

# NORTHAMPTON TOWNSHIP

# MASTER TRAIL & BICYCLE FACILITIES PLAN December 2019



# NORTHAMPTON TOWNSHIP MASTER TRAIL AND BICYCLE PLAN

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# TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
CHAPTER 1 - INTRODUCTION	7
Background	
PLAN PURPOSE	
PLAN VISION AND GOALS	
PLAN VISION AND GOALS	
CHAPTER 2 - PLANNING FOR TRAILS AND BICYCLE FACILITIES	9
BENEFITS OF TRAILS AND BICYCLE FACILITIES	9
DEMAND FOR TRAILS AND BICYCLE FACILITIES	9
OVERVIEW OF TRAIL USAGE AND USERS	15
CHAPTER 3 - NORTHAMPTON TOWNSHIP PLANNING PROCESS	10
STEERING COMMITTEE	
Steering Committee     Planning Study Goals	
IDENTIFICATION OF PLANNING AREAS	
REVIEW OF PRIOR PLANNING EFFORTS AND STUDIES	
CREATION OF A COMMUNITY PROFILE	
IDENTIFICATION OF PROPOSED TRAILS AND BICYCLE FACILITIES	
<ul> <li>IDENTIFICATION OF PROPOSED TRAILS AND BICYCLE FACILITIES</li> <li>PRIORITIZATION OF PROPOSED TRAILS AND BICYCLE FACILITIES</li> </ul>	
PRIORITIZATION OF PROPOSED TRAILS AND BICYCLE FACILITIES	20
CHAPTER 4 - NORTHAMPTON TOWNSHIP COMMUNITY PROFILE	29
REGIONAL SETTING	29
■ LAND USE	29
DEMOGRAPHICS	30
Natural Features	
Man-Made Features	34
HISTORIC RESOURCES	38
CHAPTER 5 - THE TRAILS AND BICYCLE FACILITIES NETWORK	30
TYPES OF TRAILS AND BICYCLE FACILITIES  TRAIL AND BICYCLE FACILITIES DESIGN STANDARDS	
That and big role i adictiles beginn orangaines	
TRAIL AND BICYCLE FACILITIES DESIGN ELEMENTS	
EXAMPLE OF A SIMILAR TRAIL & BICYCLE FACILITIES NETWORK	
THE TRAILS AND BICYCLE FACILITIES NETWORK	_
PRIORITY TRAILS AND BICYCLE FACILITIES	
TRAILS AND BICYCLE FACILITIES BY PLANNING AREA	5/
CHAPTER 6 - IMPLEMENTATION AND COST	201
IMPLEMENTATION PROCESS	
TRAIL AND BICYCLE FACILITIES DEVELOPMENT COSTS	
CHARTER 7. MAINTENANCE AND DIOK MANAGEMENT	200
CHAPTER 7 - MAINTENANCE AND RISK MANAGEMENT	
Shared Use / Rail Trail Maintenance	
RISK MANAGEMENT	212
CHAPTER 8 - TRAIL CONCERNS	213
SAFETY AND CRIME	
LIABILITY	
PROPERTY VALUES	
CHAPTER 9 - RECOMMENDATIONS	231

# **APPENDICES**

	APPENDIX A: GLOSSARY	
	APPENDIX B: STEERING COMMITTEE MEETING MINUTES	
	APPENDIX C: SCORING AND RANKING OF TRAILS AND BICYCLE FACILITIES DETAILED INFORMATION	
	APPENDIX D: TRAIL CONCERNS	253
F	IGURES	
	Figure 4. Occurs = 4. 0. 0. 4. F. 0.	444
	FIGURE 1 - SEGMENTS 1, 2, 3, 4, 5, 6	
	FIGURE 2 - SEGMENTS 7, 8, 9, NBR 1	
	FIGURE 3 - SEGMENTS 10, 11, 19, 20, NBR 2, NBR 3	
	FIGURE 4 - SEGMENTS 12, 13, 14, 15, 16, 17, 18	
	FIGURE 5 - SEGMENTS 21, 22, 26, 27, NBR 9, NBR 10, NBR 11, NBR 17	
	FIGURE 6 - SEGMENTS 23, 24, 28, 29, NBR 6, NBR7, NBR 8, NBR 12, NBR 13, NBR 15, NBR 16,	
	SW 1, SW 2, SW 3	
	FIGURE 8 - SEGMENTS 34, 35, 44, 45, 46, NBR 23, NBR 24	
	FIGURE 9 - SEGMENTS 36, 37, 38, NBR 21	
	FIGURE 10 - SEGMENTS 39, 40, 41, 42, 43, NBR 18, SW 5, SW 6	144
	FIGURE 11 - SEGMENTS 47, 51, 52, 53, 56	140
	FIGURE 12 - SEGMENTS 48, 48A, 54, 55, 59	
	FIGURE 13 - SEGMENTS 49, 50, 57, 58, SW 4	
	FIGURE 14 - SEGMENTS 60, 68, 70, 76, 81, 82, 83, SW 8	
	FIGURE 15 - SEGMENTS 65, 66, 71, 72, 73, 79, 80, 84, NBR 32, NBR 33, NBR 34, NBR 35	167
	FIGURE 16 - SEGMENTS 67, 69, 74, 75, 77, 78	
	FIGURE 17 - SEGMENTS 61, 62, 63, 64, 85, NBR 24, NBR 25, NBR 26, NBR 27, NBR 28, NBR 29,	171
	NBR 30, NBR 31	17/
	FIGURE 18 - SEGMENTS 87, 88, 89, 90, 91, 92, NBR 36, NBR 37, NBR 38, NBR 39	101
	FIGURE 19 - SEGMENTS 86, 93, 94, 95, NBR 46, NBR 47, NBR 48	
	FIGURE 20 - SEGMENTS 96, 99, 100, 101, 102, 103, 104, 105	
	FIGURE 21 - SEGMENTS 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, NBR 52, NBR 53	
	FIGURE 22 - SEGMENTS 97, 98, NBR 40, NBR 41, NBR 42, NBR 45, NBR 49, NBR 50, NBR 51	
	FIGURE 23 - RADNOR TRAIL VERSUS RADNOR TOWNSHIP INCIDENTS	
	FIGURE 24 - RADNOR TOWNSHIP PERCENTAGES OF HOUSING UNITS EXPERIENCING A CRIME VERSUS	∠ 1 寸
	AN ARREST	215
	FIGURE 25 - PENNSY TRAIL - HAVERFORD TOWNSHIP, PERCENTAGES OF HOUSING UNITS	2 10
	EXPERIENCING A CRIME VERSUS AN ARREST	215
	FIGURE 26 - NATIONAL CRIME VICTIMIZATION STATISTICS	216
	FIGURE 27 - TRAIL USER SURVEY RESULTS PERCEPTIONS OF SAFETY AND SECURITY ALONG	0
	THE TRAIL	218
	FIGURE 28 - SALES PRICE PER SQUARE FOOT BASED ON PROXIMITY TO TRAIL	
	FIGURE 29 - ZILLOW HISTORICAL HOME VALUES - CYNWYD HERITAGE TRAIL	
	FIGURE 30 - ZILLOW HISTORICAL HOME VALUES - PENNSY TRAIL	
	FIGURE 31 - HOUSING TURNOVER PENNSY TRAIL AND CYNWYD HERITAGE TRAIL	
V	IAPS	
	MAP 1 - NORTHAMPTON TOWNSHIP PROPOSED PLANNING AREA BOUNDARIES	
	MAP 2 - NORTHAMPTON TOWNSHIP REGIONAL SETTING	
	MAP 3 - NORTHAMPTON TOWNSHIP	
	Map 4 - Priority Trails and Bicycle Facilities	
	MAP 5 - NEWTOWN RAIL TRAIL, SEGMENTS 47, 48, 49, 50, 69, 102, 103, 104	
	MAP 6 - NEW ROAD, SEGMENTS 23, 95	
	MAP 7 - OLD JORDAN ROAD, SEGMENT 43	/6
	MAP 8 - NESHAMINY GREENWAY TRAIL, SEGMENTS 30, 31, 32, 33, 34, 35	83
	IVIAP 9 - UPPER FIOLLAND ROAD/BUSTLETON PIKE, SEGMENTS 88, 89, 90, 91, 97	გ/

