural resource and agriculture areas is zoned for resource dependent uses and lower density single-family residential uses. The plan for future development is shown on Map 11: Future Land Use. The purpose and overview of each planning area is described below.

Development Area

The Development Area is intended to accommodate the bulk of future development and infrastructure expansion. This area is designed and sized to contain projected future growth, including infill development and adaptive reuse opportunities. This includes areas of the township which are already developed. This area generally corresponds to the R-1 Residential, S Suburban, C-O Commercial Office, C-E Cultural-Educational, I-1 Industrial and I-2 Industrial districts. This area has been designated as the Development Area for several reasons, but primarily due to the presence of public water and sewer. Generally, in order to retain the rural character of the township, public water and sewer should not be extended outside the Development Area until the land within the Development Area is at capacity or approaching capacity. In addition to the existing water and sewer services, the Development Area is best suited for development due to its proximity to Perkasio Borough and existing development within the township. The roads within these areas are better equipped to handle additional traffic.

Map 11 - Proposed Future Land Use
 East Rockhill Township
 Comprehensive Plan Update 2020



- Planning Areas**
- Agricultural Preservation
 - Existing/Future Development Area
 - Resource Protection
 - Rural Holding
 - Village Preservation

- Zoning Districts**
- AP Agricultural Perseveration
 - RP Resource Protection
 - RR Rural Residential
 - S Suburban
 - R-1 Residential 1
 - VR Village Residential
 - VC Village Commercial
 - C-E Cultural/Educational
 - C-O Commercial/Office
 - I-1 Industrial 1
 - I-2 Industrial 2
 - E Extraction

- Potential Rezoning to C-O
- Potential Rezoning to RP

Source: East Rockhill Township 2019

BCPC
 Bucks County Planning Commission

Feet
0 1,500 3,000 6,000

Rural Areas

Rural Areas include four separate future land use categories—Resource Protection, Agricultural Preservation, Village Enhancement, and Rural Holding. The purpose of the Rural Areas is to protect large environmentally sensitive areas, to maintain and enhance the agricultural industry, to preserve prime agricultural lands, to protect established neighborhoods, and protect and enhance rural villages and commercial areas. The individual rural land use purposes and related policies are discussed below.

Rural Holding Area

The Rural Holding Areas are provisional areas intended for the extension of the Development Area contingent on the build out of the Development Area. This is a reserve area where higher density development should be postponed until it can be economically served with the planned extension of public water and sewer. Typically, Rural Holding Areas do not contain critical natural resource areas. The Rural Holding Areas include the bulk of the township’s park and recreational lands (e.g., Willard H. Markey Park and the municipal golf course), township-owned open space lands, natural resource areas (e.g., steep slopes along Ridge Road), and large-lot residential development. However, there are also some limited commercial areas along Ridge Road and Dublin Pike. Currently, the areas within the Rural Holding Areas are only intended to accommodate low density/intensity development. Portions of this area (which correspond to the RR Rural Residential and C-O Commercial Office zoning districts) may serve as a reserve area for future residential development. Public water service should not be provided in this area at this time. However, some public sewer has been extended into this area to serve malfunctioning on-lot sewage systems.

Resource Protection Area

The Resource Protection Area of the township includes lands that are rich in resources that require special attention, primarily concentrated northwest of Three Mile Run Road. The purpose of this district is to protect areas that contain large expanses of woodlands and wetlands and concentrations of other natural resources such as forests, steep slopes, scenic areas, streams, floodplains, and ponds. This area aligns closely with the Bucks County, Pennsylvania, Natural Areas Inventory Update (2011) conservation landscape “Nockamixon/Haycock conservation landscape.” Core areas included in this conservation landscape are Quakertown Swamp, Haycock Mountain, and Nockamixon State Park. To achieve maximum protection of these resources, a variety of regulatory measures and planning tools are used. The permitted uses and their intensities should be limited in this area to ensure that the resources are well preserved, while providing for low-density residential development with a suitable sewage disposal system.

The Resource Protection Area contains the RP Resource Protection, RR Rural Residential, C-O Commercial-Office, and E Extraction zoning districts. There are four areas zoned C-O Commercial Office in the township. Of the four C-O Commercial Office zones, two are found in the Development Area, one in the Rural Holding Area, and one zone is located in the Resource Protection Area. Limited nonresidential development is appropriate in the Resource Protection area to serve nearby residents. The C-O Commercial-Office District within the Resource Protection Area is located along Dublin Pike near Richland Township and contains an eating place and several vacant lands.

Agricultural Preservation Area

This area, which corresponds to the zoning district by the same name, is located in the southeastern corner of the township and contains soils classified as Prime Farmland and Additional Farmland of Statewide Importance by the Natural Resources and Conservation Service (NRCS). The purpose of this

district is to recognize and protect the areas designated as a significant agricultural land and where active farming predominates. This comprehensive plan recognizes that farmland serves an important function and should be retained when possible to help preserve the character of the township.

There are established residential neighborhoods within and adjacent to the Agricultural Preservation zoning district. While the character of these neighborhoods should be protected by township ordinances, the focal point of the district must remain on the preservation of farmland and open space. Beyond its historical value, farmland is a productive resource, contributing to the local economy and providing a scenic open space valued by residents. Moreover, normal farming operations and activities should also continue to be afforded protection by local ordinances.

To protect and enhance the economic vitality of farming operations in the AP District, township officials could consider expanding the permitted uses on an agricultural property to include agritourism. In addition to retail sales of commercially grown agricultural products, an accessory farm business ordinance, or agritourism, would permit the use of a farm functioning beyond traditional agricultural uses. Permitted entertainment uses would include educational tours, seasonal festivals, small private events, farmers markets, craft fairs, hayrides and food and drink tastings. Additionally, an agritourism ordinance would allow residents to benefit from the township's agricultural operations. Farm stands and farmers markets provide residents with the opportunity to eat local, obtain local produce and other goods and directly support community agriculture.

Village Preservation Area

The existing villages are a unique resource, providing residents and nonresidents alike with a historic snapshot of East Rockhill's early beginnings. The Village Preservation Area includes the villages of Hagersville, Keelersville, Rockhill Station, and Rich Hill and correspond to the VR Village Residential and VC Village Commercial zoning districts. The township's villages vary considerably in the strength of their spatial identity. The villages, with the exception of Rockhill Station, are located along primary roadways. The villages are distinctive settlement patterns and should be preserved or enhanced through appropriate land use regulations. Potential for infill or expansion of a village should be predicated by a village planning and zoning study.

Plan Compatibility

The Pennsylvania Municipalities Code requires that comprehensive plans take into account the planning in surrounding areas, the county, and the region. Coordinated efforts with neighboring municipalities are essential to address issues that extend beyond the municipal boundary lines. These issues include, but are not limited to, traffic-related problems, watershed-based resource protection, creation of regional trails and greenways, and other public facilities such as schools, emergency services, and utilities.

Planning policies of surrounding municipalities have been considered in the development of East Rockhill's future land use plan. Issues or areas of shared concern are discussed with the intent to minimize any impacts from potentially incompatible land uses and to present opportunities for intermunicipal approaches to regional issues. The seven municipalities that border East Rockhill Township include Bedminster, Haycock, Hilltown, Richland, and West Rockhill townships, as well as Perkasio and Sellersville boroughs.

Bedminster Township

Located in the southeastern portion of the township, Old Bethlehem Road separates East Rockhill and Bedminster Township. The border between the two municipalities divides the villages of Keelersville and Hagersville. Both townships have zoning districts that roughly correspond to the village limits of Keelersville and Hagersville and contain district regulations that are intended to permit only uses and area and dimensional requirements that will complement the existing village character. The *2008 Bedminster Township Comprehensive Plan* details the land use around the villages as small, low-impact business and other nonresidential uses, such as offices and various commercial and consumer service uses. The remaining area along the municipal border in both townships is dedicated to agricultural preservation. Both East Rockhill and Bedminster township's AP Agricultural Preservation zoning districts are intended to preserve prime farmland and farmland of statewide importance soils while clustering new lots on the least productive soils.

Haycock Township

Haycock Township is a member of the Quakertown Area Planning Committee (QAPC). The *Quakertown Area Comprehensive Plan for Haycock Township* designates the area along the municipal border as Resource Protection Areas. The corresponding areas are zoned RP Resource Protection. This is comparable with East Rockhill's RP Resource Protection District, which covers the extent of the East Rockhill and Haycock municipal border.

Hilltown Township

In the *Hilltown Township Comprehensive Plan Update* (2019) the area bordering East Rockhill Township is designated as Rural Residential and Country Residential-2. These Development Area land use districts correspond to the name of the underlying zoning district. The Rural Residential area is comparable with East Rockhill's Agricultural Preservation Area. In Hilltown, the Country Residential-1 and Country Residential-2 districts are intended to accommodate the majority of the township's future residential development. The Country Residential-2 zoning district mirrors this plan's Development Area and the S Suburban District across the municipal border in East Rockhill. Therefore, Hilltown's adjacent land use and zoning is generally consistent with the land use and zoning in the comprehensive plan.

Perkasie Borough

In the *Borough of Perkasie Comprehensive Plan Update* (2014), areas of the borough that border East Rockhill Township are designated as a variety of different land uses. The northern areas of the borough are designated for low density residential, general commercial, and planned industrial uses. The land uses designated along the eastern borders of the borough include commercial centers and low-density residential. These land uses are generally consistent with the land uses proposed in this plan. The portions of the township that border Perkasie are part of the Development Area and are intended to support more intense development. The portions of the Development Area that are zoned for commercial and industrial uses mirror the areas zoned for commercial and industrial uses in the borough.

Richland Township

Richland Township is also a member of the QAPC. In 2009 municipal officials adopted an update to the township's own comprehensive plan. The *Richland Township Comprehensive Plan Update* (2009) designates the land bordering East Rockhill as rural agriculture and resource protection. These areas correspond with the respective zoning district. The rural agriculture and resource protection areas are outside of Richland's Primary Development Area. In East Rockhill, almost all land bordering Richland Township is in the RP Resource Protection District. In the northwest corner of East Rockhill, at the intersection of Old Bethlehem Pike and Rich Hill Road, is the village of Rich Hill. The village area is part of

the VC Village Commercial zoning district. The adjacent land in Richland Township is part of the Richland's Planned Commercial zoning district and therefore East Rockhill's land use and zoning is regionally consistent.

Sellersville Borough

The municipal border shared between East Rockhill Township and Sellersville Borough is only about a fifth of a mile in length. The land in East Rockhill that shares a border with Sellersville is part of the R-1 Residential zoning district. The land in Sellersville that shares a border with East Rockhill is part of the NC Neighborhood Commercial and the LR Low Density Residential zoning districts. According to the *Sellersville Borough Comprehensive Plan Update (2019)* the low density residential areas of the borough should maintain a neighborhood character with a density of one to three dwelling units per acre. The only land use in East Rockhill that borders Sellersville is a place of worship, which is permitted in Sellersville's Low-Density Residential District.

West Rockhill Township

The *West Rockhill Township Comprehensive Plan Update (2019)* depicts the border of West Rockhill Township and East Rockhill Township as primarily used for planned commercial uses. The PC-2 Planned Commercial and PI Planned Industrial zoning districts encompass the land use along the municipal border. The Bethlehem Pike corridor in West Rockhill is the primary commercial area in the township. East Rockhill's S Suburban, R-1 Residential, RP Resource Protection and VC Village Commercial zoning districts cover the extent of the border with West Rockhill. Except for a bed-and-breakfast, there are no commercial land uses along the border with West Rockhill. Additionally, in East Rockhill only a small portion of the Old Bethlehem Pike corridor is zoned for Village Commercial. Therefore, the land use and zoning policies of the township are generally inconsistent with the land use and zoning in West Rockhill. However, the presence of West Rockhill's commercial corridor is optimal for the potential expansion of water and sewer lines and servicing East Rockhill's Development Area.

Actions Taken Since Previous Comprehensive Plan (2005)

The township's last comprehensive plan was adopted in 2005, and as a result of that plan, the township took several steps to modernize its land use regulations. As an update to the previous comprehensive plan, it is important to note the steps that have already been taken, many of which have been noted in the previous chapters of this plan. The following is a brief summary of prior actions of the township:

- Adoption of the East Rockhill Township Open Space Plan (2009)
- Adoption of the East Rockhill Township Park and Recreation Plan (2006)
- Eclipsed 4,900 acres of protected land
- Updated various ordinances, including but not limited to:
 - o Sewers and sewage disposal
 - o Traffic regulations, covered bridges, and recreational vehicles
 - o Public water system
 - o Stormwater management
 - o Floodplains
 - o Riparian corridor
 - o Solid waste management

- Updated the use regulations to allow Use B3 Performance Standard Development to be permitted in the VR Village Residential, R-1 Residential and S Suburban districts
- Permitted the expansion of nonresidential employment via the development of the business park and airport complex in the I-1 Industrial and I-2 Industrial districts, increasing tax rates in the township.
- Continued participation in the Penridge Area Coordinating Committee.
- Zoning expansions of the VR Village Residential and VC Village Commercial districts in Hagersville Village

Development Area Analysis

The size of the Development Area should be large enough, and the zoning permissive enough, to accommodate the anticipated growth based upon population projections and the estimated number of future dwelling units in the township. A review of the capacity of the Development Area should be performed periodically to ensure that potential growth could be accommodated for the time horizon established for this comprehensive plan. If the analysis concludes that the population projections exceed the capacity of the Development Area, then the district would need to be expanded in to the rural holding area as applicable.

The purpose of this section is to determine the ability of the identified Development Area to support future development based on the projected number of dwelling units to the year 2035. The analysis examines the inventory of vacant and potentially developable lands in the Development Area and determines whether it can suitably accommodate future housing development. A discussion of the methodology and calculations of this section can be found in Appendix A.

As the analysis shows, there are 180.65 acres of developable land within the three zoning districts that allow residential development—S Suburban, R-1 Residential and RR Rural Residential. By using the development capacity acreage of each parcel of developable land within those three zones, it can be determined that a total of 490 units can be constructed in the Development Area. This analysis shows that there is sufficient capacity in the current Development Area to more than accommodate anticipated growth in the township into 2035.

Land Use Plan

This comprehensive plan update retains the planning areas delineated in the previous comprehensive plan update for East Rockhill. It takes into account the vision statements East Rockhill developed for the future of the township. It is also consistent with the development district concept adopted by the township. Through appropriate zoning, the types and intensities of land uses to be directed into these development district will aid in achieving the stated community development goals and objectives. As discussed previously, this land use plan helps inform the zoning decisions for the township.

Zoning

Zoning and subdivision and land development ordinances are the regulatory mechanism authorized by the MPC to support a municipality's land use policy. East Rockhill Township currently has 12 zoning districts and each district serves a specific purpose. The following discussion highlights the primary purpose, location and uses permitted in each district. Each zoning district is categorized based on the future land use area classifications.

Development Area

C-E – Cultural-Educational District

The C-E Cultural-Educational District in the south central part of the township along Ridge Road. The district intended to maintain the character of areas currently used by major institutions. All permitted uses shall have a minimum lot area of 2 acres and shall not exceed 35 feet in height.

C-O – Commercial Office

There are four areas of the C-O Commercial-Office District in the township. Two of the areas are located in the southeastern portion of the township and the other two areas are located outside of the Development Area, in the Resource Protection and Rural Residential areas, respectively. The intent of the C-O Commercial-Office District is to provide a wide range of commercial and service uses to suit the needs of the local and area-wide residents. No residences are permitted in this district. All permitted uses shall have a minimum lot area of 1 acre and shall not exceed 35 feet in height.

I-1 Industrial-1 District

The I-1 Industrial-1 District is located in the western portion of the township. The district provides for industrial, major commercial, intensive office and laboratory uses with suitable open space and landscaping to keep consistent with the township's rural character. All permitted uses shall have a minimum lot area of 5 acres and have a minimum front, side and rear yard setback of 100 feet.

I-2 Industrial-2 District

The I-2 Industrial-2 District is located in the western portion of the township, adjacent to the I-1 Industrial-1 District. The purpose of the I-2 Industrial-2 District is similar to that of the I-1 Industrial-1 District but with smaller lot sizes. All permitted uses shall have a minimum lot area of 5 acres and a minimum front, side and rear yard setback of 100 feet.

R-1 Residential District

The R-1 Residential District, located in three areas throughout the Development Area, is intended to accommodate all types of residential structures, single-family and multifamily, to ensure a balanced community. Performance standards encourage clustered development and medium density with open space areas as to keep with the character of the township. All permitted uses except for Use B1 Detached Dwelling shall have a minimum lot area of 2 acres and a maximum building coverage of 10 percent. Use B1 Detached Dwelling requires a minimum lot area of 22,000 square feet and a maximum building coverage of 15 percent.

S Suburban District

Located in the west and southwest parts of the township, the S Suburban District permits a range of housing types at moderate densities. All permitted uses except B1 Detached Dwelling shall have a minimum lot area of 2 acres and a minimum lot width of 200 feet. Use B1 Detached Dwelling requires a minimum lot area of 22,000 square feet and a minimum lot width of 100 square feet.

Rural Holding Area

RR Rural Residential District

Located throughout the central areas of the township, the RR Rural Residential District is intended to promote the preservation of agriculture as the primary use of undeveloped land. There are four separate areas that comprise the RR Rural Residential District. Two of these areas are located within the Rural Holding Area, one is located east of Route 313 in the Resource Protection Area, and the last portion of the district is located between North Fifth Street and Blooming Glen Road in the Development Area. All permitted uses except for Use B1 Detached Dwelling shall have a minimum lot area of 2 acres and a minimum lot width of 200 feet. Use B1 Detached Dwelling shall have a minimum lot area of 1.8 acres and a minimum lot width of 150 feet.

Agricultural Preservation Area

AP Agricultural Preservation District

The AP Agricultural Preservation District is located in the southeastern portion of the township. The purpose of the district is to recognize and protect the areas of East Rockhill where farming predominates. This district recognizes that farmland is being used to produce a product and has a positive purpose in utilizing the prime agricultural soils for the benefit of the entire community. On site containing less than 10 acres, all permitted uses shall have a minimum lot size of 80,000 square feet and a maximum impervious surface ratio of 10 percent.

Resource Protection Area

RP Resource Protection District

The RP Resource Protection District covers the majority of the township north of Three Mile Run Road. The purpose of the RP Resource Protection District is to protect areas containing sensitive natural features and areas of natural scenic beauty. Agricultural and low-intensity residential uses are permitted with standards and densities designed to encourage preservation of natural resources. All permitted uses except for Use B1 Detached Dwelling shall have a minimum lot area of 2 acres and a minimum lot width of 200 feet. Use B1 Detached Dwelling shall have a minimum lot area of 1.8 acres and a minimum lot width of 150 feet.

E Extraction District

The E Extraction District is located in the center of the Resource Protection Area. The E Extraction District is established to permit

mining and resource extraction operations. The rehabilitation of land during the extractive operation and at the time operations are ended will be required. All permitted uses shall have a minimum lot area of 2 acres and a maximum building coverage of 10 percent.

Village Preservation Area

VR Village Residential District

The purpose of the VR Village Residential District is to preserve the character of the township's villages. A variety of residential uses are permitted in the VR Village Residential District. Standards and densities are designed to be compatible with existing conditions. The VR Village Residential District covers the villages of Rockhill Station, Keelersville and a portion of Hagersville. All permitted uses except for Use B1 Detached Dwelling shall have a minimum lot area of 1 acre and a minimum lot width of 150 feet. Use B1 Detached Dwelling shall have a minimum lot area of 10,000 square feet and a minimum lot width of 70 feet.