MAP 10 - MIDDLE HOLLAND ROAD, SEGMENT 39	90
MAP 11 - NEWTOWN RICHBORO ROAD, SEGMENT 14	
MAP 12 - TEMPERANCE LANE, SEGMENTS 6, 7	98
MAP 13 - BUCK ROAD, SEGMENTS 70, 71, 72, 73, 79, 80, 81, 82, 84	104
MAP 14 - STONEYFORD ROAD, SEGMENT 46	107
MAP 15 - TANYARD ROAD, SEGMENTS 24, 86	110
MAP 16 - PLANNING AREA 1	AFTER PAGE 112
MAP 17 - PLANNING AREA 2	AFTER PAGE 128
MAP 18 - PLANNING AREA 3	
Map 19 - Planning Area 4	
Map 20 - Planning Area 5	AFTER PAGE 180
Tables	
Table 1 - Planning Area Boundaries	
TABLE 2 - CHARACTERISTICS OF HIGHER AND LOWER SCORING TRAILS	
Table 3 - Land Use Characteristics	
TABLE 4 - DEMOGRAPHICS	31
TABLE 5 - TARGET POPULATION GROWTH TRENDS	
Table 6 - Population and Housing Growth	
TABLE 7 - EXISTING TRAILS	
TABLE 8 - PARKS AND OPEN SPACE RESOURCES	
TABLE 9 - SCHOOLS AND ENROLLMENT	
TABLE 10 - HISTORIC RESOURCES	
TABLE 11 - TYPES OF TRAILS AND BICYCLE FACILITIES	
TABLE 12 - RECOMMENDED TRAIL AND BICYCLE FACILITIES STANDARDS	
TABLE 13 - PROPOSED TRAIL & BICYCLE FACILITIES (SEGMENTS BY TYPE OF FACILITY BY PLA	
TABLE 14 - PROPOSED TRAIL & BICYCLE FACILITIES (MILEAGE BY TYPE OF FACILITY BY PLAN	NING AREA 46
TABLE 15 - PROPOSED TRAIL & BICYCLE FACILITIES BY TYPE	
TABLE 16 - EVALUATION CRITERIA	
TABLE 17 - EVALUATION CRITERIA AND SCORING SCALE	
TABLE 18 - TABULATION OF SCORES FOR TOP PRIORITY TRAILS AND BICYCLE FACILITIES	
TABLE 19 - PROPOSED TRAILS & BICYCLE FACILITIES - PLANNING AREA 1	
TABLE 20- PROPOSED TRAILS & BICYCLE FACILITIES - PLANNING AREA 2	
TABLE 21- PROPOSED TRAILS & BICYCLE FACILITIES - PLANNING AREA 3	
TABLE 22- PROPOSED TRAILS & BICYCLE FACILITIES - PLANNING AREA 4	
TABLE 24 - PROBABLE COSTS OF CONSTRUCTION	
TABLE 26 - ESTIMATED MAINTENANCE COSTS	211

#### **EXECUTIVE SUMMARY**

The Northampton Township Master Trail and Bicycle Plan (The Plan) outlines a vision for improving the quality of life in the Township; providing a wide range of outdoor experiences; and supporting economic development through the development of a comprehensive township-wide trail and bicycle facilities network.

The process of developing this Master Trail and Bicycle Facilities Plan was a multi-step process designed to identify opportunities for providing non-motorized transportation options in all areas of the township. The primary components addressed in individual chapters of the plan are as follows:

- 1. An introduction outlining the plan vision and goals and objectives
- 2. Insight into why it is important to plan for trails and bicycle facilities
- 3. An overview of the planning process used to in the development of this plan
- 4. A Northampton Township Community Profile designed to help understand opportunities and constraints and identify assets and destination points in the township
- 5. The Trails and Bicycle Facilities Network
- 6. An identification of the implementation process and costs guidelines
- 7. Maintenance and Risk Management
- 8. Insights on concerns relative to the relationship between trails and bike facilities and crime, property values, and individual property owner liability.

Key concepts and principles of the planning process included:

- The plan should encompass all areas of the township
- The plan should be reflective of the community
- Safety of trail users and bicyclists of varying skill sets and experience levels was paramount
- Plan recommendations should be consistent with previously conducted planning studies
- The plan should address concerns and provide factual responses relative to the relationship between trails and crime, property values, and individual property owner liability.

The Plan begins with an overview of the benefits of trails, the demand for trails and bike facilities, and information on who uses trails.

Kev takeawavs:

- Trails and bicycle facilities provide a myriad of benefits including improvements in health, quality of life, while also providing a non-motorized transportation alternative benefiting everyone in the community;
- Demand for trails and bicycle facilities is widespread, growing and is often a key consideration in where people want to reside: and
- Trail users span all age groups. However, consistently fifty to fifty five percent of trails users are in the 46 - 65 age groups. Similarly, although trails are used for a variety of purposes, the primary usage is for walking and bicycling.

The Plan provides an overview of the steps involved in the planning process including:

- Formation of a steering committee to oversee the development of the plan;
- Development of the goals for the planning study;

- Review of previous planning efforts and studies;
- Creation of a community profile;
- · Identification of proposed trail and bicycle facilities;
- A prioritization of the proposed trails and bicycle facilities;
- Development and review of the draft plan by the steering committee; and
- Public presentation of the plan.

**The Plan** describes the process used to identify the various types of segments to be proposed as part of the network including:

- Dividing the township into 5 planning areas;
- Describing the various types of trails and bicycle facilities discussed in the plan;
- · Development of a set of trail standards; and
- Identifying the proposed trails and bicycle facilities.

The Plan includes a profile of Northampton Township in several areas including land use, demographics, natural features, man-made features such as existing trails, parks, schools and commercial areas, and historic resources.

#### Key takeaways:

- Northampton Township is one of the largest municipalities, both in terms of acreage and population, in the Central Bucks area and connects to nine surrounding municipalities with the predominant land uses being residential, parks and open space, and agriculture.
- Although one of the largest municipalities, the population is declining driven by a large decrease in those under 19. This has been offset by sizable increases in those 55 and older.
- Despite being almost fully built-out, the township possess a great deal of natural resources including the Churchville Reservoir, the Neshaminy Creek, Pine Run, Mill Creek and Ironworks Creeks stream corridors, and a sizable amount of agricultural land.
- Similarly, the township benefits from a well-developed and connected road network, as well as 32 miles
  of existing trails, and over 1,300 acres of parkland.

#### The Plan identifies:

- 5 different types of trails and bicycle facilities including Shared Use Trails, Rail Trails, Bike Lanes, Bike Sharrows, and Sidewalks
- 124 individual trail and bike facility segments, totaling 57.1 miles
- 53 Neighborhood Bike Routes totaling 45.36 miles

Area	Shared Use Trails / Boardwalk	Newtown Rail Trail	Bike Lanes	Bike Sharrows	Sidewalks	Total Trails & Bike Facilities	Neighborhood Bike Routes	Total
1	2.67	-	1.27	11.04	-	14.98	3.36	18.34
2	1.30	-	0.92	3.26	1.05	6.53	12.14	18.53
3	5.11	2.35*	1.84	4.01	0.64	13.95*	6.32	19.63
4	4.44	0.22	0.66	4.02	0.48	9.81	9.03	18.63
5	5.02	1.91	0.30	4.29	0.31	11.83	14.51	26.34
Total	18.54	4.48*	4.99	26.62	2.48	57.11*	45.36	101.48

<sup>\*</sup> Segment 48 and 48A are counted once as they represent different alignments of the same length for the same trail segment.

The Plan includes the identification of a priority set of trails and bicycle facilities which consolidated the 124 individual segments into 53 facilities, including a description of the evaluation and scoring process used to objectively evaluate the various facilities. This process assigned a score to each facility for 9 different criteria in three categories:

- Trail User Safety: (1) How safe is the trail for a variety of users based on separation from vehicular
- Feasibility: (2) Cost to the township, (3) Ownership of right-of-way, (4) Extent of constraints and engineering
- Connectivity to: (5) Commercial areas, (6) Parks & Recreation, (7) Housing, (8) Schools, (9) Overall Trail Network

The following trails and bicycle facilities achieved the highest scores across the nine criteria. These 11\* trails and bicycle facilities should be given highest priority by the township as it implements the recommendations contained in this plan. The name of each trail, including its final score, and a description is provided below.

- Newtown Rail Trail (20.50) Continuous shared use trail contained fully within the SEPTA right-of-way of the former Fox Chase-Newtown train line from Bristol Road to the Neshaminy Creek
- New Road (18.61) Spans the length of New Road from Hatboro Road to Bustleton
- Old Jordan Road (17.75) Will join East and Middle Holland roads to connect to the Newtown Rail Trail
- Neshaminy Greenway Trail (17.46) Links the center of Village Shires to the County's proposed Neshaminy Greenway trail which would extends along the Neshaminy Creek from Chalfont to the Delaware River.
- Upper Holland Road (16.50) Bike facilities would cover the length of Upper Holland Road from Second Street Pike to Holland Road
- Middle Holland Road (15.00) Dedicated bike lanes would link Council Rock South to Old Jordan Road and the Newtown Rail Trail
- Newtown Richboro Road (14.81) Extends from the commercial center of Richboro to the intersection of St. Leonards Road and Newtown Richboro Road. Would connect to the Northampton Township Recreation Complex and, via the proposed Neshaminy Greenway Trail, connectivity to Tyler State Park
- Temperance Lane (14.50) Connects the northwestern portion of the township to the commercial center of Richboro
- 9A Buck Road (14.00) Links the Village of Holland to Holland Middle School, spanning Buck Road from the intersection of Holland and Buck roads, and East Holland Road, via the existing pathway on the Hillcrest Elementary and Holland Middle School property
- 9B Stoneyford Road (14.00) Links the neighborhoods along Stoneyford Road, and those near the intersection of Stoneyford Road and East Holland Road, to Big Meadow Park and the Neshaminy Greenway Trail at Big Meadow Park
- 9C Tanyard Road (14.00) Running from Jacksonville Road to Bustleton Pike this segment would provide easy access to Richboro

It should be noted that these priority trails encompass the entire township meaning that each area of the township is represented.

<sup>\*</sup> The last three segments all scored and ranked equally resulting in a total of 11 high-ranking trails

**The Plan** outlines an implementation process and provides an overview of the many tools available and steps involved in the trail development process including:

- Requiring trails as part of the development process
- · Acquisition of right-of-way
- Securing funding
- Design and Engineering, Permitting and Construction

The Plan provides a summary of general cost guidelines for the development of different types of trails. No detailed cost estimate for the complete development of the proposed trails and bicycle facilities network has been provided as many variables impact the cost of trail development It is envisioned that many of the trails will be paid for by developers as part of the land development process and that any additional funding required will be obtained through federal and state grant programs.

The Plan provides information on trail maintenance and risk management including:

- Trail maintenance including the need to develop a trail maintenance program and schedule;
- Recommendation for ensuring safety and security on the trails; and
- Risk management techniques thee township can use to limit their liability exposure.