VC Village Commercial District

The VC Village Commercial District is located around the villages of Rich Hill and Hagersville. The intent of the district is to provide local residents with a limited amount of commercial services. All permitted uses except for Use B1 Detached Dwelling shall have a minimum lot area of 1 acre and a minimum lot width of 150 feet. Use B1 Detached Dwelling shall have a minimum lot area of 10,000 square feet and a minimum lot width of 70 feet.

Future Land Use Considerations

The analysis presented in this comprehensive plan suggests key areas where revisions to the current zoning map and ordinance and the development of new planning initiatives may be warranted. This list is not meant to be prescriptive, only to allow for areas where discussions might take place.

Development Area

This area is intended to accommodate the bulk of future development and infrastructure expansion. It is designed and sized to receive projected future growth as discussed previously, including infill and flexible use opportunities.

- Ensure that zoning in the Development Area has adequate density.
- Develop a resident education program on on-lot sewage systems
- Require a pumping schedule for on-lot sewage systems
- Assess the need for and continue efforts to provide public water and sewer connection along the Old Bethlehem Pike corridor.
- Evaluate the zoning of the RR Rural Residential District south of the intersection of North Fifth Street and Blooming Glen Road. This portion of the RR Rural Residential District is located within the Development Area and several of the parcels have access to public services. The township could consider rezoning this area to the C-O Commercial Office District to create consistency with regional zoning.

Rural Holding Area

This area is designated for the extension of the Development Area contingent on the build out of the Development Area. This is a reserve area that does not typically contain critical natural resources but rather low density development that could accommodate higher density development and more intense economic activity. Public water and sewer should not be provided but the area could be serviced if need be.

- Conduct an assessment study of failing on-lot sewer systems within the Rural Holding Area. Public water and sewer may be extended to properties with malfunctioning sewage systems.

Resource Protection Area

Land uses within the Resource Protection Area are generally of low-intensity. It is the intent of this comprehensive plan that the rural character of these areas be maintained for the foreseeable future.

- Continue to preserve open space and farmland, but prioritize preservation based on threats to property.
- Evaluate the zoning of the C-O Commercial Office District along Old Dublin Pike near Richland Township. The district does not have access to public utilities and many of the parcels are designated as vacant land use. The township could consider rezoning the area to the RP Resource Protection District in order to create consistency with the regional zoning.
- Evaluate and possibly amend the steep slope regulations in the zoning ordinance to incorporate additional protection measures or allowances for limited disturbance areas.
- Review forestry regulations to provide more restrictive clear-cutting standards.
- Evaluate and possibly amend the riparian buffer regulations in the zoning ordinance to determine if an expansion of Zone 1 and Zone 2 would provide greater protection to the township's stream corridors.

Agricultural Preservation Area

This area is intended to recognize and protection the portions of the township designated as significant agricultural land and where active farming predominates. Beyond its historical value, farmland is a productive resource, contributing to the local economy and providing a scenic open space valued by residents.

- Consider an agritourism ordinance to encourage the economic vitality of farming operations by giving the farming operation the flexibility to generate revenue through additional means.
- Encourage farming operations to be flexible and generate revenue through additional means such as community-supported agriculture opportunities (CSAs).

Historic Preservation Village Zoning

A historic preservation zoning ordinance can contain provisions to encourage property owners of historically significant properties to use and maintain significant historic structures. Creating a historic preservation ordinance ensures that the township can guide and limit the type of alterations that may be made to existing buildings.

- Develop design guidelines to ensure that the township can guide and limit the type of alterations that may be made to existing buildings in the villages.
- Implement village signage in order to raise public awareness of the villages and preserve village character.
- Establish scenic overlay provisions to encourage compatible land uses that compliments the existing rural character and provide protection of scenic vistas from roadways, entrances to historic villages, and overall scenic character of the township.
- Consider amending the township's demolition regulations to require a waiting period after the submission of a request for a demolition permit and allow time to research the significance of older properties and develop alternatives.
- Consider adopting a historic preservation overlay zoning ordinance which would allow for additional uses within historic buildings. A historic preservation overlay zoning ordinance would encourage the continued use of a historic resource and can provide an alternative to demolition.

Township-Wide Considerations

Many land use considerations defy boundaries and apply across the township. While there are certain attributes that are ascribed either to the Development Area or the rural areas, often both areas benefit from looking at the township as a whole.

- Establish scenic overlay provisions to encourage compatible land uses that complement the existing rural character and provide protection of scenic vistas from roadways, entrances to historic villages, and overall scenic character of the township.
- Amend the township's demolition regulations to require a waiting period after the submission of a request for a demolition permit and allow time to research the significance of older properties and develop alternatives for preservation.
- Joint planning with surrounding municipalities and other regional entities should continue to be a priority of the township's land use plan. Joint planning occurs when municipalities agree to work

together to develop a single planning document, such as the Pennridge Area Water Resources Plan. The purpose of joint municipal planning is to address regional concerns and development that has or potentially will impact multiple municipalities.

Resident Survey Results

In general, residents who responded to the survey do not wish to see major changes to the current land use patterns of the township. They wish to remain rural and maintain their current patterns of living. Residential and commercial development were seen in a neutral light. Multifamily residential and industrial development were viewed negatively. Maintaining public safety and water quality/groundwater protection were deemed important issues to the future of the township. Other significant issues that were documented in the survey include the community's desire for a farmers market, establishing new and expanding existing trails and roadway maintenance/improvements.

Recommendations

- Continue participation in the Pennridge Area Coordinating Committee. Strongly consider future multi-municipal initiatives, including joint municipal planning, to address land use and transportation issues that have cross-municipal impacts.

Recommendations and Implementation

This chapter summarizes the recommendations of this comprehensive plan by chapter. Each recommendation includes recommended activities and entities responsible for completing the activities.

Housing

- ❖ Periodically review the density requirements of the R-1 residential and S Suburban districts to ensure adequate standards to accommodate anticipated population growth.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Ensure strict enforcement of the building code and zoning ordinance.
Responsible Entity: Board of Supervisors, Township Manager, Zoning Officer
- ❖ Amend the zoning ordinance to address short-term rentals in the township.
Responsible Entity: Board of Supervisors, Planning Commission

Nonresidential Development

- ❖ Consider amending the zoning ordinance to only allow Use E2 Veterinary Office to be permitted as a conditional use or special exception in the RP Resource Protection and RR Rural Residential districts. Use E2 Veterinary Office is currently permitted by right in the aforementioned zoning districts.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Consider amending the zoning ordinance to address medical marijuana land uses, such as medical marijuana dispensary and medical marijuana grower/processor.
Responsible Entity: Board of Supervisors, Planning Commission

Natural Resources

- ❖ Evaluate and possibly amend the steep slope regulations in the zoning ordinance to incorporate additional protection measures or allowances for limited disturbance areas.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Review forestry regulations to provide more restrictive clear-cutting standards.
Responsible Entity: Board of Supervisors, Planning Commission

- ❖ Evaluate and possibly amend the riparian buffer regulations in the zoning ordinance to determine if an expansion of Zone 1 and 2 would provide greater protection to the township's stream corridors.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Remove Fraxinus tree species from the tree lists in the subdivision and land development ordinance, due to their vulnerability to the emerald ash borer.
Responsible Entity: Board of Supervisors, Planning Commission

Parks and Recreation, Farmland and Open Space

- ❖ Continue to carry out the planning and implementation of the greenway routes established in the 2009 East Rockhill Township Open Space Plan.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Provide park and recreational facility improvements or additions to East Rockhill's park system that were identified in the 2019 comprehensive plan update resident survey.
Responsible Entity: Board of Supervisors, Park and Recreation Board
- ❖ Monitor the progress of the Liberty Bell Trail, currently undergoing a feasibility study.
Responsible Entity: Board of Supervisors, Planning Commission, Park and Recreation Board
- ❖ Work with farmers to preserve priority farms through the Bucks County Agricultural Preservation Program or conservation easement purchase.
Responsible Entity: Board of Supervisors
- ❖ Continue to preserve open space using funds from the township's open space tax.
Responsible Entity: Board of Supervisors
- ❖ Consider an agritourism ordinance to encourage the economic vitality of farming operations.
Responsible Entity: Board of Supervisors
- ❖ Encourage farming operations to be flexible and generate revenue through additional means such as community-supported agriculture opportunities.
Responsible Entity: Board of Supervisors

Historic and Scenic Resources

- ❖ Develop design guidelines to ensure that the township can guide and limit the type of alterations that may be made to existing buildings in the villages.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Implement village signage in order to raise public awareness of the villages and preserve village character.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Establish scenic overlay provisions to encourage compatible land uses that complement the existing rural character and provide protection of scenic vistas from roadways, entrances to historic villages, and overall scenic character of the township.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Consider amending the township's demolition regulations to require a waiting period after the submission of a request for a demolition permit and allow time to research the significance of older properties and develop alternatives for preservation.
Responsible Entity: Board of Supervisors, Planning Commission

- ❖ Consider adopting a historic preservation overlay zoning ordinance which would allow for additional uses within historic buildings. A historic preservation overlay zoning ordinance would encourage the continued use of a historic resource and can provide an alternative to demolition.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Consider conducting a historic site survey in order to identify significant and undesignated resources and determine which resources could be viable nominations for the National Register of Historic Places.
Responsible Entity: Board of Supervisors, Planning Commission

Community Facilities

- ❖ Evaluate protective services and township facilities for adequacy on a periodic basis.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Continue with, and evaluate the potential for, additional shared services and facilities with adjacent municipalities.
Responsible Entity: Board of Supervisors, Planning Commission

Transportation and Circulation

- ❖ Develop a regional transportation improvement program and work with the Bucks County Planning Commission to assist in the identification of potential Regional TIP projects.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Use access management techniques to ensure that the function and capacity of the transportation network is maintained.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Work with PennDOT and the Pennridge Regional Police to develop a Traffic Calming Plan for the region.
Responsible Entity: Planning Commission
- ❖ Identify potential bicycle infrastructure improvements in the township, as proposed in the Bucks County Bicycle Master Plan.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Continue the development of the township trail network as shown in the 2009 East Rockhill Township Open Space Plan.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Continue to follow the Airport Area Protection Standards and promote balanced development around the Pennridge Airport to ensure that the quality of life is maintained for the surrounding neighborhoods, while creating a safe and modern airport facility.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Consider adopting an arterial corridor overlay ordinance to ensure that the functionality of the Route 313 / Route 663 corridor is maintained.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Consider reclassifying Three Mile Run Road (east of Rt. 313) and Old Bethlehem Road as local access roads instead of minor collector roads. Consider renaming the portion of Three Mile Run Road east of Route 313 “East Three Mile Run Road” to allow the reclassification of this portion of the road.
Responsible Entity: Board of Supervisors

Hazard Mitigation

- ❖ Continue to regularly monitor the mitigation activities and hazard events listed in the HMPU.
Responsible Entity: Board of Supervisors, Planning Commission, Township Manager
- ❖ Increase resident awareness of emergency actions in weather-related emergencies.
Responsible Entity: Board of Supervisors, Township Manager
- ❖ Review, on an annual basis, and update, as needed, the Township Floodplain Ordinance.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Participate in the update to the Bucks County HMPU.
Responsible Entity: Planning Commission

Water and Sewer

- ❖ Assist in implementing the recommendations of the Pennridge Water Resources Plan, including participation in the Intermunicipal Water Resources Committee.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Encourage green stormwater infrastructure, such as naturalized basins, use of rain barrels, and use of native landscaping.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Continue to follow the recommendations of the current Act 537 Plan and assess the feasibility and necessity of updating the current Act 537 Plan.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Develop a water quality and quantity baseline study for the township. Consider a formal, Geographic Information System-based watershed monitoring program for the Pennridge Area.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Maintain compliance with the NPDES II MS4s regulations and incorporate the MCMs into the township's stormwater management programs.
Responsible Entity: Board of Supervisors
- ❖ Continue participating in the PACC with the purpose of educating and information sharing.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Continue educating the public regarding stormwater, water, and sewage issues.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Consider adopting an ordinance regulating on-lot sewage systems and requiring a pumping schedule for on-lot sewage systems.
Responsible Entity: Board of Supervisors
- ❖ Assess the need for and continue to provide public water and sewer connection along the Old Bethlehem Pike corridor.
Responsible Entity: Board of Supervisors, Planning Commission

Future Land Use

- ❖ Continue participation in the Pennridge Area Coordinating Committee. Strongly consider future multi-municipal initiatives, including joint municipal planning, to address land use and transportation issues that have cross-municipal impacts.
Responsible Entity: Board of Supervisors
- ❖ Consider rezoning the RR Rural Residential District located inside the Development Area to the C-O Commercial Office District.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Consider rezoning the C-O Commercial-Office District, located along Route 313 in the northeast portion of the township, to the RP Resource Protection District.
Responsible Entity: Board of Supervisors, Planning Commission
- ❖ Ensure joint planning with surrounding municipalities and other regional entities continues to be a priority of the township's land use plan.
Responsible Entity: Board of Supervisors

Analysis of Development Area Housing Capacity

The Delaware Valley Regional Planning Commission (DVRPC) generates population forecasts from 2015 to 2045 for each county and municipality in the Delaware Valley region. Based on the projections from the DVRPC's 2015-2045 County and Municipal-Level Population Forecasts, East Rockhill's population in the year 2035 is estimated to be 6,450. The anticipated growth in housing units by the year 2035 is calculated from the DVRPC's population projection. The township is anticipated to have 2,263 housing units by 2035. To determine whether the Development Area has a suitable capacity to meet anticipated demand for housing, this method considers the development potential of individual parcels.

Methodology

The methodology used to determine future development capacity focuses on the capacity of individual parcels of land in the Development Area. This analysis includes all lands within the S Suburban, R-1 Residential, and RR Rural Residential zoning districts, as these are the only districts within the Development Area that are permissive of housing development.

Within each district, the analysis considers only parcels of land with a land use classification of vacant or rural residential land use. These are the parcels most likely to be developed in the future, as the lack of the intense development on them provides the least resistance to new development and makes them more susceptible to change. Most vacant properties have little or no development, while rural residential properties are those that are developed with only a single-family dwelling, leaving them potentially attractive for future subdivision.

For this analysis, each district is examined to determine its development capacity according to the maximum number of housing units permitted by the existing zoning ordinance of the township. The following zoning ordinance criteria were applied to each parcel for this analysis:

- In the R-1 Residential and S Suburban districts, Use B1 Detached Dwelling is permitted by right on a minimum lot area of 22,000 square feet with a maximum permitted density of 1.98 units per acre.
- In the RR Rural Residential District, Use B1 Detached Dwelling is permitted by right on a minimum lot area of 1.8 acres.
- In the R-1 Residential District, Use B2 Cluster Subdivision is permitted by right on a minimum site area of 5 acres with a maximum density of 2.5 units per acre. The required minimum open space is 40 percent.
- In the S Suburban District, Use B2 Cluster Subdivision is permitted by right on a minimum site area of 5 acres with a maximum density of 2 units per acre. The required minimum open space is 25 percent.

- In the RR Rural Residential District, Use B2 Cluster Subdivision is permitted by right on a minimum site area of 10 acres with a maximum density of 1 unit per acre.
- In the R-1 Residential District, Use B3 Performance Standard Development is permitted as a conditional use on a minimum site area of 5 acres with a maximum density of 3 units per acre. The required minimum open space is 35 percent.
- In the S Suburban District, Use B3 Performance Standard Development is permitted as a conditional use on a minimum site area of 10 acres with a maximum density of 3 units per acre. The required minimum open space is 35 percent.
- In the R-1 Residential District, Use B4 Mobile Home Park is permitted by special exception on a maximum site area of 15 acres with a maximum density of 5 units per acre. The required minimum open space is 30 percent.

Where a parcel in any district is not large enough to be developed with a more intense use, its capacity was the maximum number of single-family dwellings that would be permitted. Where a parcel is large enough for more intense development, the permitted capacity of the parcel is taken from the more intense use.

There are a number of assumptions and considerations that go into this analysis. They are as follows:

- Only lands within the S Suburban, R-1 Residential and RR Rural Residential districts that are designated as either vacant or rural residential are considered. Other parcels of land in other districts which may have development potential are not included.
- Parcels of land that have any other use category are considered to already be developed and are not developable lands.
- All environmental constraints such as lands within a floodplain, wetlands, or woodlands, are removed from the available land for each parcel. Each parcel is analyzed only on the land available for development that is free of environmental constraints.
- Only parcels with more than 50 percent of land free from environmental constraints were considered as developable.
- No parcels that are currently restricted from development by way of a conservation easement are considered as available for development, and are excluded from this analysis.
- Parcels that are listed under Act 319 are considered developable land and are included in this analysis.
- All vacant parcels that are too small in size to meet the minimum lot size requirements of their zoning district are excluded from the analysis.
- All parcels that are only large enough for one single-family dwelling to be permitted are excluded.
- Zoning requirements such as maximum impervious surface coverage, building height limits, building setbacks, and buffer yards, that may impact development on each site, are not taken into consideration.
- Other site specific constraints that may impact development potential such as access considerations, soil conditions, and sewer system capacity are not taken into consideration.

- All fractions of housing units permitted within the calculation were rounded down to the nearest whole number for each parcel. No fractions of housing were included in the capacity calculations.

The following table summarizes the analysis of each of the identified parcels in each district for the district’s maximum development capacity based on the criteria and assumptions listed above. The table is a listing of the total number of units of each housing type that would be permitted within each district based on an analysis of each parcel, with developable land on each parcel taken into consideration based on the above mentioned criteria. Where more intense development is not permitted, single-family units are assumed on those parcels.

TABLE 32. DEVELOPMENT CAPACITY

	# of Parcels	Total District Acres	Acres of Developable Land	Total Units	Net Density (Units/Acre)*
R-1 Residential					
Vacant/Undeveloped	2	4.74	0	0	N/A
Rural Residential	2	19.837	10.227	51.14	5
Total	4	24.577	10.227	51.14	5
RR Rural Residential					
Vacant/Undeveloped	0	0	0	0	N/A
Rural Residential	1	6.67	0	0	N/A
Total	1	6.67	0	0	N/A
S Suburban					
Vacant/Undeveloped	19	108.106	87.867	263.60	3
Rural Residential	6	32.328	23.555	70.67	3
Total	25	140.434	111.422	334.27	3
Totals	30	171.681	121.649	385.40	3.17

**Net density reflects the overall density of the highest permitted use for all parcels in each district and land use category.*

In total, there are approximately 121.65 acres of developable land within these three districts in the Development Area, and under current zoning they could be developed at an overall density of approximately 3.17 housing units per acre. This includes taking woodlands, wetlands, floodplain, conservation easements, and open space requirements into consideration. The potential capacity figure of 394 units, or 385 additional units when existing units on Rural Residential properties are taken into account, represents a realistic development scenario.

As the table above indicates, there is a development capacity of 394 housing units on these properties which are considered developable land. When the existing nine units (number of parcels included in the calculation which already have a single-family dwelling) is taken into account, this represents a capacity of 385 new housing units potentially within the S Suburban, R-1 Residential, and RR Rural Residential districts in the development Area.

One of the considerations for this analysis was that parcels less than 10 acres were not taken into consideration. However, if parcels under 10 acres are included in the analysis, under the assumption that only single-family detached dwellings could be constructed, the development capacity increases a considerable amount. Assuming that the same assumptions and considerations are applied to the parcels under 10 acres, and environmental constraints are applied to the calculations, there are approximately

59 acres of additional developable land in the Development Area. The minimum lot size for detached dwellings in the Development Area is 22,000 square feet. Therefore, an additional 105 housing units can be constructed in the Development Area.