The Plan addresses frequently heard concerns about trails as related to Crime, Liability, and Property Values.

Key takeaways for each of these topics are identified below:

#### Crime

- The extent of crime is not significantly different for areas adjacent to trails as compared to areas farther away from the trail.
- Prior planning studies from across the country also indicate that crime is no greater on, and/or adjacent to trails, as compared to the surrounding community.

#### Liability

- Property owners adjacent to the trail are afforded various legal protections that limit their exposure, similar to the same protections afforded to property owners with sidewalks.
- Insurance industry experts affirm that proximity to a public recreational facility, such as a trail, park or recreation field is not a factor in the pricing of an individual homeowner's policy.

#### **Property Values**

- Property values, based on an Average Sales Price per Square Foot analysis, are typically the same for properties adjacent to the trail as those in the surrounding community.
- Rates of real estate appreciation for homes following the opening of the trail are typically in-line with those of the greater community.
- There is no evidence to suggest that real estate turnover in the year following the introduction of the trail is higher in areas adjacent to trails as compared to the greater community.

The Plan concludes with a set of specific recommendations for ensuring successful implementation of this plan including:

- Official adoption of the plan by elected officials
- Review of the priority trail rankings in this plan to determine if there are any upcoming land development projects where the township might be able to get the developer to fund construction of a key trail segment as part of the development process.
- Review both the township and PennDOT road repaving schedules to identify opportunities for incorporating proposed bike sharrows and bike lanes as part of the resurfacing project.
- Support the County-funded design and construction of the Newtown Rail Trail as a major spine for the overall Northampton Township Trails and Bicycle Facilities Network with low cost and high return for the township.
- Where possible, consider widening the cartway width as part of future resurfacing projects on township roads to be able to accommodate dedicated bike lanes, particularly on those proposed for bicycle sharrows.
- Review the priority trail rankings to identify specific easements required for future development of trails and begin the process of acquiring the right-of-way needed.
- Continue to partner with other municipalities and the County to take advantage of opportunities to extend the Northampton Township Trails and Bicycle Facilities Network beyond the municipal borders.
- Review and understand the various grant funding sources available in terms of grant requirements, project eligibility, and deadlines to ensure that the township maximizes its potential for securing grant funding for implementation of this plan and recommended segments.

## **CHAPTER 1 - INTRODUCTION**

#### **BACKGROUND**

In 2019, the Northampton Township Board of Supervisors, in response to increased interest in trails and bicycle facilities from many township residents, commissioned the Bucks County Planning Commission to undertake the development of a township-wide trails and bicycle plan to help guide the future development of trail and bicycle facilities in the township. This is the township's first trail and bicycle plan and serves as the guiding document for the future development of trails and bicycle facilities.

#### PLAN PURPOSE

The purpose of the Northampton Township Master Trail and Bicycle Plan is to guide the development of an extensive, integrated, trails and bicycle facilities network to support the needs of the community. The intent is to provide a trail and bicycle facilities network for the township that will improve mobility and quality of life for residents. This plan will serve as a tool to secure grant funding, as well as forge partnerships to move towards implementation of the plan elements.

#### PLAN VISION AND GOALS

#### Vision

The vision of the Northampton Township Trail and Bicycle Network is to strengthen the Northampton Township Community by creating a network of trails and bicycling paths where residents can safely travel to local and regional destinations via non-motorized forms of transportation. The network will promote and encourage healthy lifestyles of walking and bicycling for transportation and recreation; protect water quality and scenic and natural resources; and promote and sustain the local economy.

#### Goals

The goals to be achieved via the creation of a trail and bicycle network include:

- 1. Support a healthy lifestyle for activities such as walking, cycling, running, and cross-county skiing by providing safe routes as an alternative to motorized transportation.
- 2. Strengthen community social connections by providing paths and trails that support the interaction of users of all ages, abilities and interests.
- 3. Provide safe access to nearby and regional destinations including parks, regional trails, churches, shopping and community facilities.
- 4. Promote and sustain the local economy.
- 5. Protect water quality and scenic and natural resources.

# CHAPTER 2 - PLANNING FOR TRAILS AND BICYCLE FACILITIES

Part of planning for trails and bicycle facilities involves understanding the benefits of trails and to understand the demand for trails. Similarly, it is also helpful to gain insight into who uses trails.

#### BENEFITS OF TRAILS AND BICYCLE FACILITIES

Interest in trails and bicycle facilities is driven in part by the recreational, environmental, quality-of-life and economic benefits they provide including:

#### **Recreational Benefits**

- Provides safe places for bicycling and walking including safe routes to schools.
- Facilitates connections to recreational and commercial areas, within and outside of the township.
- Provides access to historic and cultural sites.
- Increases access to streams, creeks, and rivers for fishing and water-based recreation.
- Offers opportunities for nature study and bird watching.

#### **Quality of Life Benefits**

- Encourages physical activity to improve the health and welfare of users of the trail.
- Inspires residents to participate in the ongoing maintenance of the trail and create a sense of community.
- Allows for the opportunity to use a bicycle as an alternative transportation mode.

#### **Environmental Benefits**

- Provides the opportunity to improve stormwater management, re-establish and rehabilitate riparian buffers along streams and creeks, and conduct streambank restoration.
- Provides opportunities for environmental education programs at schools in the area.
- Gives citizens the choice to either walk or bike, reducing the need to drive.

#### **Economic Benefits**

 Placement of trails close to historic boroughs and commercial centers can benefit both businesses and trail users. Businesses provide trail amenities to trail users in the form of restaurants and shops, thus bringing in a new source of income to help grow current businesses and create opportunity for the development of new ones.

#### DEMAND FOR TRAILS AND BICYCLE FACILITIES

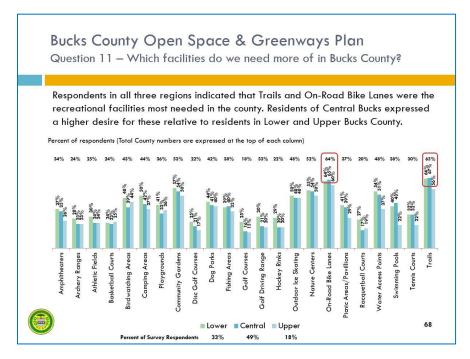
The interest in trails and bicycle facilities among the Northampton Township Board of Supervisors, and many in Northampton Township, is not unique. In fact, a variety of studies indicate that the demand for trails within communities is widespread and spans multiple generations.

#### Bucks County Open Space & Greenways Plan (2011)

https://app.sharebase.com/#/document/280224/share/129-1Qaw3RHN6l5kfODvC-b6Jr--GOdM

A survey completed as part of that plan, asked residents which types of recreational facilities they would like to see more of in Bucks County. The top two facilities residents expressed a desire for including Trails

(65 percent of County residents/67 percent of Central Bucks residents) and On-Road Bike Lanes (64 percent of County residents/65 percent of Central Bucks residents).



Community and Transportation Preferences Survey (2017) - National Association of Realtors <a href="https://www.nar.realtor/reports/nar-2017-community-preference-survey">https://www.nar.realtor/reports/nar-2017-community-preference-survey</a>

American Strategies conducted an internet survey of the top 50 metropolitan statistical areas in the United States on behalf of the National Association of Realtors. The survey explores Americans' wants regarding neighborhood characteristics such as proximity to parks and shopping, walkability, and commuting time, and the trade-offs in home type and size that people may be willing to accept in order to obtain those neighborhood preferences. Key findings from this survey included:

 When asked the relative importance of various community aspects in determining a place to live, walkability, bike lanes and trails were all cited as being Somewhat or Very Important by at least 50 percent of survey respondents.

for a sum of summit								
(RANDOMIZE)								
(ROTATE VERY IMPORTANT TO NOT AT	ALL IMPORT	ANT)						
				Not				Total importan
	Very important	Smwt important	Not very important	at all important	(Don't know)	Total important	Total not important	Total not importan
A. Being within an easy walk of other			•					Comments of the Comments of th
places and things in a community, such								
as shops and parks	42	38	15	5	0	80	20	59
B. Sidewalks and places to take walks	49	38	10	4	0	86	14	72
C. Being within a short commute to								
work	41	33	12	14	0	74	26	48
D. Easy access to the highway	38	42	14	5	0	80	20	61
E. Having public transit nearby	34	28	23	14	0	62	38	25
F. Bike lanes and paths nearby	21	34	28	18	0	54	46	9
G. Separated bike paths or trails	20	33	30	17	0	53	47	6

 76 percent of survey respondents indicated the presence of sidewalks in their neighborhood. In comparison, only 26 percent of neighborhoods/34 percent of housing units in Northampton Township have sidewalks.

Q.3 Here are a few questions about your neig disagree with that statement.	ghborhood a	nd home.	For each, p	olease indic	ate wheth	er you (RC	OTATE) agre	e or
(RANDOMIZE)								
(ROTATE STRONGLY AGREE TO STRONGLY DI	SAGREE)							
	Strongly agree	Smwt	Smwt disagree	Strongly disagree	(Don't know)	Total agree	Total disagree	Agree - Disagree
A. There are lots of places to walk nearby, such as shops, cafes, and restaurants.	31	31	21	17	0	62	38	24
B. There are parks within walking distance.	41	28	16	15	0	69	31	39
C. There are sidewalks on most of the								
streets.	49	27	12	12	0	76	24	52
D. There are bike lanes and paths nearby.	30	32	17	21	0	62	38	24
E. There is public transit nearby.	42	28	12	17	0	71	29	41

Northampton Township				
	Number of	Percent of		
With Sidewalks	Neighborhoods 36	Neighborhoods 26%		
Without Sidewalks	100	74%		
	Number of	Pcercent of		
	Housing Units	Housing Units		
With Sidewalks	4,197	34%		
Without Sidewalks	8,322	66%		

Although not ranking as high other transportation infrastructure, there was still some degree of priority
given to the development of sidewalks and bike lanes. More importantly, providing convenient
alternatives to driving such as walking, biking and public transportation was rated as being either a High
Priority or Extremely High Priority by respondents.

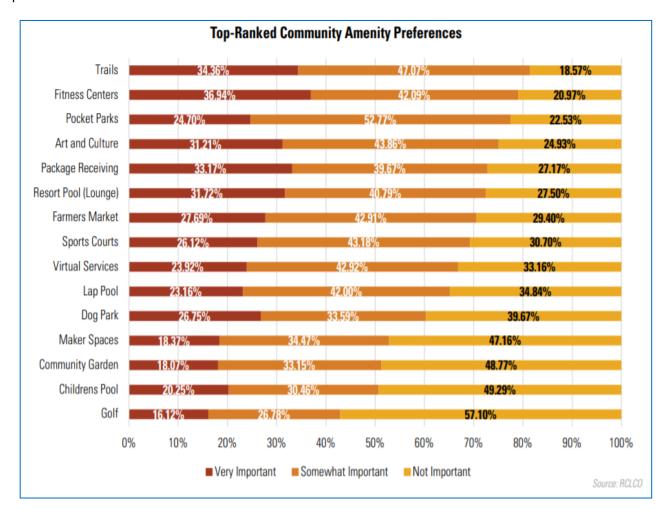
priority it should be for the gove	ernment:								
(RANDOMIZE)									
(ROTATE EXTREMELY HIGH TO E	XTREMELY LO	OW)							
									Total High priority
	Extremely				Extremely		Total		Total
	high	High	Middle	Low	low	(Don't	High	Total Low	
A. Maintaining and repairing	priority	priority	priority	priority	priority	know)	priority	priority	priority
roads, highways, freeways,									
and bridges	39	35	22	3	2		74	5	69
B. Providing convenient									
alternatives to driving such as									
walking, biking, and public									
transportation	17	27	34	15	7		45	21	23
C. Building more roads and									
expanding existing roads to									
help reduce traffic congestion	25	29	31	12	4	-	54	16	38
D. Expanding public									
transportation, including									
trains and buses	22	24	32	15	8	-	45	23	22
E. Developing communities where more people do not									
have to drive long distances to									
work or shop	16	26	37	16	6		42	21	20
F. Building more sidewalks	13	24	36	19	8	0	37	27	10
G. Building more bike lanes									
and paths	10	16	35	26	13		25	40	-15

# 2018 Housing & Community Preference Survey - RCLCO Real Estate Advisors https://www.rclco.com/publication/2018-housing-and-community-preference-survey/

RCLCO surveyed over 23,500 persons across the U.S., narrowing the respondents to include only those who either a purchased a home in the last year or have intentions to purchase a home in the next 12 to 24 months. The survey gathered information on a variety of housing and community topics including:

- Preferred community locations (suburbs, rural areas, small towns, etc.)
- What is motivating a home purchase? (move closer to job, move to more affordable area, move into better school district, etc.)
- What particular housing features are buyers seeking? (house size, yard size, lower maintenance, higher quality, etc.)