When considering all vacant and rural residential parcels within the development area, regardless of acreage, there is a development capacity of 503 dwelling units. The development capacity calculation consists of 13 existing units (number of parcels included in the calculation which already have a single-family dwelling) and 490 new units. The basic calculation is as follows:

- Maximum new development capacity = 503 housing units
- Projected need for new housing units = (2035 housing projection) – (existing number of dwellings)
 - $2,263 - 2,016 = 247$ units
- Excess capacity of Development Area = (potential new units) – (projected need for new units)
 - $= (490 \text{ units}) - (247 \text{ units}) = 243$ unit surplus.

Using this method, the analysis shows a sufficient capacity to meet future needs and does meet the required need by 2035. When the projected need of 247 units is subtracted from the additional capacity of 490 units as noted above, there is a surplus of 243 housing units.

In order to further assess the residential development capacity in East Rockhill, the extent of the analysis was broadened to all rural residential and vacant parcels in the township. The total acreage of rural residential and vacant parcels throughout the township, including outside the Development Area, was totaled and the environmental constraints of each parcel were calculated. The total acreage of developable land among rural residential and vacant parcels is 1,674 acres.

Again, this is not to be considered a suggestion that all of these parcels would be developed to their full capacity at any point in the future. This is merely an analysis of the capacity for development within the legal bounds of the zoning ordinance for all lands within the Development Area that are most likely to be suitable for development. The purpose of this analysis is not necessarily to portray the most realistic development scenario, but only to conceptualize the amount of residential development that would be permitted within the township. The actual amount of development which will take place by the year 2035 could be considerably lower than the estimates shown through this analysis. This analysis is conducted in order to demonstrate that the capacity is available within the designated Development Area of the township to accommodate this future growth.

As this analysis shows, there is sufficient capacity for new housing within the Development Area and in areas outside the Development Area. Whether any of this potential new housing is constructed and when is largely up to the economics of the regional housing market, and the availability of infrastructure. In particular, the provision of public water and sewer service to the currently unserved parcels in the Development Area will determine whether any of these parcels experience development of any significant density in the future. The densities noted, 3.17 units per acre overall, and 5 units per acre in the R-1 Residential district cannot be achieved without these lands being served by a public sewer system. Only low density development, can be supported by on-lot sewage disposal systems.

Multifamily Fair Share Analysis

The purpose of this analysis is to determine if there is adequate land zoned for multifamily housing in East Rockhill, based upon two separate tests: multifamily housing units' needs based upon the regional average and the Four Percent Rule, as described below.

Methodology

The methodology used to determine the findings of the fair share analysis focuses on the capacity of the vacant and rural residential parcels in the Development Area of the township. Specifically, data was gathered for vacant and rural residential parcels in zoning districts where use B3 Performance Standard Development is permitted. Use B3 is permitted in the S Suburban, R-1 Residential and VR Village Residential districts. The VR Village Residential District is not within the Development Area and was not included in the analysis.

Within the R-1 Residential and S Suburban districts, the parcels that were included in the analysis are identified on the current land use map shown in Chapter 4: Land Use Characteristics and Development Trends. Only vacant and rural residential parcels of 10 acres or greater were considered in the analysis. The vacant and rural residential parcels are the parcels potentially most likely to be developed in the future, as the lack of intense development on them currently provides the least resistance to new development, and makes them more susceptible to change.

District Capacities

The use regulations of the Use B3 Performance Standard Development require a minimum density of three units to an acre for multifamily dwellings. In order to calculate the potential number of multifamily units in the R-1 Residential and S Suburban districts, the density of Use B3 was multiplied by the number of developable acres in the districts. After calculating required open space and removing any environmental constraints such as lands within a floodplain, wetlands, or woodlands, the developable lands in between the two districts is 121.649 acres. This number is multiplied by three, or the maximum permitted density of multifamily dwellings, to get the unit capacity, or 365 potential multifamily units.

R-1 Residential District

- Vacant land use = 0 acres
- Rural residential land use = 10.227 acres
- Total acreage inventoried = 10.227 acres

S Suburban District

- Vacant land use = 87.867 acres¹
- Rural residential land use = 23.5558 acres
- Total acreage inventoried = 111.422 acres

Total acreage between the two districts = 121.649 acres

Total capacity = 365 units

Multifamily Housing Unit Needs based on Regional Average

Housing forecasts show that by the year 2035 there will be 2,263 housing units in the township, a gain of about 247 housing units. Based on the regional average of multifamily housing units, by the year 2035, the township will need to provide enough zoned land for the construction of 33 additional multifamily units.

The regional average was calculated based on the multifamily units in the surrounding townships including Hilltown, West Rockhill, Richland, Haycock, and Bedminster townships (see Table 33). East Rockhill and the surrounding municipalities are generally similar in population, land use patterns, and share many of the same regional planning issues. The multifamily housing data was assessed from the surrounding townships, rather than the entire county or regional boroughs, in order to achieve a more accurate and better understanding of the need for multifamily housing in East Rockhill. As shown in the table below, East Rockhill’s share of multifamily housing is 13.8 percent. This is within 20 percent of each surrounding township’s share of multifamily housing.

TABLE 33. UNITS IN STRUCTURE AND MULTIFAMILY DWELLINGS, EAST ROCKHILL AND SURROUNDING TOWNSHIPS, 2013-2017

Units in Structure	East Rockhill	Bedminster	Haycock	Hilltown	Richland	West Rockhill
1, detached	1,716	2,210	828	4,026	2,856	1,379
1, attached	233	389	24	1,199	1,342	297
2 (twins)	10	50	42	167	173	97
3 or 4	35	84	0	69	30	13
5 to 9	12	76	0	88	29	42
10 to 19	0	0	0	111	71	0
20 to 49	0	0	0	0	0	0
50 or more	0	22	0	42	19	457
Mobile	10	33	15	113	683	97
Boat, RV, van, etc.	0	0	0	0	60	0
Total units	2,016	2,864	909	5,815	5,263	2,382
Total multifamily units*	280	571	24	1509	1491	809
Total multifamily units* (%)	13.8%	19.9%	2.6%	25.9%	28.3%	33.9%

* Multifamily unit totals do not include twins

Source: American Community Survey 5-year estimates, 2013-2017

¹ The McClennen Tract, or TMP #12-8-22, totals 59.19 acres and is included in this calculation. Proposals have been reviewed for dwelling units on this site but a building permit has not been issued.

Based on the 2013-2017 U.S Census American Community Survey 5-year estimates the overall percentage of multifamily units for the region, is 24.3.² Using the 2035 total housing unit projection of 2,263 units³ as the potential number of housing units that would be constructed in the township, the following calculations summarize the potential number of multifamily units if East Rockhill would match the region’s average of multifamily units.

2035 housing units	2,263
Multiply by the regional avg. of MF units (24.3%)	<u>x 0.243</u>
	550
Subtract MF units constructed (2013-2017 ACS estimates)	<u>- 280</u>
	270
MF units needed for 2035	270
Subtract potential number of MF unit capacity of the R-1 Residential and S Suburban districts	<u>- 365</u>
	-95
Number of MF units above county average	95

The potential unit capacity within the R-1 Residential and S Suburban districts is 365 multifamily dwelling units. This is 95 units above the regional average. Therefore, the township has zoned for the potential number of multifamily units through the year 2035 and does pass the regional average assessment.

Four Percent Rule

A second test for determining if a municipality is providing its fair share of multifamily housing units is based upon relevant case law that requires at least four percent of the land area of a municipality be zoned for multifamily use. The Court of Common Pleas has specifically held that land used for farming is to be considered developed when conducting an analysis related to the Surrick Case and other cases that served to supplement the Surrick case.⁴

Approximately 862 acres of land in East Rockhill Township is used for agriculture. Subtracted from the overall land area of the township (8,261 acres), the resulting amount of land is 7,399. Multiplied by 0.04, or 4 percent, the resulting amount of land area needed in the Development Area for multifamily use would be 296 acres.

As of 2019, Use B3 Performance Standard Development is the only use in the zoning ordinance that permits multifamily housing. The use is permitted by right in the VR Village Residential District and permitted as a conditional use in the S Suburban and R-1 Resident districts. The VR district is not within the Development Area and will not be included in this analysis.

² MF units include attached unit structures (e.g., townhouses) or 3 or more unit structures (e.g., apartment buildings), but excludes 2-unit structures (e.g., twins).

³ Projections are based on the DVRPC Population Forecasts

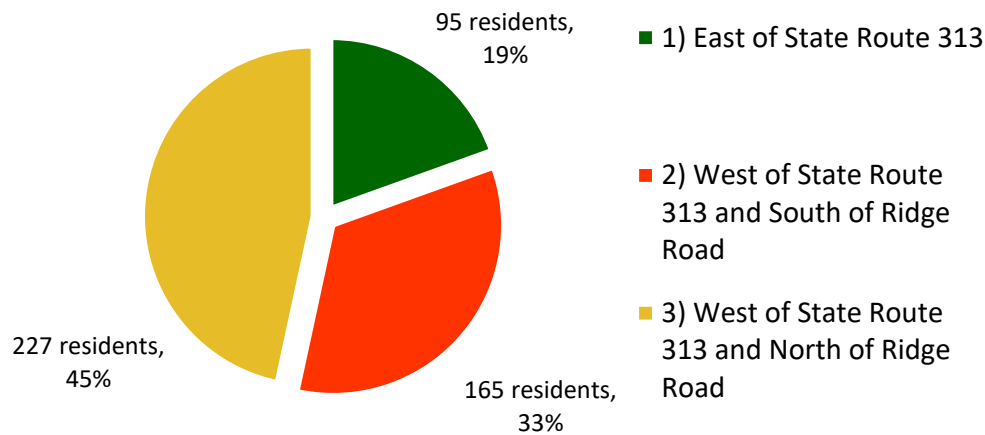
⁴ See Appeal of Heritage Building Group, Inc. from the decision of the Zoning Hearing Board 72 Bucks Co. L. Rep. 185 (2000), and Appeal of Heritage Building Group, Inc. from the Decision of the Bedminster Township Board of Supervisors 72 Bucks Co. L. Rep. 188 (1999).

Based upon the analysis of tax map parcel data, the overall land area of the R-1 Residential and S Suburban zoning districts within the Development Area is 1000.4 acres. The overall land area exceeds the required amount of land needed in the Development Area for multifamily dwellings. Therefore, the land area zoned for multifamily use in East Rockhill Township passes the Four Percent Rule.

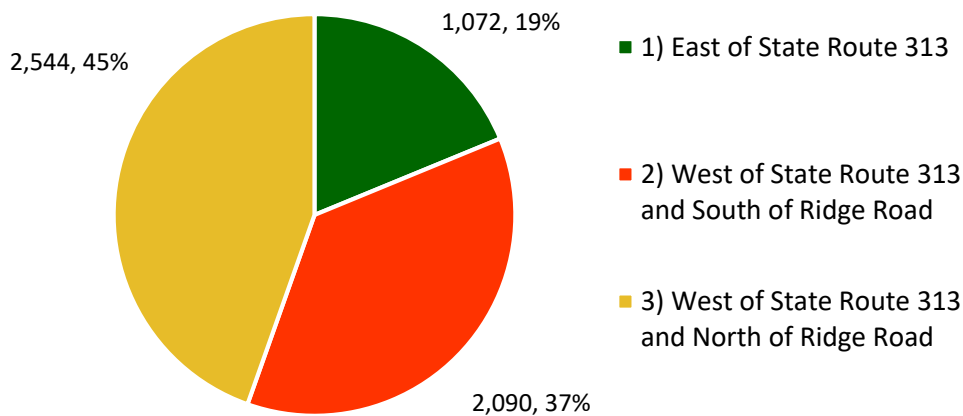
Resident Survey Results

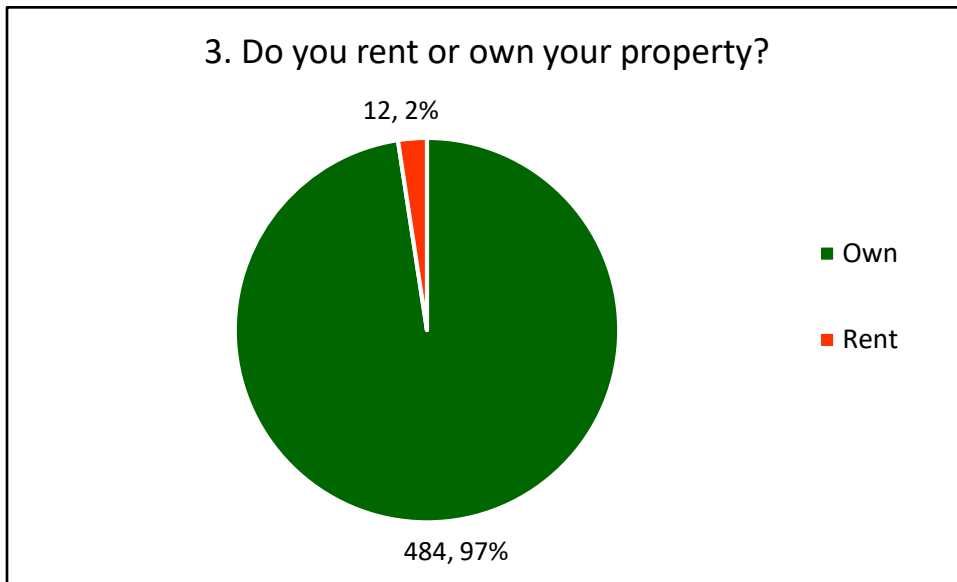
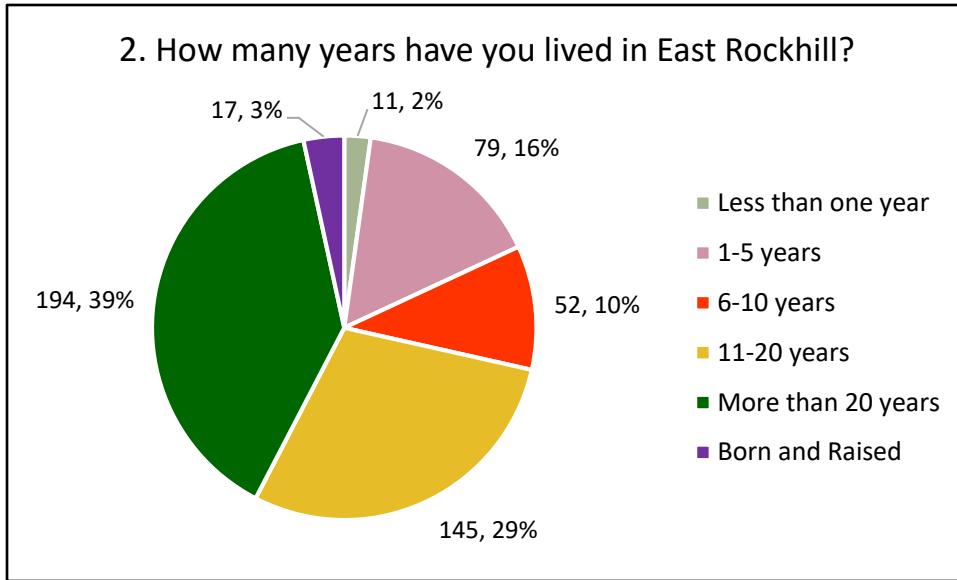
Charts and Analysis

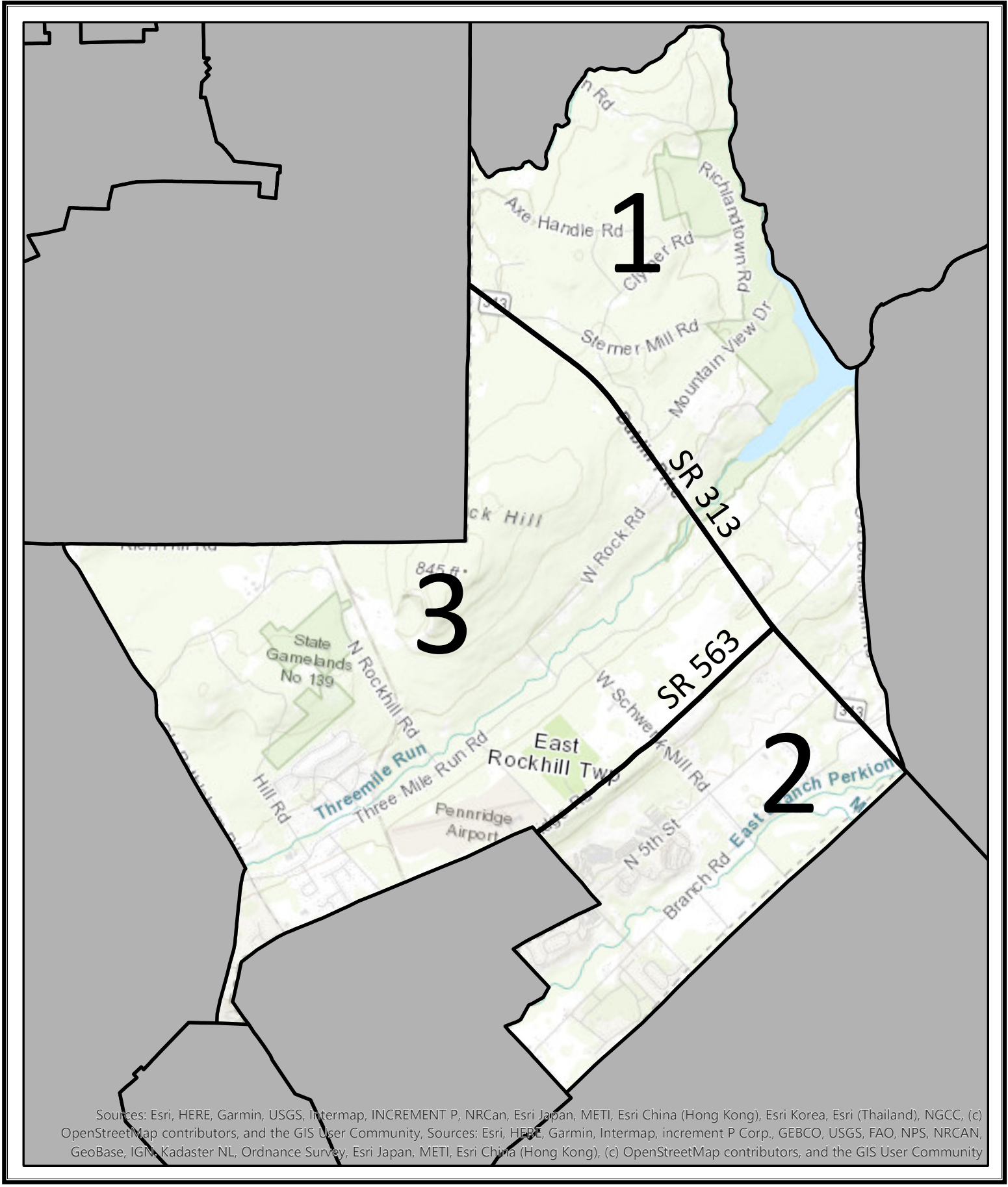
1. Please indicate in which portion of the township you reside:



1A. Resident population per portion (2010 Census)