The survey also asked about the importance of particular community amenities. The number one amenity cited as being very important (34%) or important (47%) are trails with over 80% of respondents indicating a preference for them.



The desire for trails is not unique to any one age group as shown by a variety of surveys:

Marketing to Baby Boomers One More Time (2019) - RCLCO Real Estate Advisors <a href="https://www.rclco.com/publication/marketing-to-baby-boomers-one-more-time/?utm\_campaign=Urbanexus%20Update&utm\_medium=email&utm\_source=Revue%20newsletter">https://www.rclco.com/publication/marketing-to-baby-boomers-one-more-time/?utm\_campaign=Urbanexus%20Update&utm\_medium=email&utm\_source=Revue%20newsletter</a>

Trails were in the top 5 community amenities across all age groups

RANK	UNDER 35	35-54	55+
1	Package receiving	Gated entry	Gated entry
2	Fitness centers, such as weights, yoga studio, trainers, and classes	Trails	Fitness centers, such as weights, yoga studio, trainers, and classes
3	Gated entry	Fitness centers, such as weights, yoga studio, trainers, and classes	Art and culture, such as concerts, food wine, art, educational trips, etc.
4	Trails	Resort pool (lounge)	Trails
5	Resort pool (lounge)	Package receiving	Resort pool (lounge)
6	Art and culture, such as concerts, food, wine, art, educational trips, etc.	Art and culture, such as concerts, food, wine, art, educational trips, etc.	Package receiving
7	Farmers market	Farmers market	Virtual services, such as community intranet, virtual education, Amazon locker, etc.
8	Sports courts, such as pickleball, bocce, basketball, sports fields, tot lots, tennis courts, etc.	Dog park	Farmers market
9	Dog park	Sports courts, such as pickleball, bocce, basketball, sports fields, tot lots, tennis courts, etc.	Lap pool
10	Pocket park	Pocket park	Dog park

Housing Preferences of the Boomer Generation (2016) - National Association of Homebuilders http://eyeonhousing.org/2016/02/boomers-prefer-suburbs-and-cul-de-sacs/

	Millennials	Gen X	Baby Boomers	Seniors
1	Park area	Typically suburban	Typically suburban	Typically suburban
2	Typically suburban	Park area	Near retail space	Near retail space
3	Walking/jogging trails	Walking/jogging trails	Park area	Walking/jogging trails
4	Playgrounds	Near retail space	Walking/jogging trails	Park area
5	Near retail space	Lake	Lake	Outdoor maint, service
6	Swimming pool	Swimming pool	Outdoor maint. service	Lake
7	Lake	Exercise room	Swimming pool	Swimming pool
8	Exercise room	Playgrounds	Exercise room	Exercise room
		73		

Consumer & Product Insights - What Do You Call Home? (2018) - John Burns Real Estate Consulting https://www.realestateconsulting.com/our-value/consumer-insights/

All generations rated walking trails as one of the top amenities they wanted most in their next community.



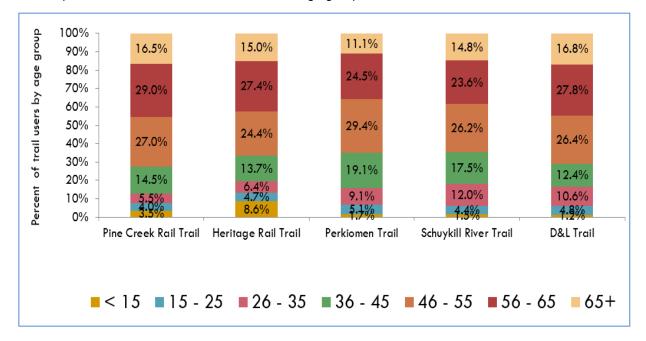
#### **OVERVIEW OF TRAIL USAGE AND USERS**

A variety of User Surveys and Economic Impact Analysis studies have been conducted on trails across the country. However, in recognition of potential regional differences, this plan focuses on five studies conducted within Pennsylvania, with three of these being within the Philadelphia region. These studies included:

- Pine Creek Rail Trail 2006 User Survey and Economic Impact Analysis (62.6 miles)
- Heritage Rail Trail County Park 2007 User Survey and Economic Impact Analysis (21.0 miles)
- Perkiomen Trail 2008 User Survey and Economic Impact Analysis (19.0 miles)
- Schuylkill River Trail 2009 User Survey and Economic Impact Analysis (56.0 miles)
- D & L Trail 2012 User Survey and Economic Impact Analysis (165.0 miles)

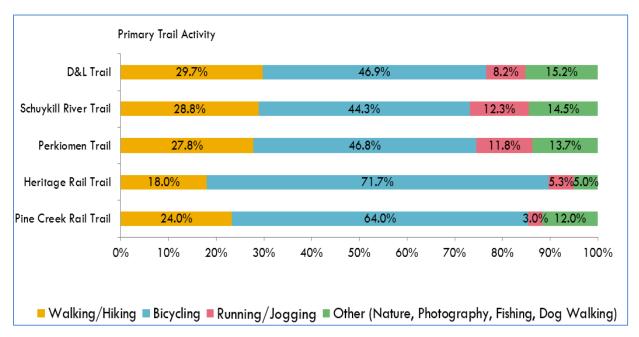
#### **Trail User Ages**

50 to 56 percent of all trail users are in the 46-65 age groups.



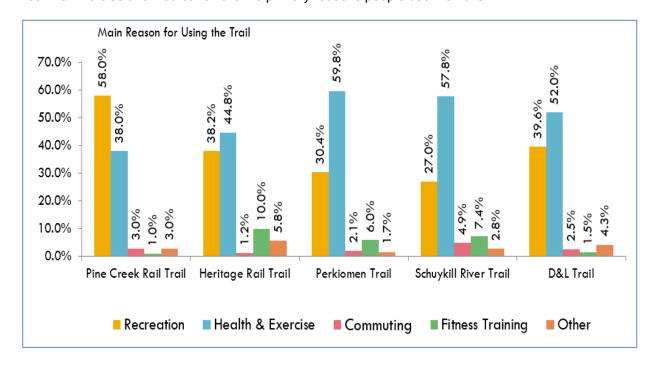
**Trail Activities** 

Bicycling is the number one activity across all five trails.



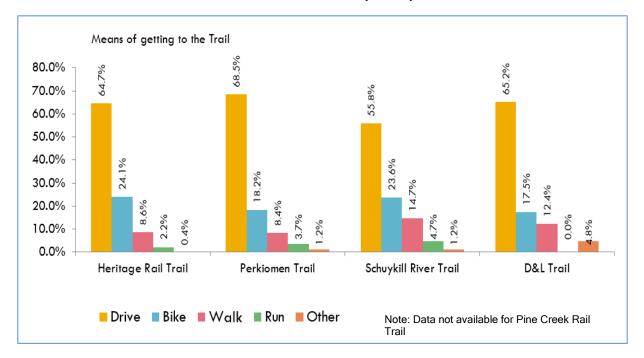
### Reasons for Trail Usage

Health & Exercise and Recreation are the primary reasons people use the trails.



# Access to the Trail

While the majority of trail users accessed the trail by car, nearly one third of trail users biked, walked or ran to the trail. This seems to indicate that these users were likely nearby residents.



# CHAPTER 3 - NORTHAMPTON TOWNSHIP PLANNING PROCESS

The planning and development of the Northampton Township Master Trail and Bicycle Plan consisted of several phases including:

- Formation of a steering committee to oversee the development of the plan;
- Development of the goals for the planning study;
- Review of previous planning efforts and studies;
- Creation of a community profile:
- Identification of proposed trail and bicycle facilities;
- A prioritization of the proposed trails and bicycle facilities;
- Development and review of the draft plan by the steering committee; and
- Public review and comment period.

#### STEERING COMMITTEE

The development of the plan was overseen by a steering committee comprised of Northampton Township supervisors, township employees, the township engineer and the township solicitor.

> Barry Moore **Township Supervisor** Eileen Silver **Township Supervisor** Frank O'Donnell Township Supervisor **Township Supervisor** Kimberly Rose Adam Selisker **Township Supervisor** Bob Pellegrino **Township Manager**

William Wert Assistant Township Manager Michael Solomon **Township Zoning Officer** Amanda Fuller Township Engineer Kurt Schroeder Township Engineer Joseph W. Pizzo **Township Solicitor Bucks County Planning Commission** Planning Consultant

Primary responsibilities of the committee included:

- Defining the goals and objectives for the trails and bicycle network;
- Assisting in the development of the community profile by providing input on existing conditions and other relevant information;
- Identifying the overall scope and goals for the planning study itself;
- Generating ideas for possible trail routes; and
- Reviewing the findings and recommendations of the trail and bicycle facilities plan.

The Steering Committee met a total of six times. A summary of the key discussion items from each meeting are noted below. Full meeting agendas and meetings are included in Appendix B.

#### February 5, 2019

At the first meeting of the Steering Committee, the two primary tasks undertaken included defining the scope and goals for the planning study itself, and identification of planning areas within the township.

#### PLANNING STUDY GOALS

- Identify preferred trail and bicycle routes;
- Identify opportunities and constraints to the development of those routes;
- Develop an understanding of the potential costs associated with trail and bicycle facility development;
- Identify implementation strategies;
- · Address concerns relative to crime and the impact on property values; and
- · Explore and identify potential sources of funding

In addition to these specific planning study goals, additional items that the committee requested be included as part of the planning process were:

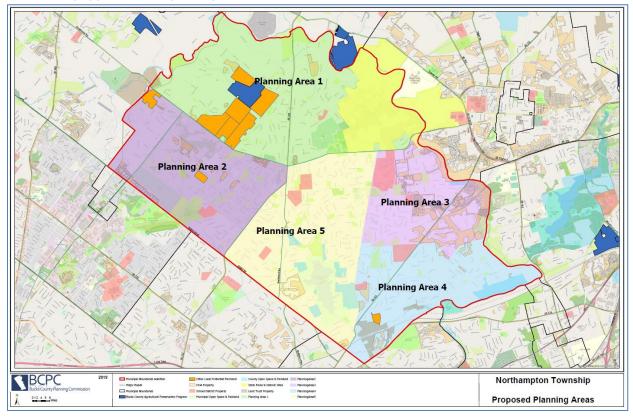
- Providing the safest trail and bicycle facilities for all users regardless of age or ability.
- Emphasizing connections, specifically to parks, recreation centers, schools, and commercial centers.
- Utilizing existing sidewalks to control cost and reach all portions of the township.
- Ensuring that bike lanes are as safe as possible.
- Exploring opportunities for establishing trails on the AQUA PA/Churchville Reservoir property.
- Identifying the potential for a trail or bicycle facilities along Newtown Richboro Road, including making
  use of the old alignment of Newtown Richboro Road to connect to the trail crossing under Newtown
  Richboro Road at Neshaminy Creek to provide access to Tyler State Park.
- Exploring alignment options for a shared use trail between Holland Road and Buck Road.

## **IDENTIFICATION OF PLANNING AREAS**

Recognizing the unique characteristics of various areas of the township, including the extent of development, topography, concentration of resources, transportation network, etc., the steering committee agreed that planning process should be conducted for five separate areas within the township:

TABLE 1 – PLANNING AREA BOUNDARIES

	North Boundary	South Boundary	West Boundary	East Boundary
Area 1	Neshaminy Creek	Almshouse & Newtown-Richboro Roads	Neshminy Creek & municiapl boundary with Warwick Township	Neshaminy Creek
Area 2	Almshouse Road	Bristol Road	Municipal Boundary with Warwick Township	PA Route 232
Area 3	Newtown-Richboro Road	East Holland Road & Stoney Ford Road	Holland Road	Neshaminy Creek
Area 4	East Holland Road & Stoney Ford Road	Neshaminy Creek, Municipal Boundary with Lower Southampton Township, Bristol Road and PA Route 213	Holland Road & PA Route 532	Neshaminy Creek
Area 5	Newtown-Richboro Road	Bristol Road	PA Route 232	Holland Road



MAP 1 – PROPOSED PLANNING AREAS

The features of each planning area, and the proposed trails and bicycle facilities are detailed in Chapter 4.

The remaining five steering committee meetings focused on reviewing potential trail and bike routes as identified by the Bucks County Planning Commission based on specific criteria. At each of these planning meetings, the proposed trails and bicycle routes for one of the five planning areas was presented by the planning consultant. The steering committee then provided feedback and suggestions on the trails and bicycle facilities presented, to ensure that the proposed trails and bicycle facilities being proposed met the needs of Northampton Township residents.