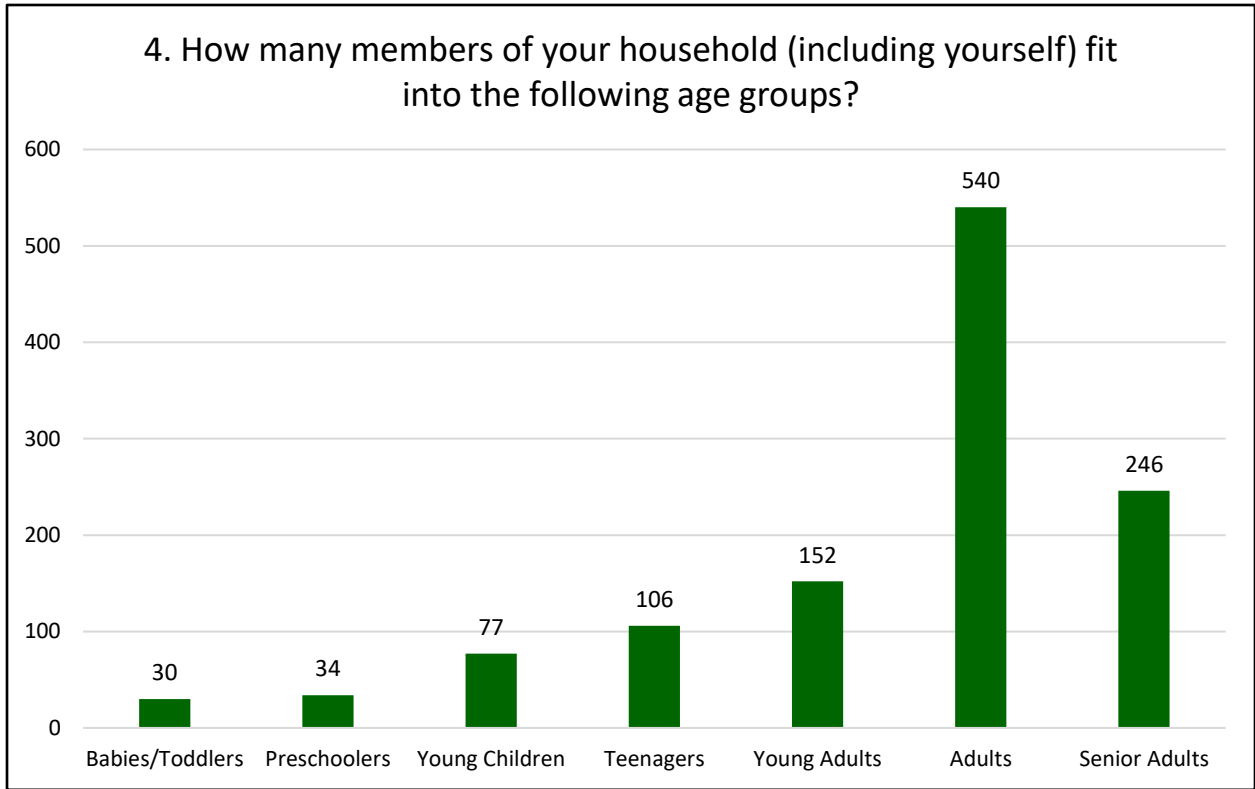


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

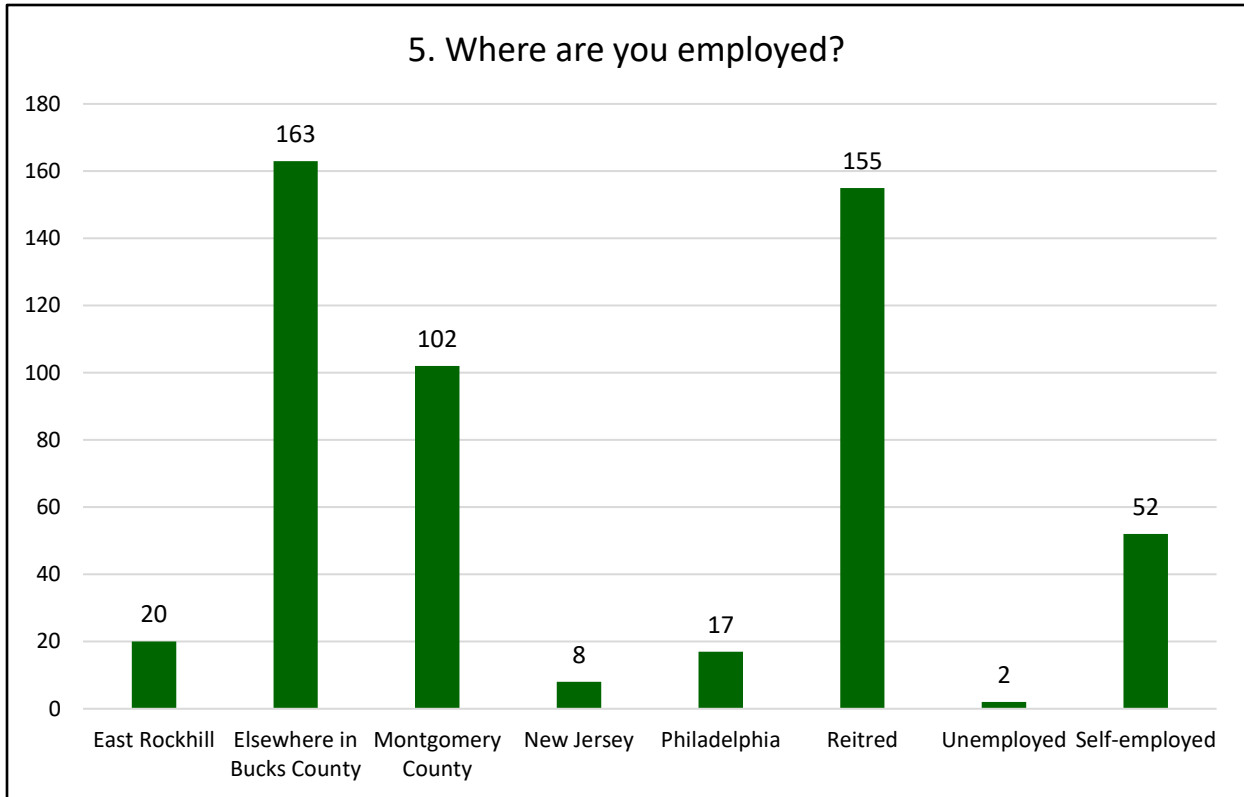
BCPC
Bucks County Planning Commission

Section 1 Area — 3.85 square miles
 Section 2 Area — 2.48 square miles
 Section 3 Area — 6.58 square miles

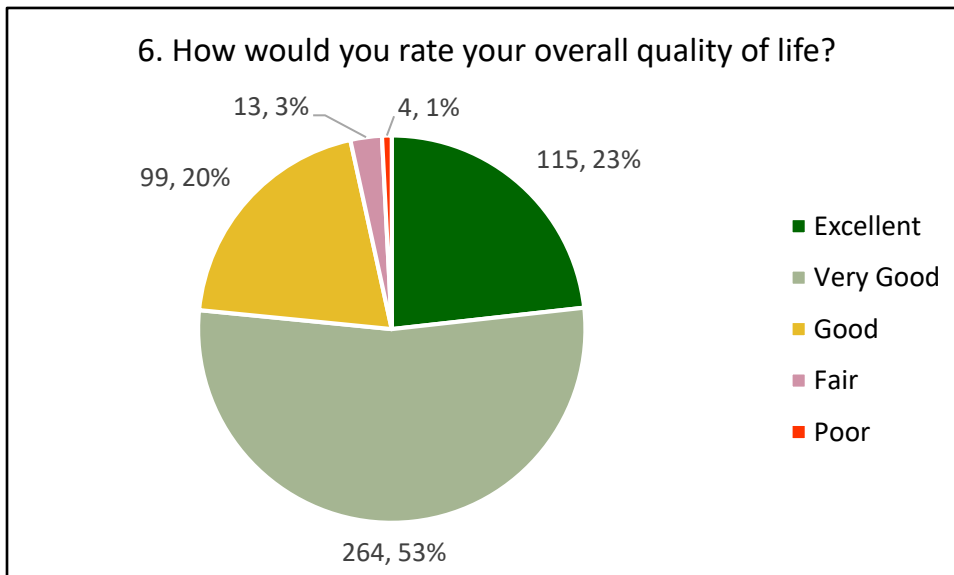
Map 12 - Resident Survey Question 1
East Rockhill Township
 2020



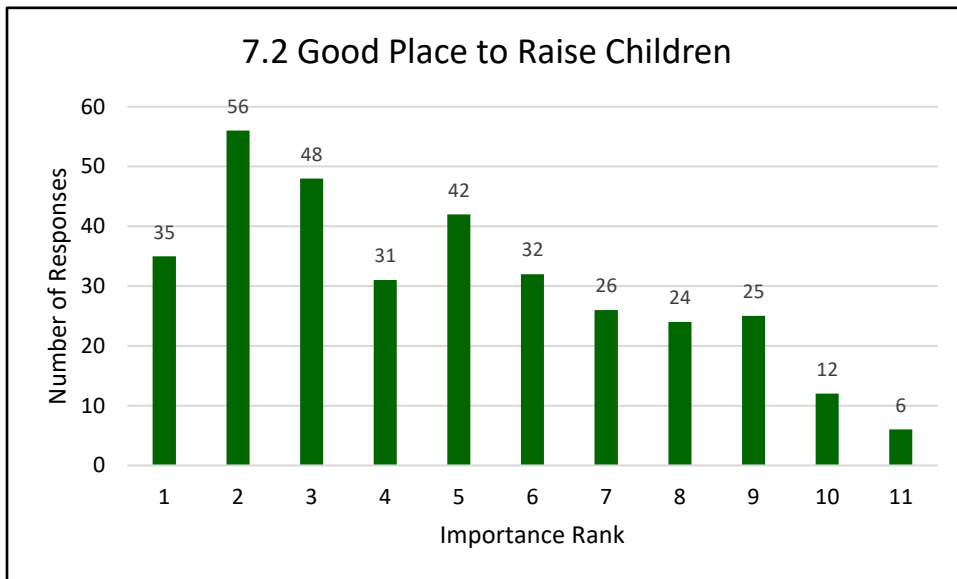
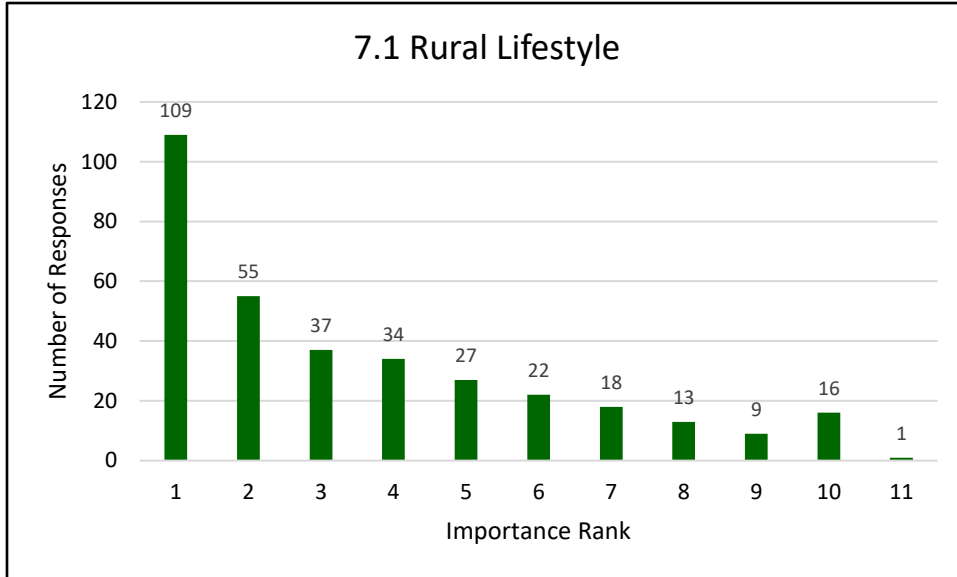
Babies/Toddlers (0-2) - 2%	Young adults (20-35) - 13%
Preschoolers (3-5) - 3%	Adults (36-64) - 45%
Young Children (6-12) - 6%	Senior adults (over 65) - 20%
Teenagers (13-19) - 9%	

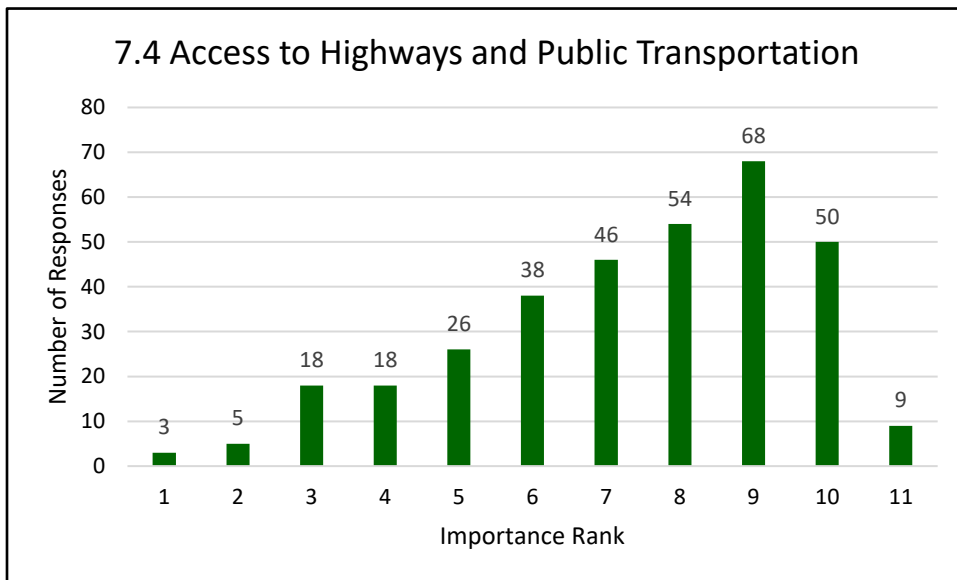
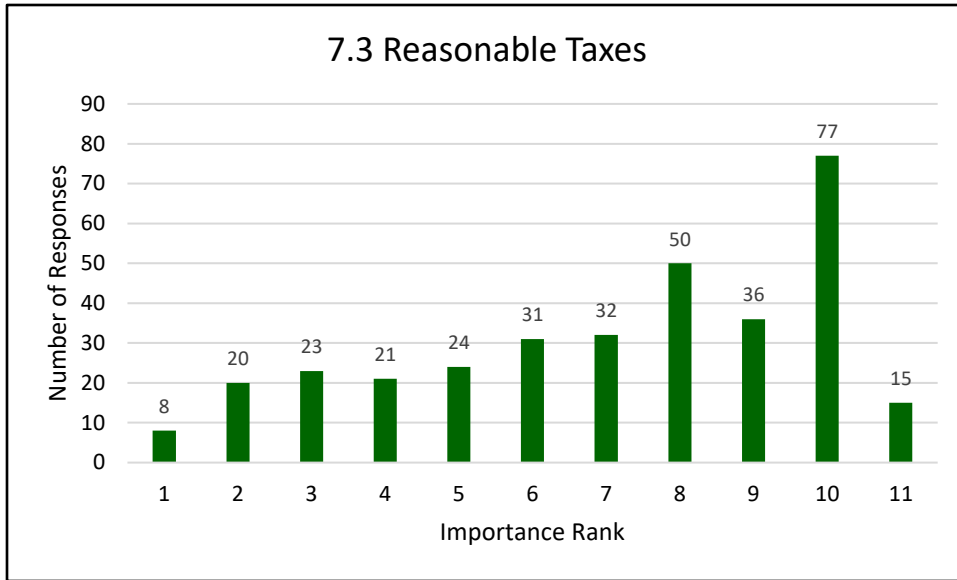


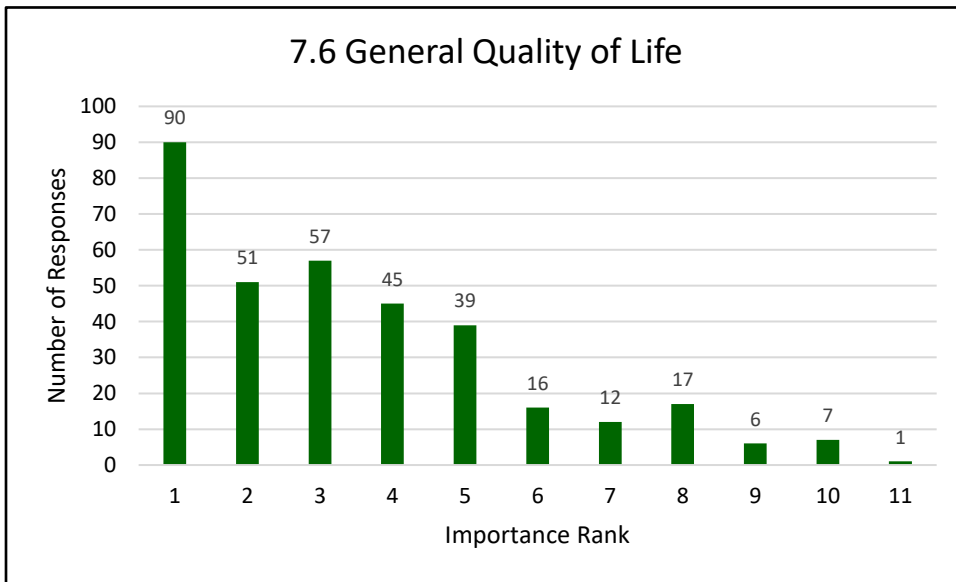
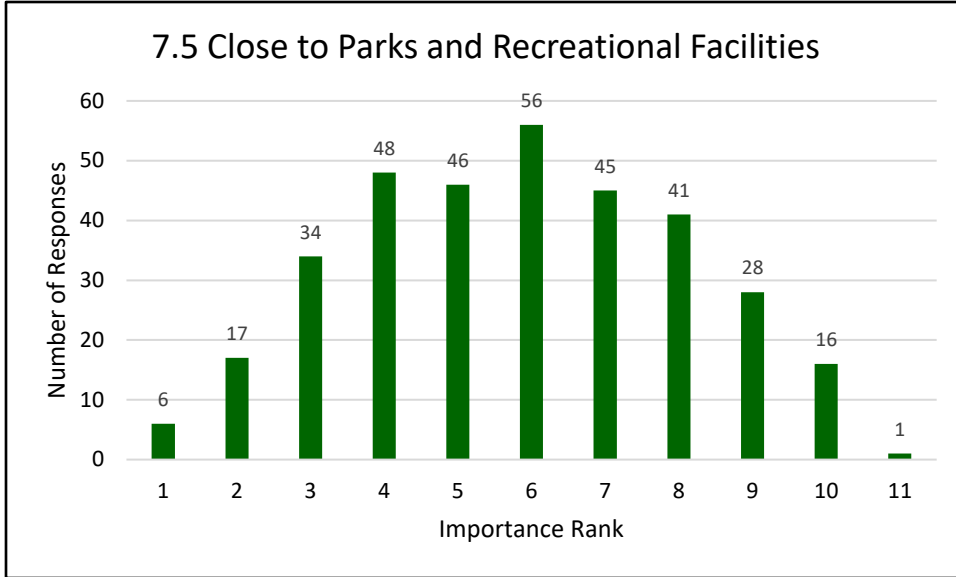
East Rockhill - 4%	Philadelphia - 3%
Elsewhere in Bucks County - 31%	Retired - 29%
Montgomery County - 19%	Unemployed - 0%
New Jersey - 2%	Self-employed - 10%

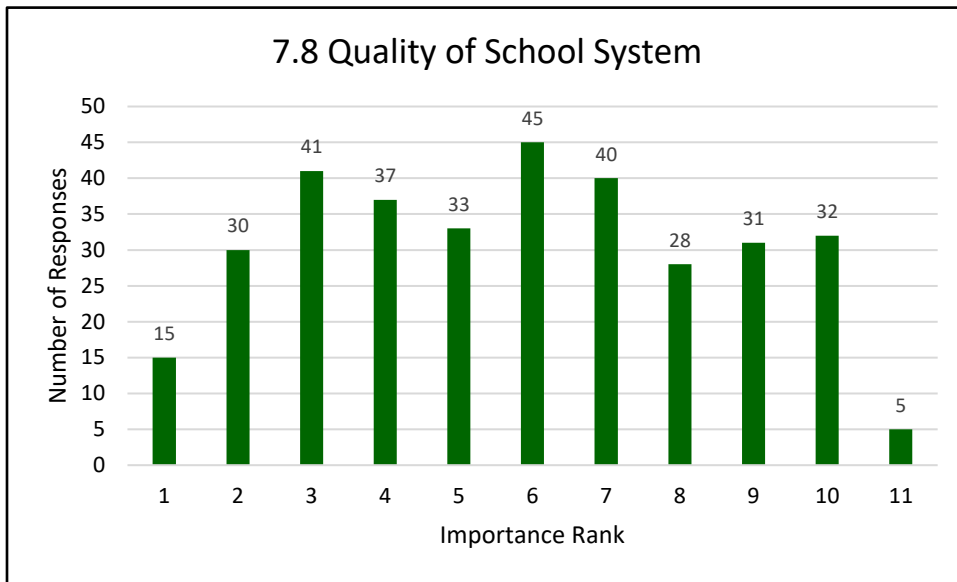
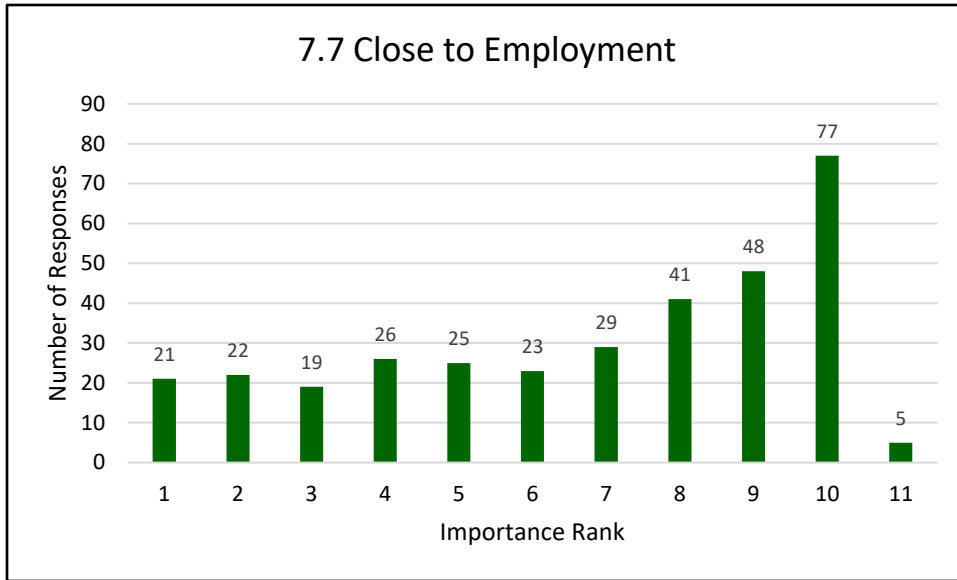


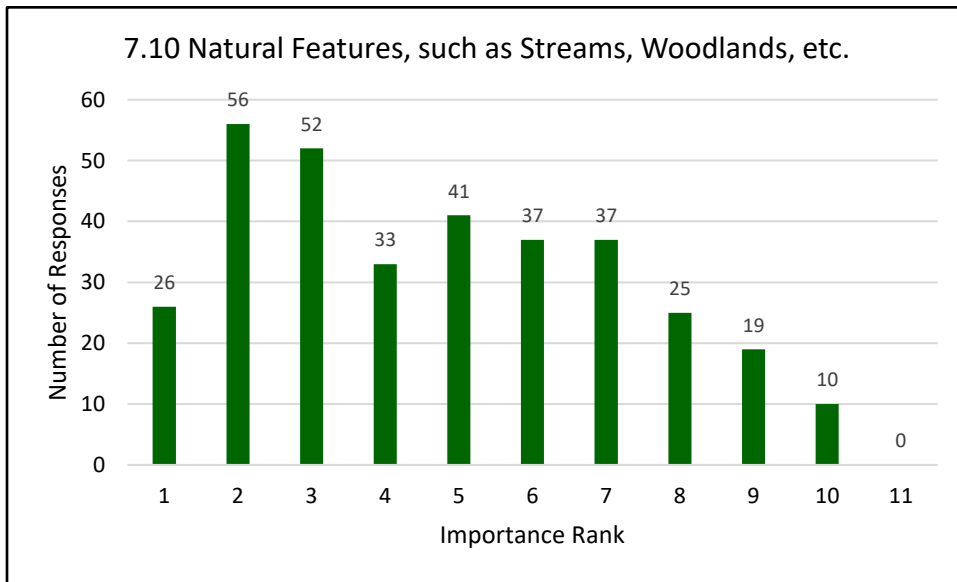
Question 7. Please rank from 1 to 11, what are the main reasons you reside in East Rockhill Township? (Prioritize the following from 1 to 11, with 1 being the most important).

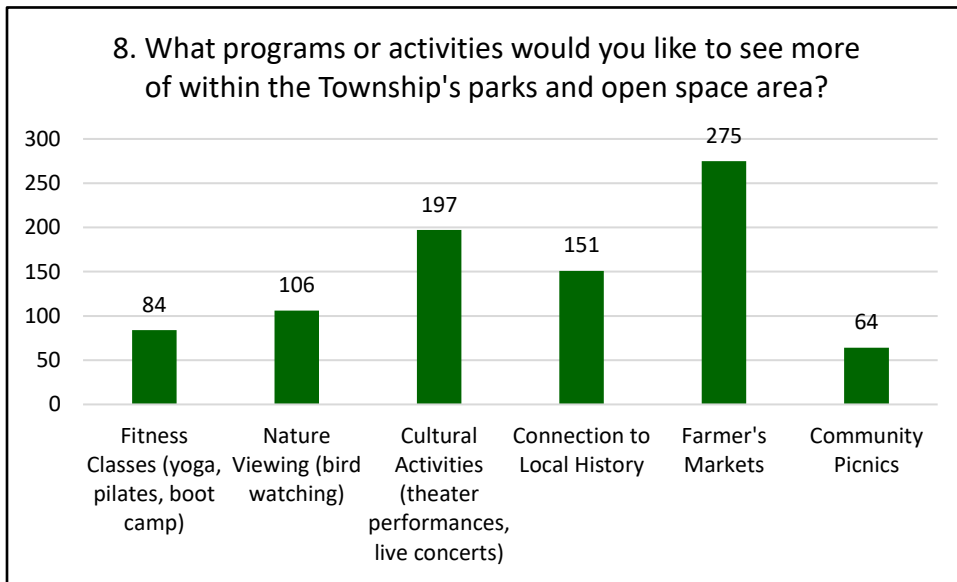
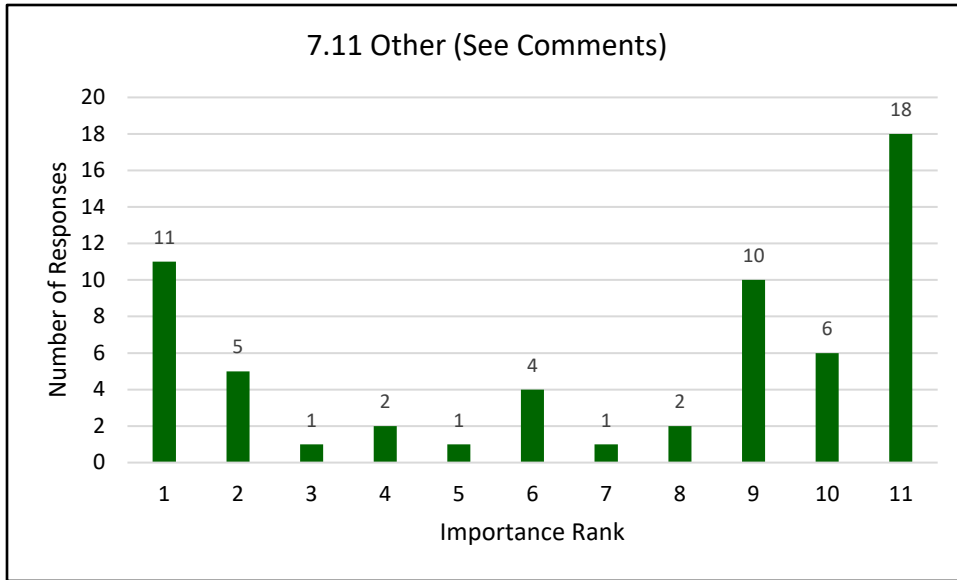




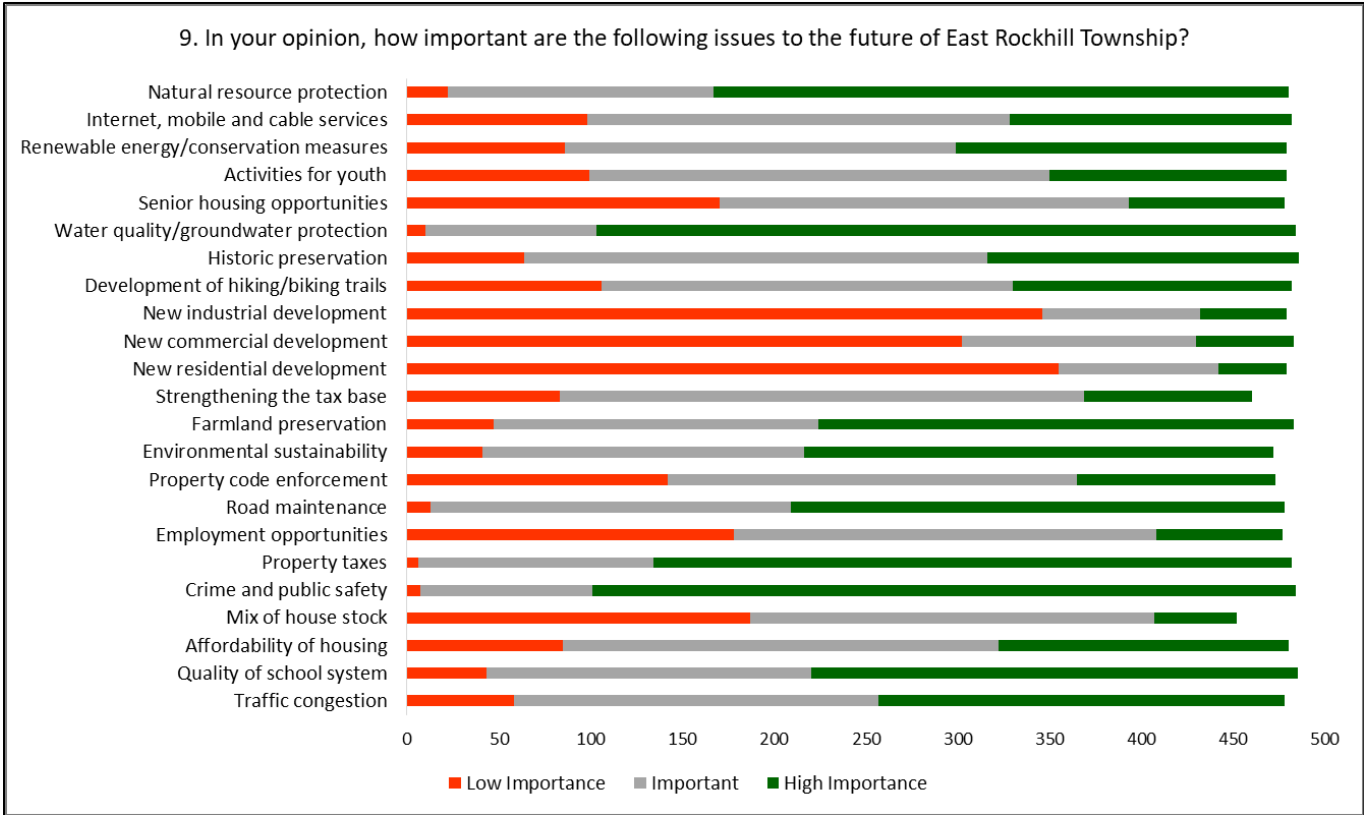






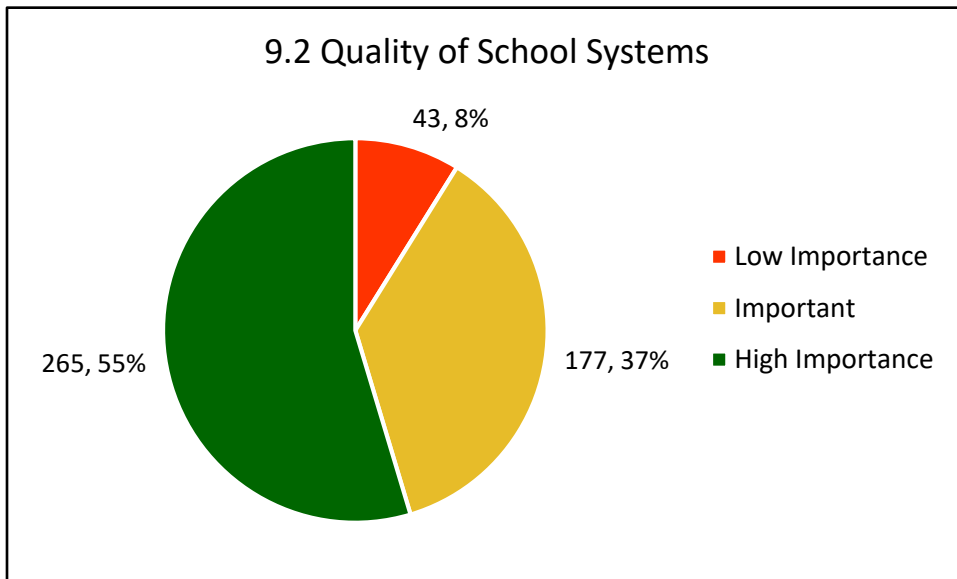
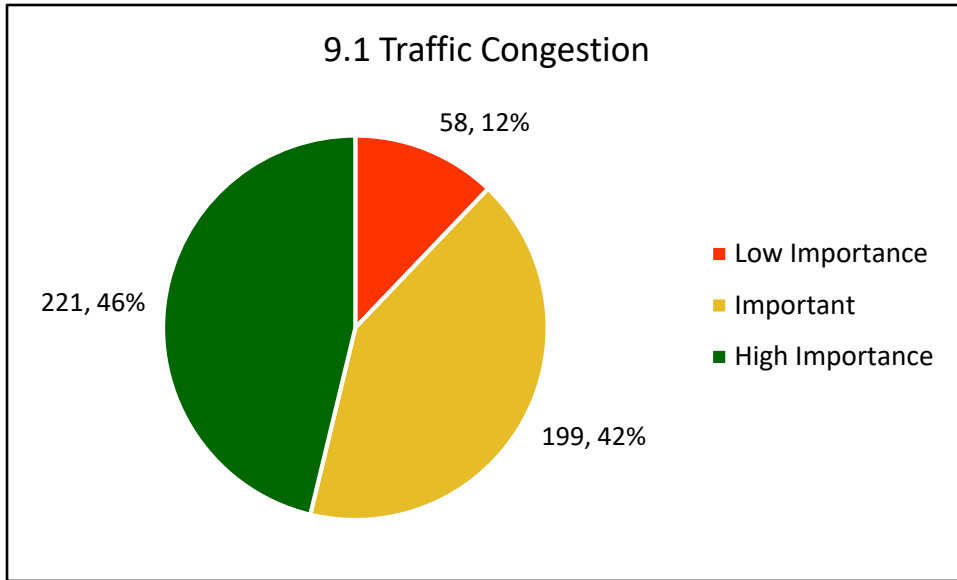


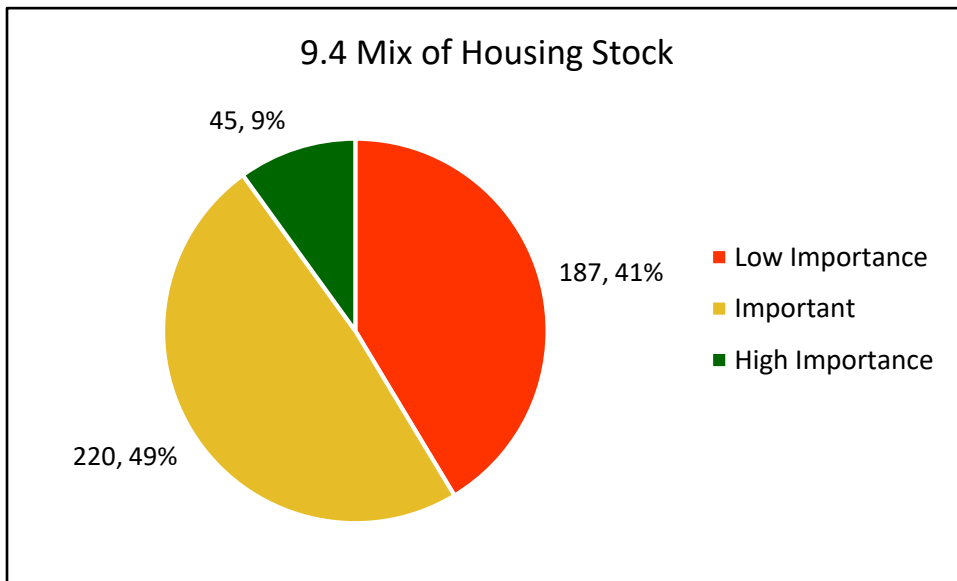
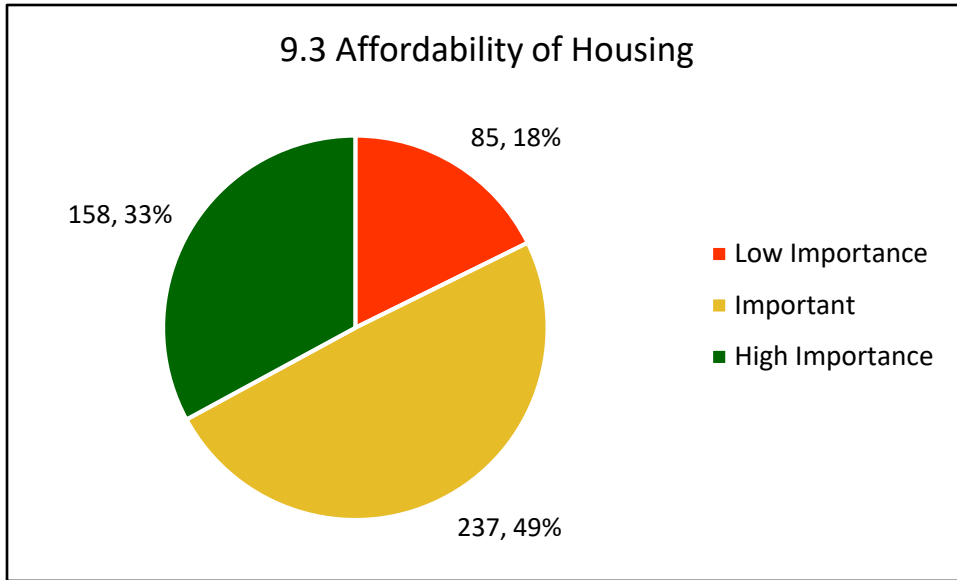
Fitness Classes (yoga, pilates, boot camp) - 9%	Connection to Local History - 16%
Nature Viewing (bird watching) - 11%	Farmers Markets - 29%
Cultural Activities (theater performances, live concerts) - 21%	Community Picnics - 7%

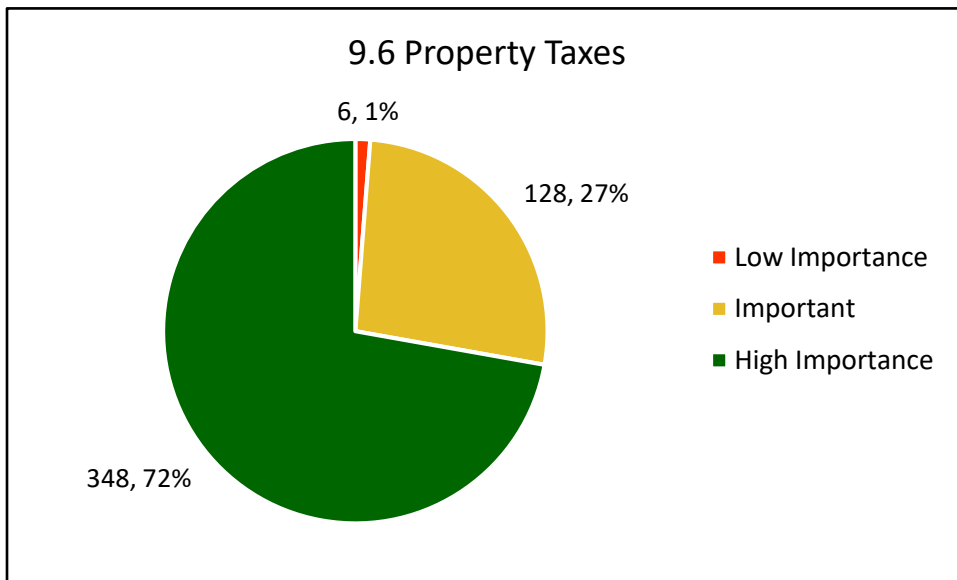
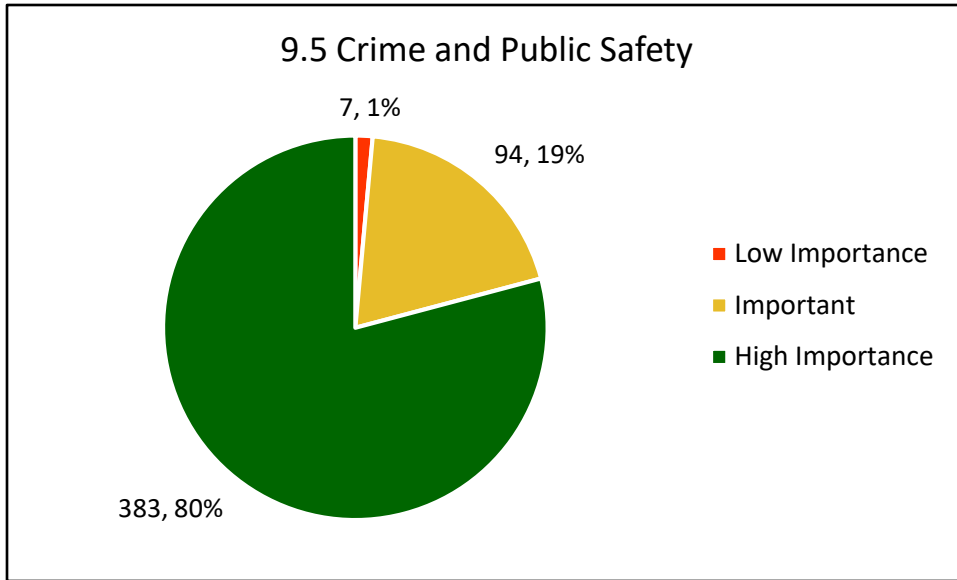


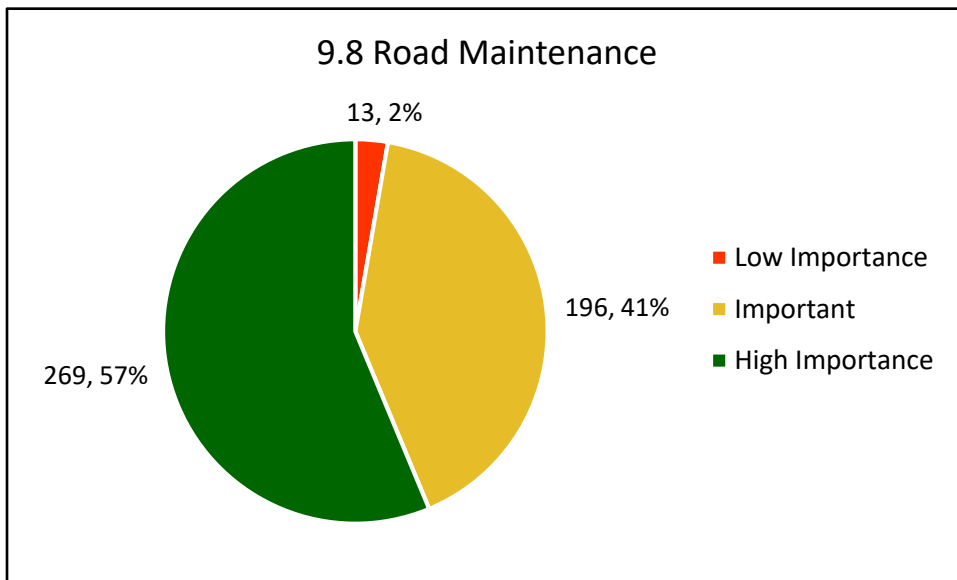
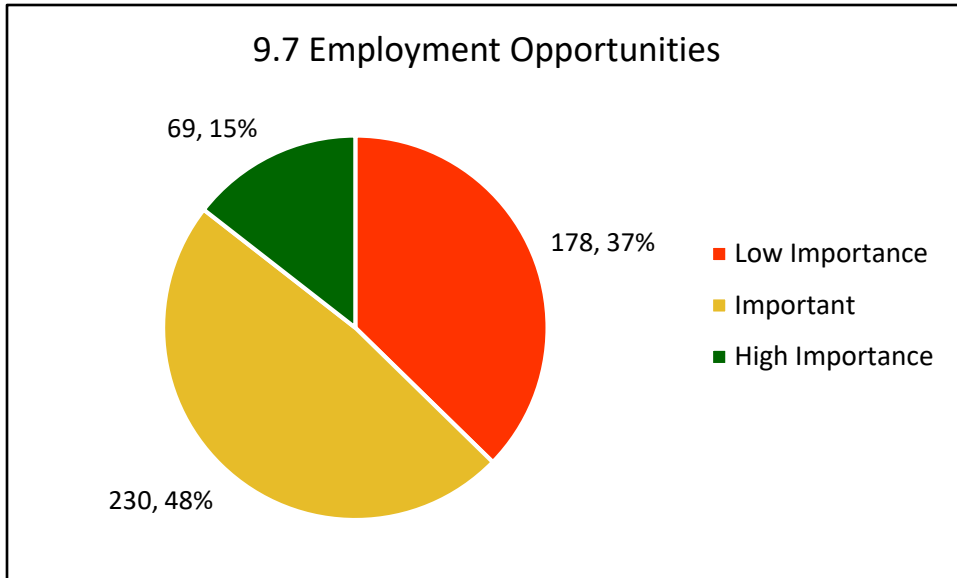
Question 9. In your opinion, how important are the following issues to the future of East Rockhill Township? (Listed in order from most important to least important; percents are based on respondents identifying the characteristic of high importance.)

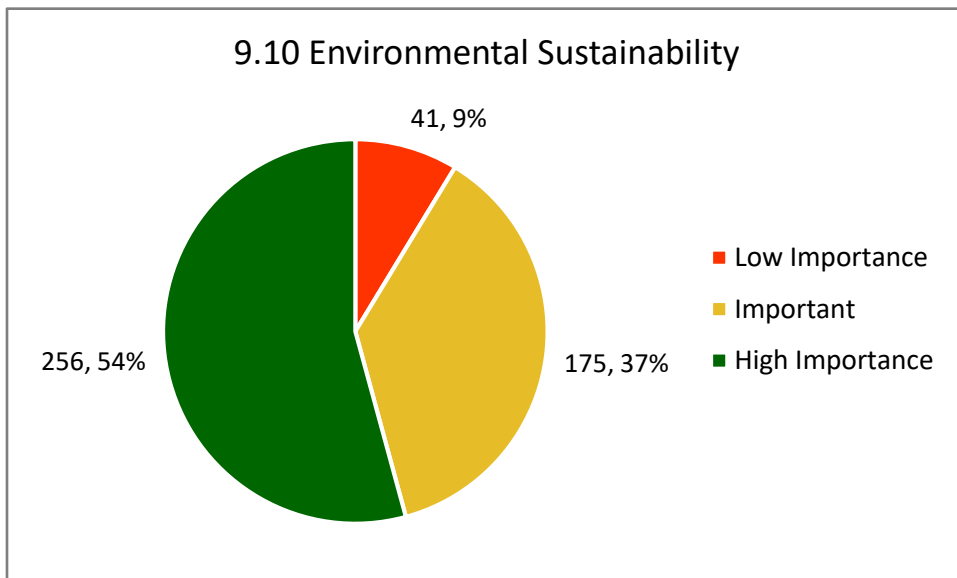
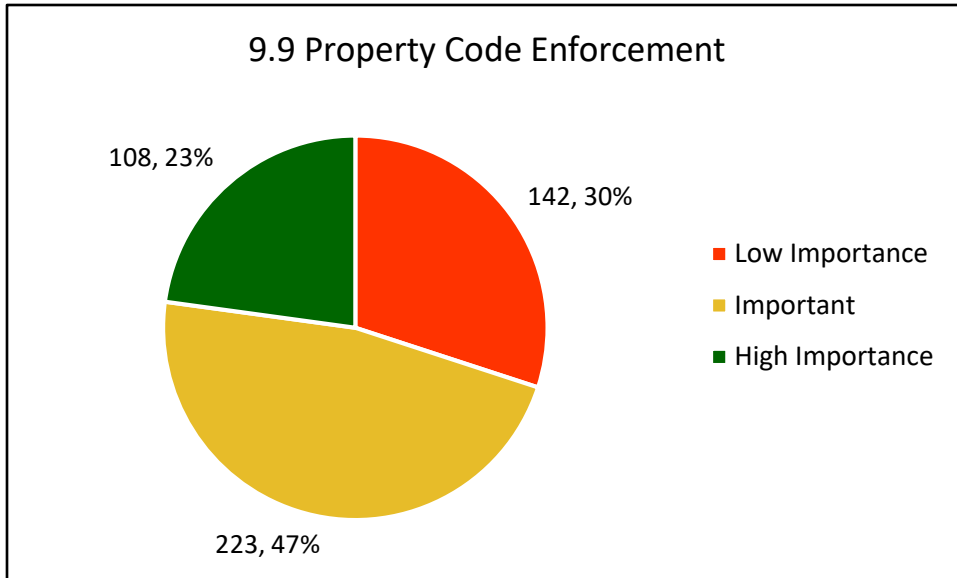
1. Crime and public safety	80%	13. Internet, mobile, and cable services	32%
2. Water quality and groundwater protection	79%	14. Development of biking and hiking trails	31%
3. Property taxes	72%	15. Activities for youth	27%
4. Natural resource protection	65%	16. Property code enforcement	23%
5. Road maintenance	57%	17. Strengthening the tax base	20%
6. Quality of school system	55%	18. Senior housing opportunities	18%
7. Environmental sustainability	54%	19. Employment opportunities	15%
8. Farmland preservation	54%	20. New commercial development	11%
9. Traffic congestion	46%	21. New industrial development	10%
10. Renewable energy/conservation measures	38%	22. Mix of housing stock	9%
11. Historic Preservation	35%	23. New residential development	8%
12. Affordability of housing	33%		

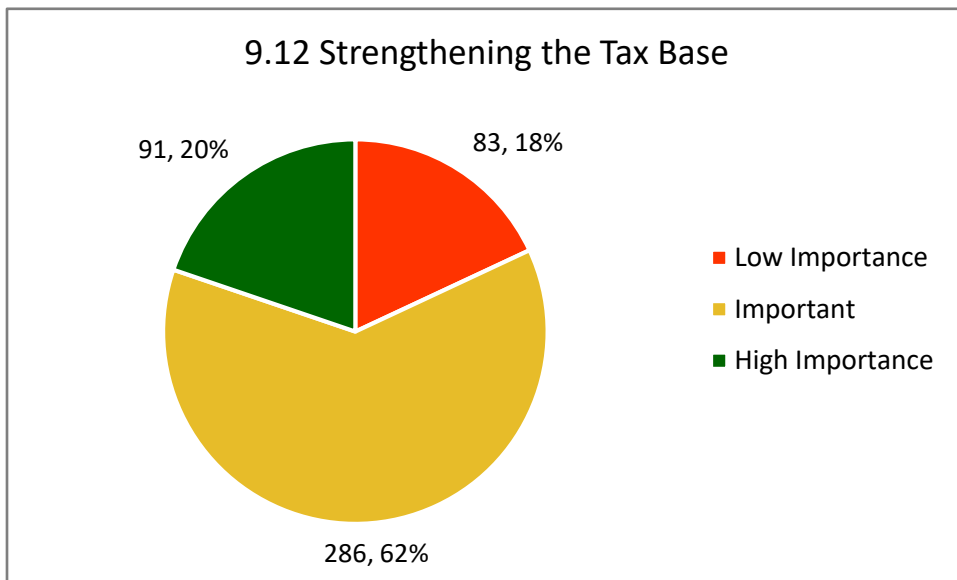
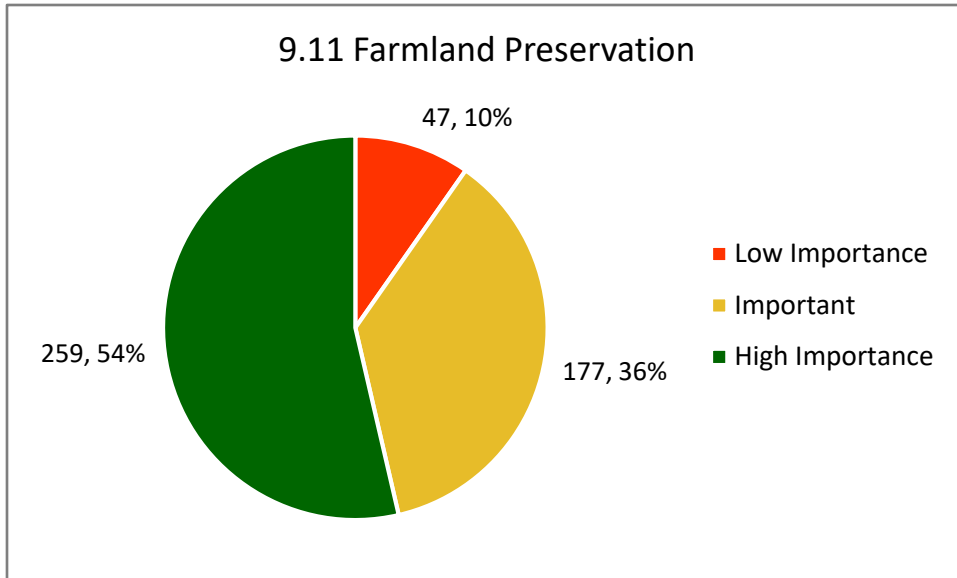


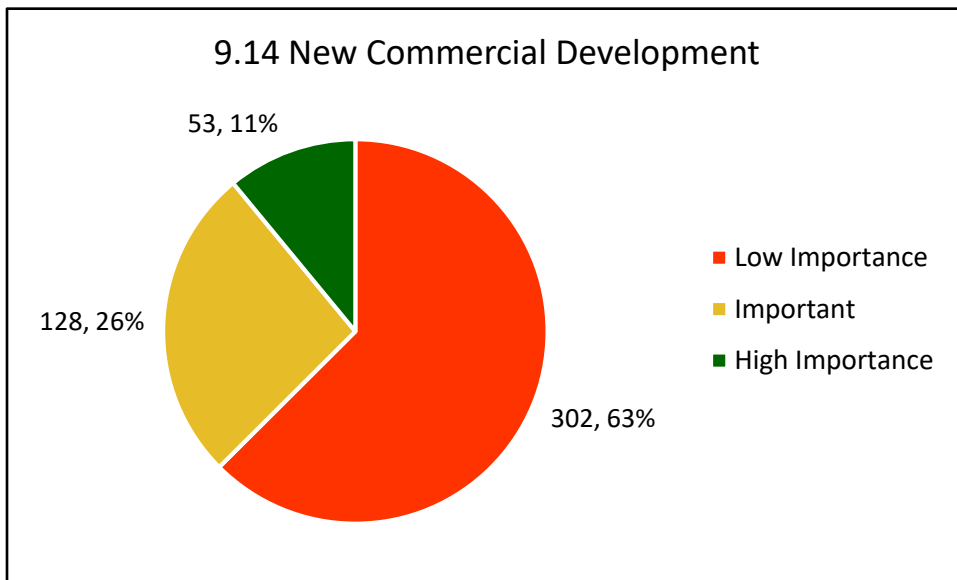
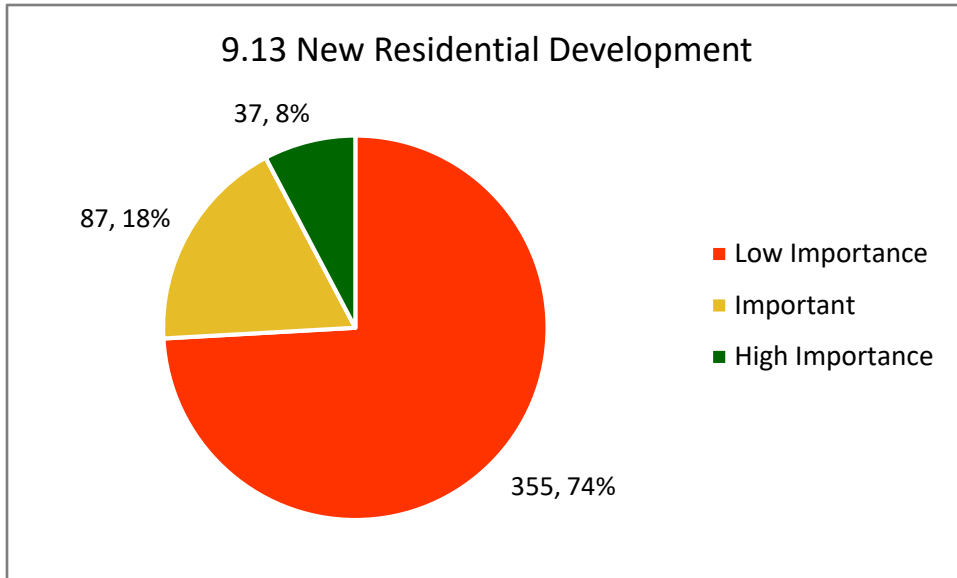


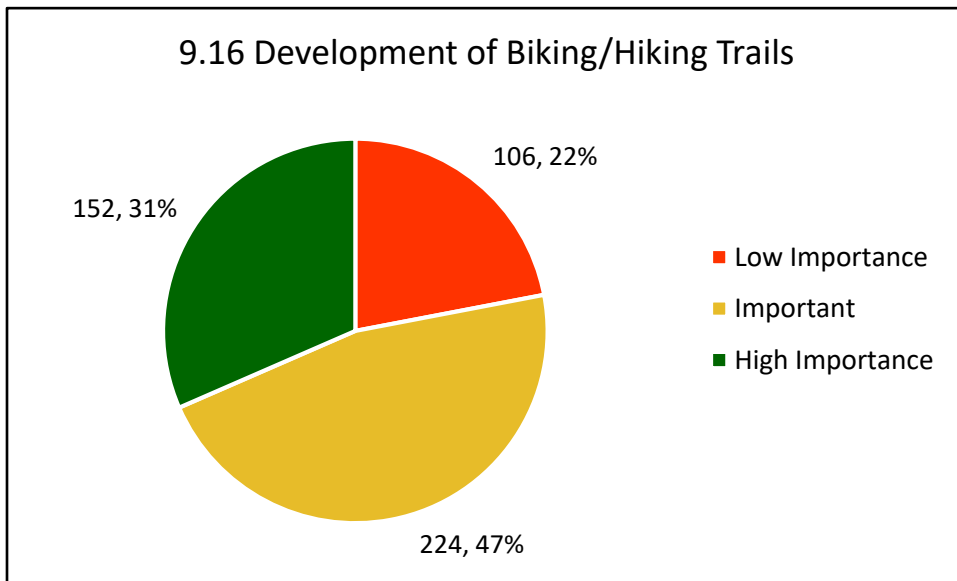
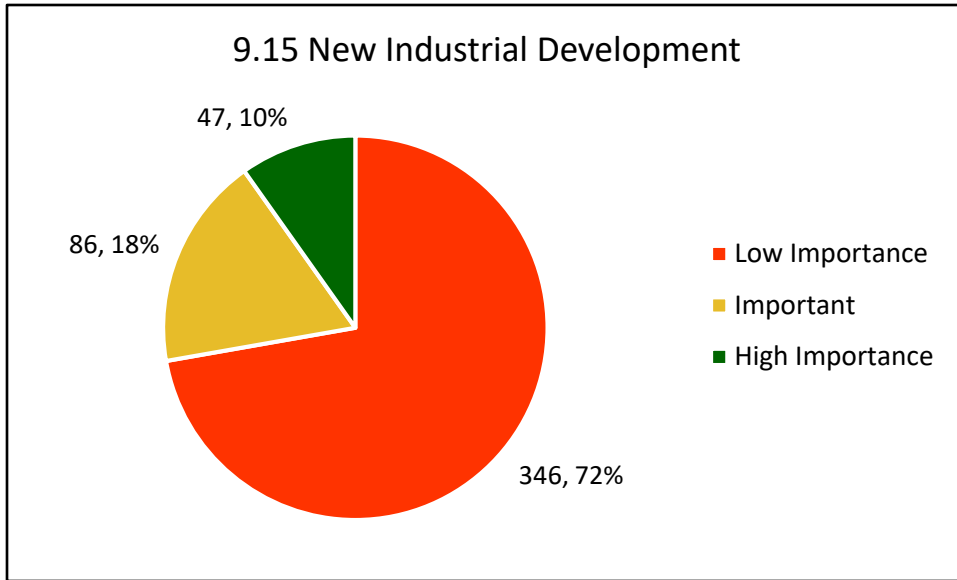


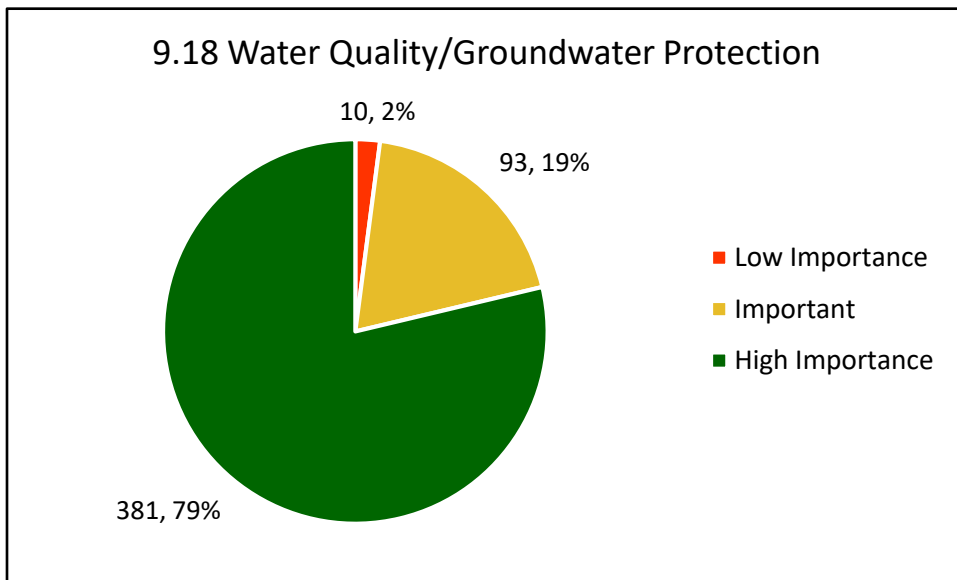
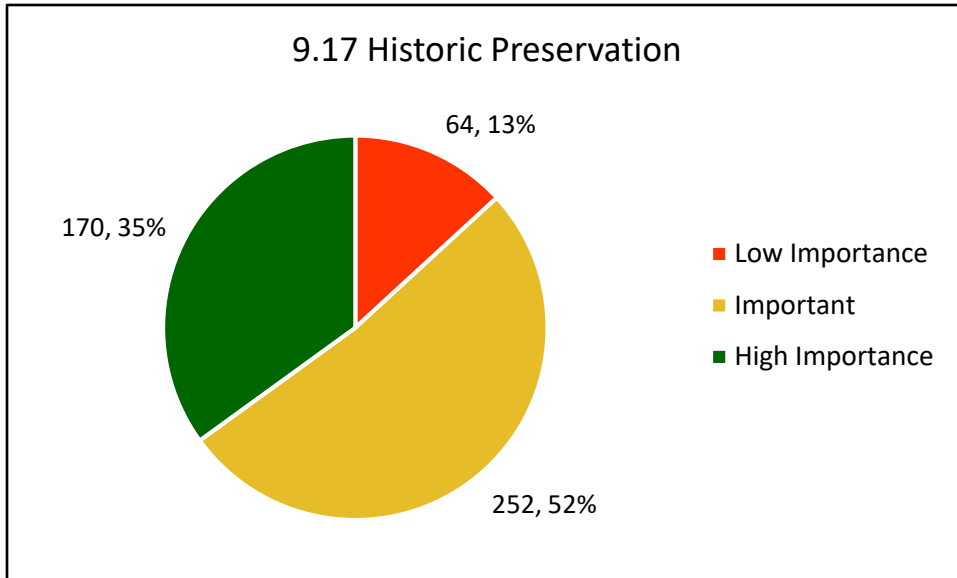


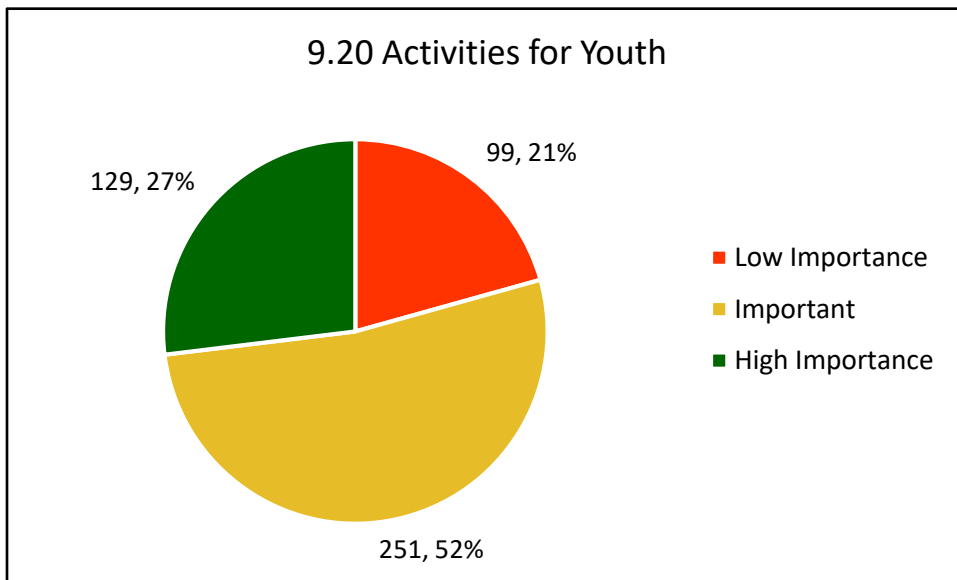
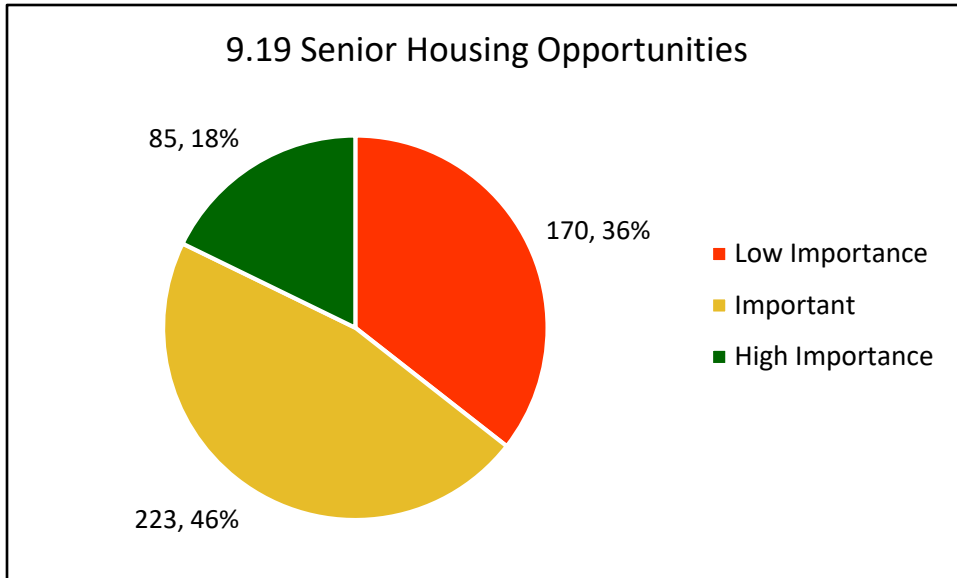


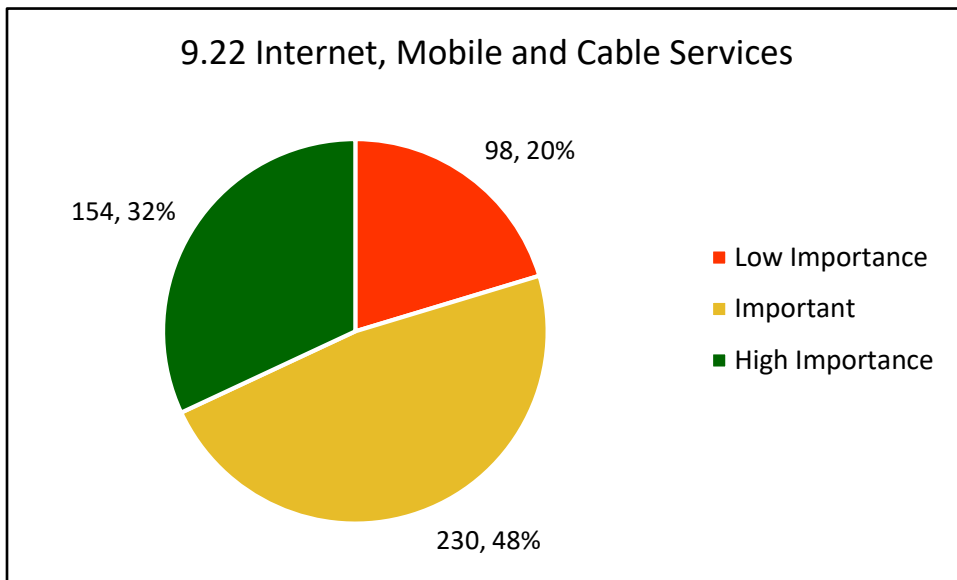
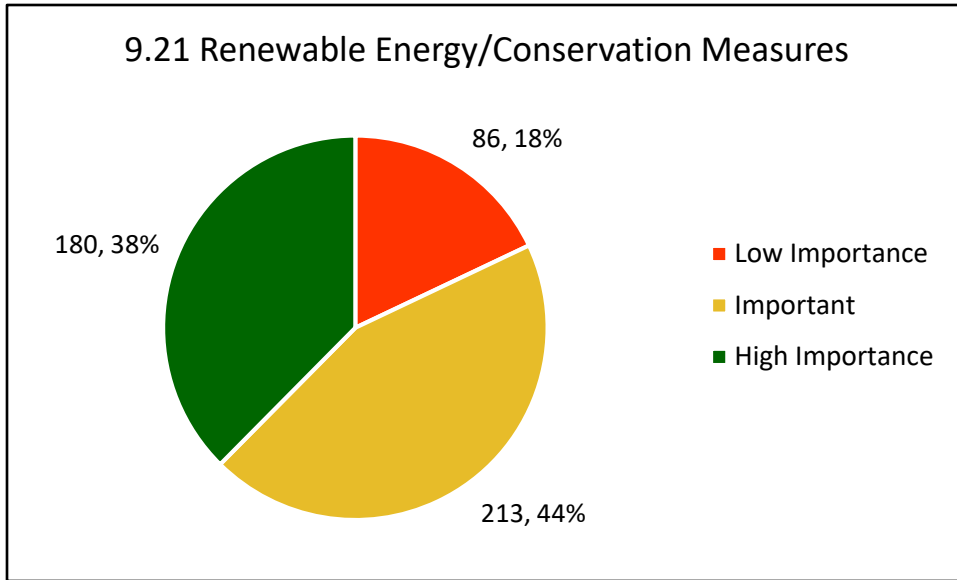


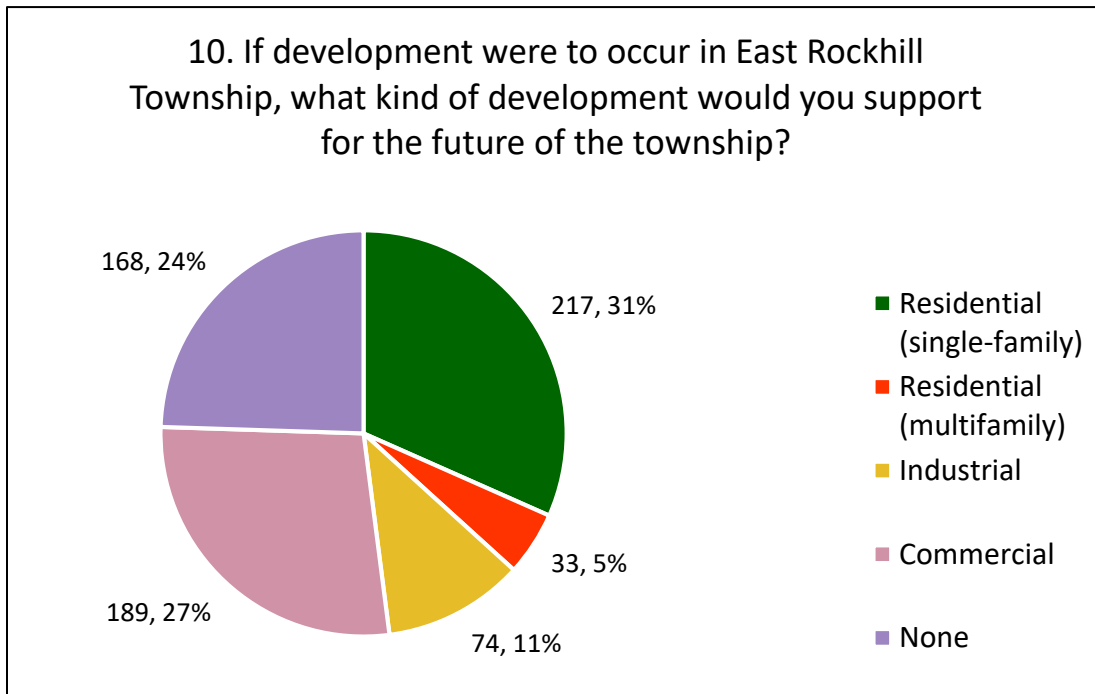
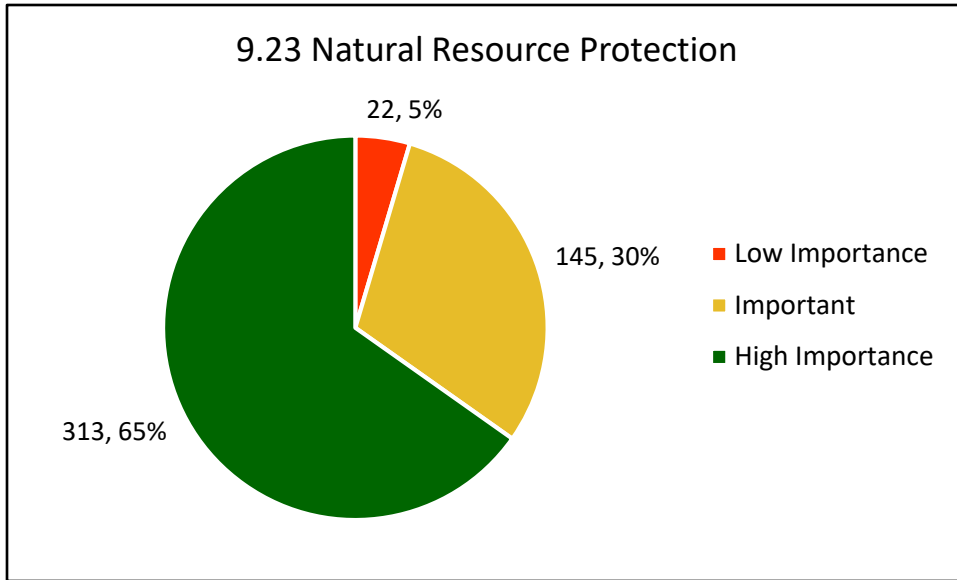




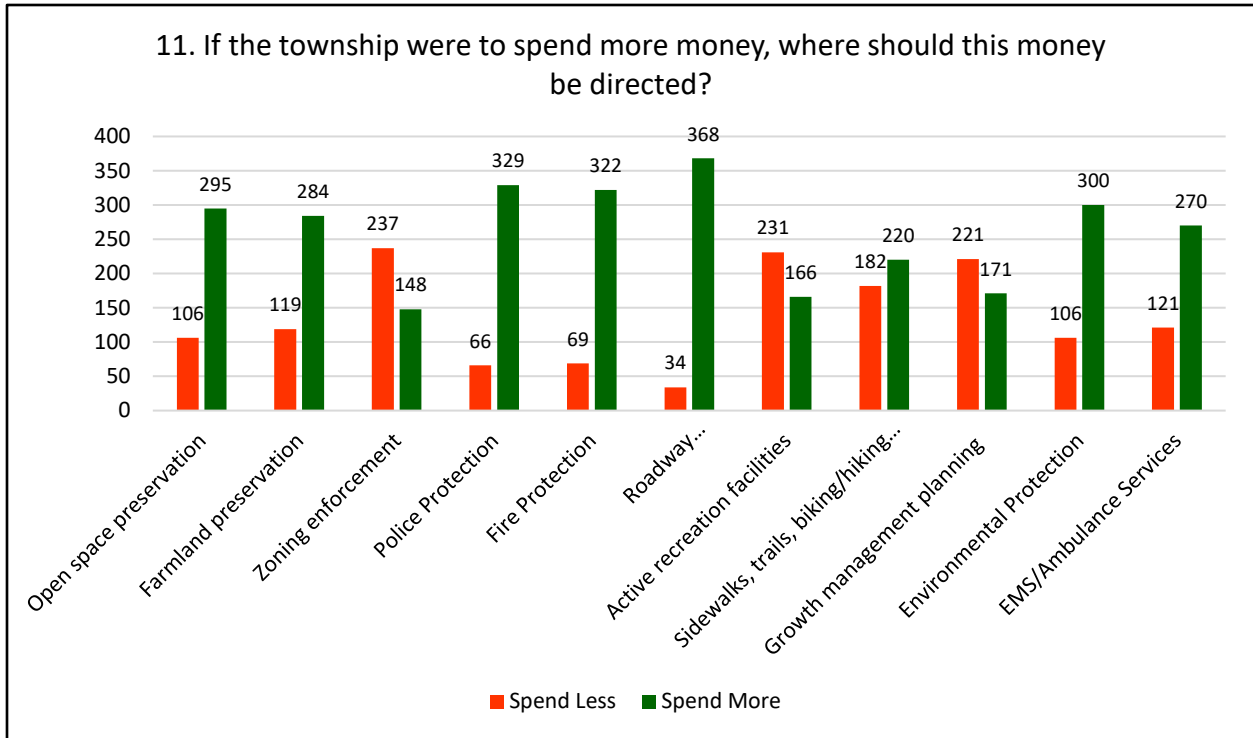






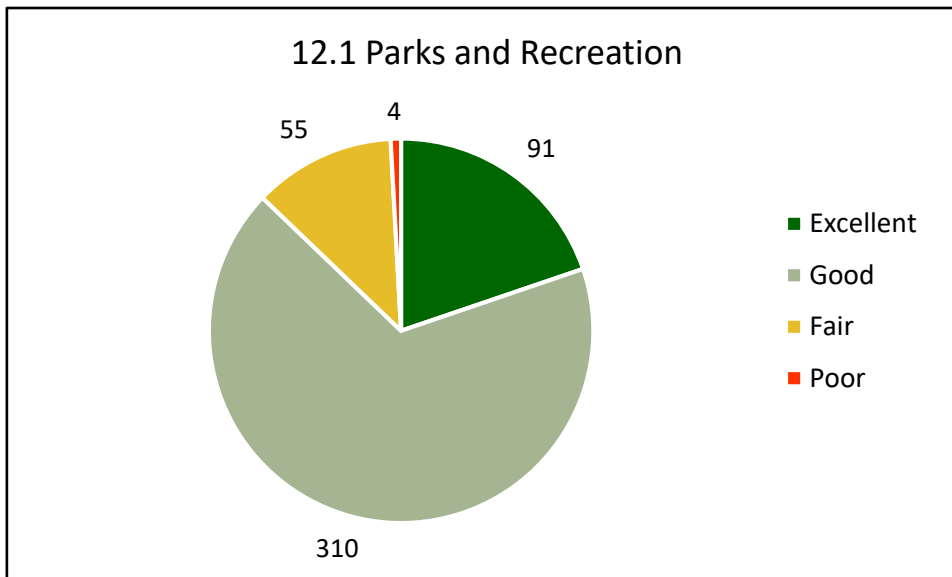


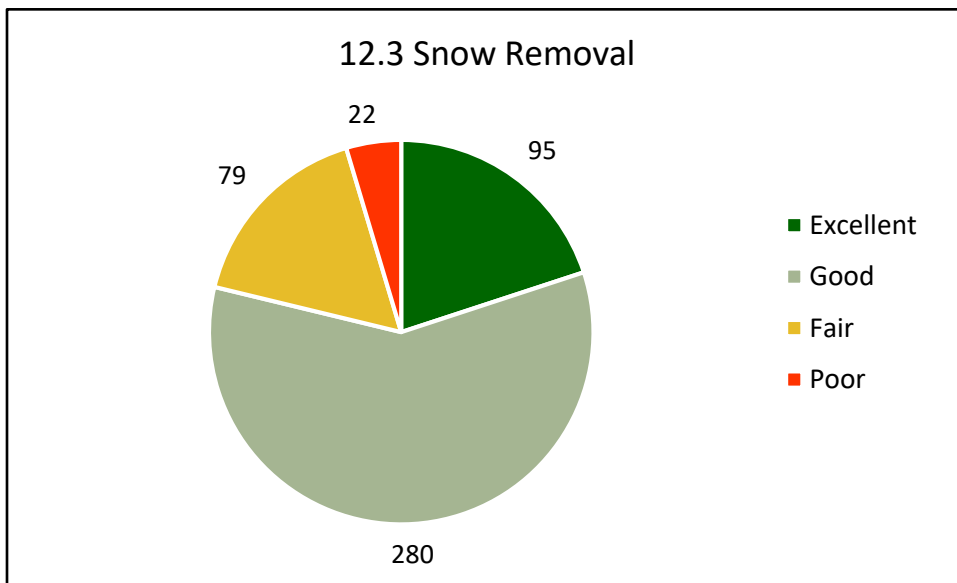
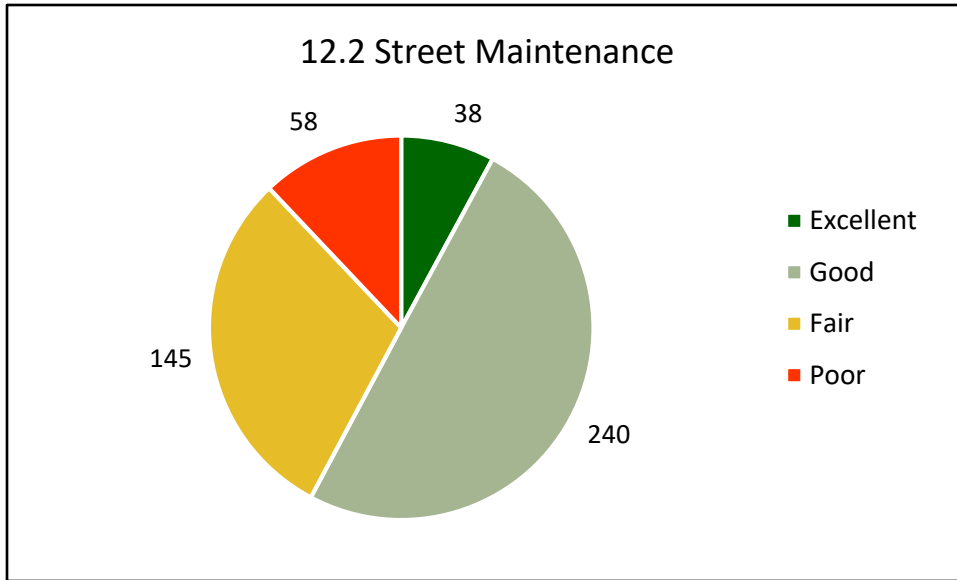
Residential (single-family) - 31%	Industrial (manufacturing, warehouses, production) - 11%
Residential (multifamily) - 5%	Commercial (retail, office, stores, restaurants) - 27%
None - 24%	

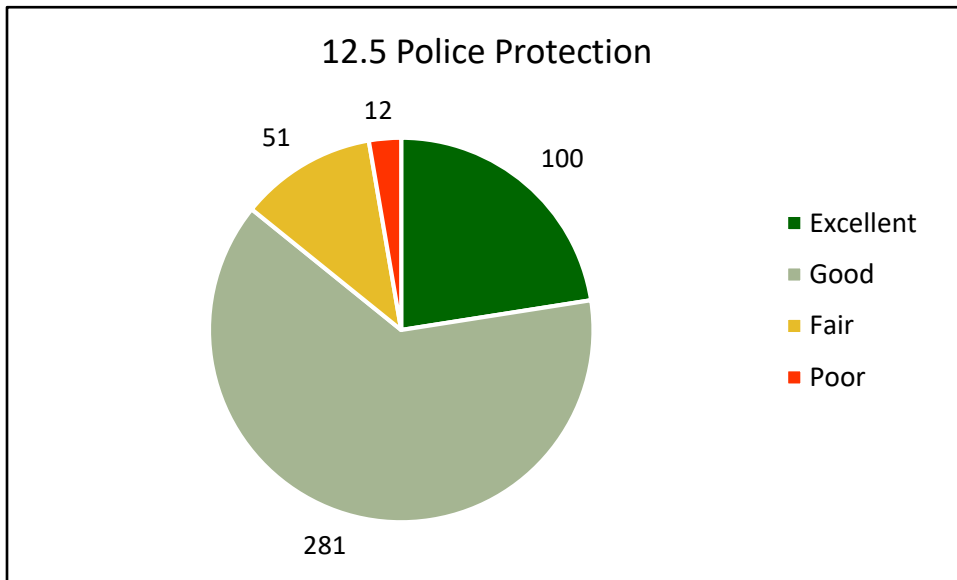
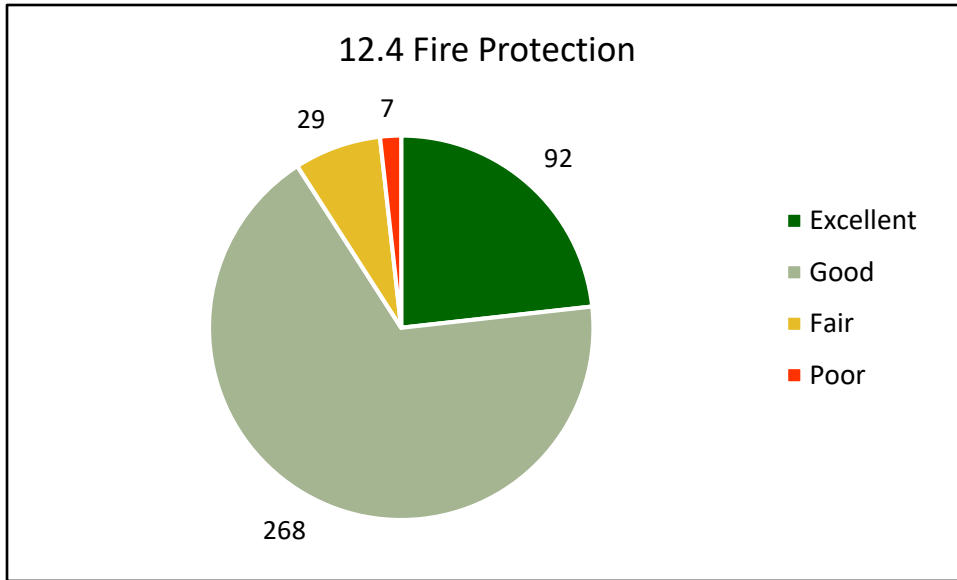


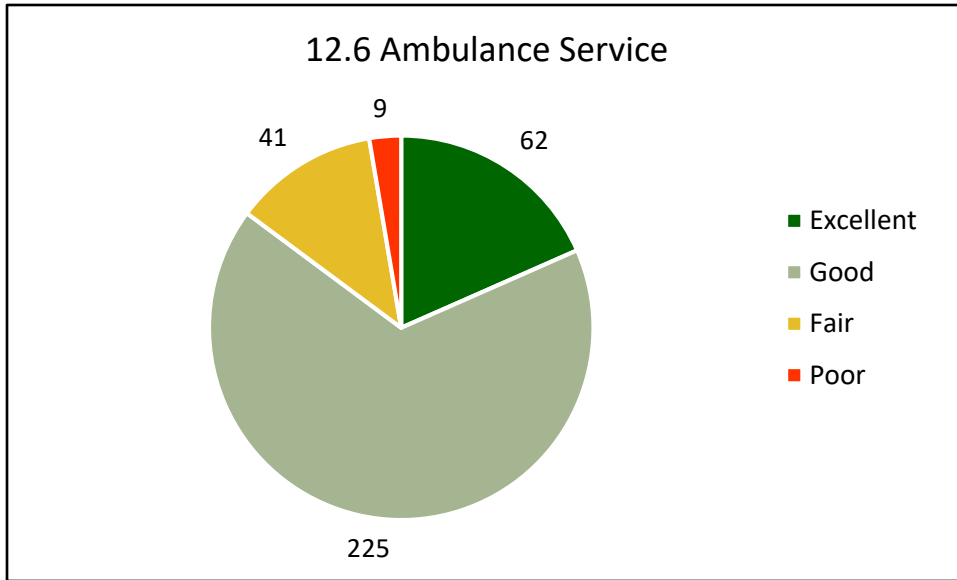
Question 12. How would you rate the current quality of services in East Rockhill Township?

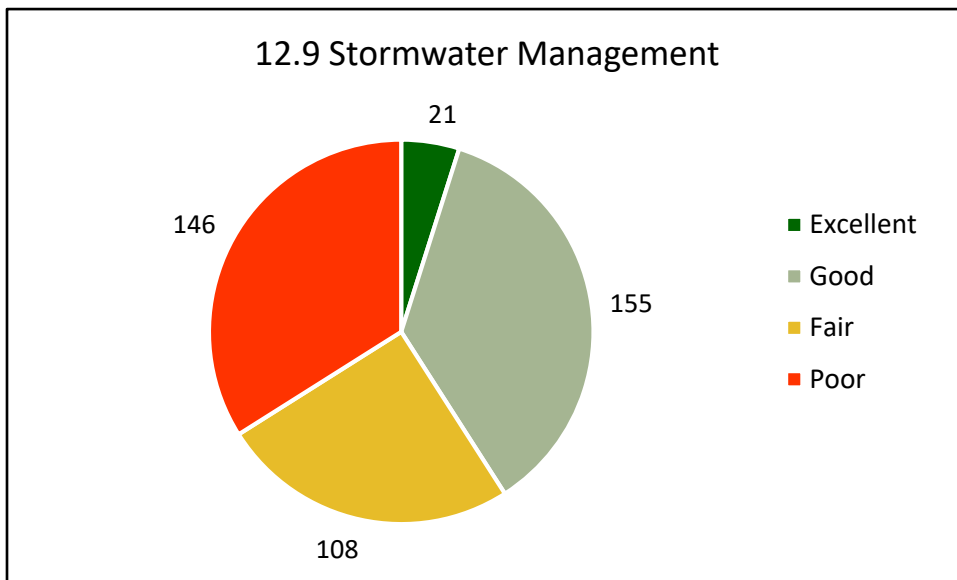
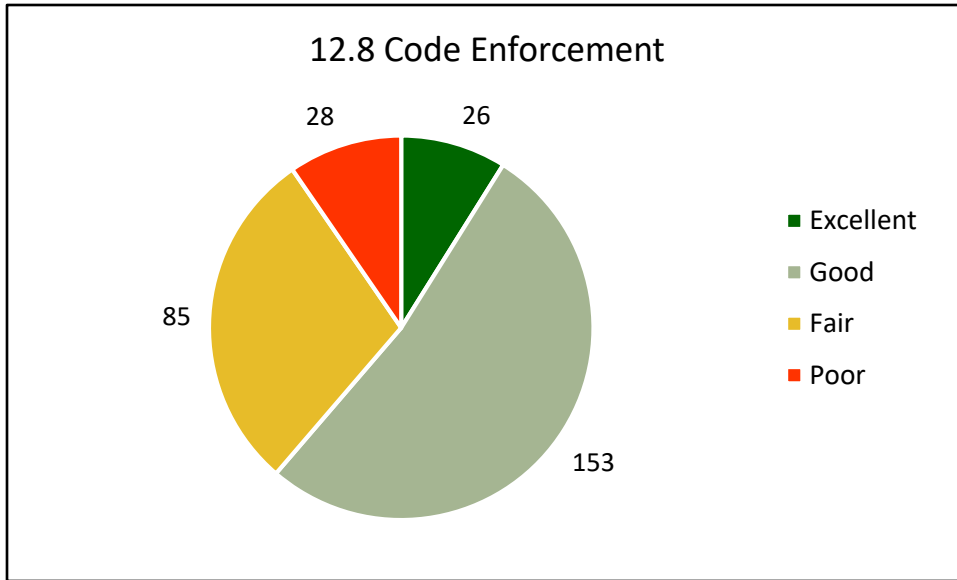
1. Fire protection	3.13	6. Code enforcement	2.61
2. Police protection	3.06	7. Street maintenance	2.54
3. Parks and recreation	3.06	8. Yard waste/leaf collection	2.5
4. Ambulance services	3.01	9. Stormwater management	2.12
5. Snow removal	2.95		

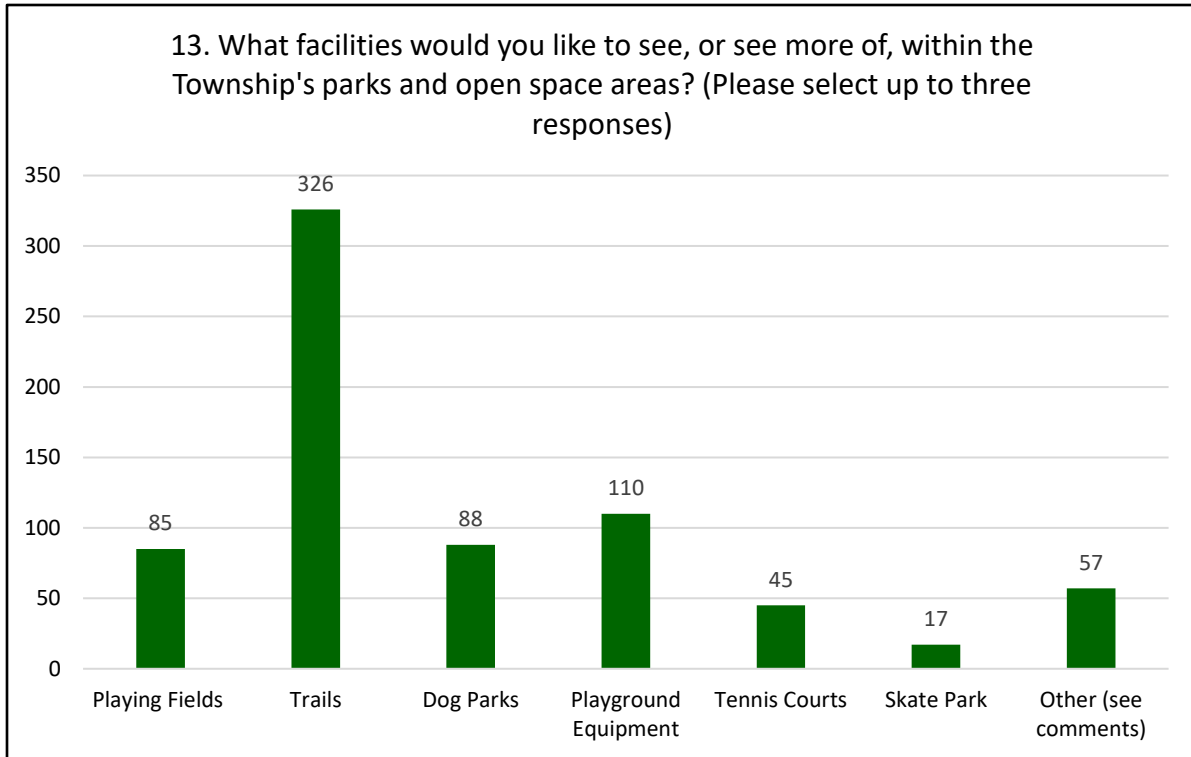












Playing Fields (soccer, baseball, lacrosse, etc.) - 11%	Tennis Courts - 6%
Walking/Hiking/Biking Trails - 43%	Skate Park - 2%
Dog Parks - 12%	Other (see comments) - 8%
Playground Equipment - 15%	