#### March 5, 2019

A total of nineteen (19) trails and bicycle facilities were proposed and discussed, along with several neighborhood bike routes, for Planning Area 1. Specific follow-up items requested included:

- Assessing the potential for a connection between Route 232 and Hatboro Road.
- Determining if bicycle sharrows can be established along Worthington Mill Road from Second Street Pike to the bridge over the Neshaminy Creek.
- Review the proposed road widening plan for the area of Newtown-Richboro Road at Second Street Pike (Route 232) to determine if bike lanes could be incorporated.

#### March 26, 2019

The seven (7) trails and bicycle facilities, and numerous neighborhood bike routes, proposed for Planning Area 2 were reviewed and discussed. Specific discussion items included:

Although the use of the Spring Mill Country Club site to connect the Poet's Walk community to the rest
of the township trail and bicycle facilities network was discussed and discarded, an alternative

connection via a sidewalk along Bristol Road extending from the Poet's Walk neighborhood to Hatboro Road was discussed.

- Specific to Hatboro Road, extending from Almshouse Road to Bristol Road, although the speed limit
  is 35 mph, which meets the requirement for bicycle sharrows, the County is not recommending bicycle
  sharrows due to the Average Daily Traffic counts exceeding 10,000.
- Due to the lack of a bridge, and the expense associated with the cost to construct one, it would not be
  possible to establish a connection between the two segments of Inland Road in the neighborhoods of
  Hidden Meadows and Traymore Manor.

Follow-up items for Planning Area 2 included:

- Review the alignment of the trail that connects Maureen Welsh Elementary to the Northampton Municipal Park.
- Assess the potential for a bike-friendly connection at the intersection of Hatboro and Almshouse roads to connect Highland Farms to Tanner Brothers Dairy.

#### April 9, 2019

This meeting was a discussion of the trails and bicycle facilities proposed for Planning Area 3 including the Neshaminy Greenway Trail, the proposed widening of the sidewalk on the Council Rock South High School property, and along Holland Road between East Holland and Middle Holland Roads. However, the majority of the meeting focused on the Newtown Rail Trail, with a particular focus on the section located between Holland Road and Buck Road. More specifically, the committee agreed that the intent was to identify an alignment for a continuous shared use trail in the area. The various alignment options presented included:

- A shared use trail located exclusively within the SEPTA right-of-way from Holland Road to the Neshaminy Creek Bridge;
- A shared use trail located within the SEPTA right-of-way from Holland Road to the southwest end of Spring Avenue where the trail would leave the SEPTA right-of-way and detour onto the Bucks County Roses property before rejoining the SEPTA right-of-way at the SEPTA bridge over Buck Road and continue east within the SEPTA right-of-way to the Neshaminy Creek; and
- A shared use trail within the SEPTA right-of-way between Holland Road and East Holland Road, connecting to bicycle lanes and sidewalks along East Holland Road up to Old Jordan Road where it would connect to a shared use trail, replacing the existing sidewalk, along the frontage of Holland Middle and Hillcrest Elementary schools, then proceed northeasterly on a shared use trail along the northwest side of Buck Road, eventually reconnecting to the SEPTA right-of-way at the SEPTA bridge over Buck Road, continuing east to the Neshaminy Creek.

The merits, pros and cons, engineering challenges, and cost implications of each were discussed extensively. The key takeaways included:

- The only alignment for a continuous shared use trail from Holland Road to Buck Road is the proposed alignment within the former SEPTA-owned Fox Chase-Newtown rail corridor.
- The shared use trail within the SEPTA right-of-way provides the safest user experience for all types of users while also being the most cost effective.
- The discussion relative to the possibility of placing continuous shared use trails along East Holland Road and Buck Road started with an overview of the minimum right-of-way needed for establishing a trail adjacent to an existing roadway. The minimum right-of-way for placing a 10 foot wide trail adjacent to a two-lane road was cited as 60 feet, or 30 feet from the centerline of the road. This is based upon approximately 29 feet being needed for the travel lanes, buffer, trail and shoulder combined:
  - 12 foot wide travel lane
  - 5 foot wide buffer required between the trail and travel lane
  - 10 foot wide trail
  - 1-2 foot wide shoulder on non-buffered side of trail

- East Holland Road It would be possible to develop a shared use trail along portions of East Holland Road. primarily on township-owned open space and school district property, but other constraints such as limited right-of-way width, the presence of buildings and structures close to the road, and slopes and utility poles adjacent to the road where the trail would need to be placed, would prevent the establishment of a continuous shared use trail along the full extent of East Holland Road.
- Buck Road Two possible alignments were discussed.
  - 1. Southeast side of Buck Road This alignment was determined to not be feasible due to the presence of steep slopes and the presence of an unnamed tributary to the Neshaminy Creek at the SEPTA railroad bridge.
  - Northwest side of Buck Road This alignment is technically feasible but will require significant engineering and involve partnering with both PennDOT and the Hills at Northampton HOA for acquiring the right-of-way needed. More specifically, the existing travel lanes and emergency breakdown/turn lanes would need to be realigned so that the existing emergency lane would become the northbound travel lane, the existing northbound travel lane would become the new southbound travel lane, and the area occupied by the existing southbound lane, combined with the existing right-of-way, would become the area for the trail.
- Everyone agreed that the potential facilities along East Holland and Buck roads did not provide the highest level of safety for all user groups including walkers, hikers, and casual bicyclists. However, although recognizing that the safety provided is not the same as that provided by a continuous off-road shared use trail, the inclusion of these facilities could improve safety for experienced bicycle riders so these facilities are included as complementary facilities to the Newtown Rail Trail.
- Everyone agreed on the benefit of placing the trail adjacent to the SEPTA right-of-way on the Bucks County Roses property versus staying within the SEPTA right-of-way.

These alignments are discussed in more detail in Chapter 5.

#### April 23, 2019

A total of twenty-seven (27) proposed trails and bicycle facilities, and numerous neighborhood bike routes, proposed for Planning Area 4 were reviewed and discussed. Specific discussion items included:

- The challenges of establishing a trail, running along Ironworks and Mill Creeks, from Churchville Reservoir to Playwicki Park, including steep slopes, property easements needed, and wetlands were discussed.
- The opportunity to connect several neighborhoods via a trail along Buck Road, extending from Holland Road to Briarwood Drive, with a connection to the existing trail on the Holland Middle School and Hillcrest Elementary School properties, was presented.

Following a review of the proposed trails and bicycle routes, and the extensive network being proposed for the township in total, concerns were raised relative to the potential costs associated with developing the network. The planning consultant advised the committee of the following:

- Many of the facilities reviewed and proposed are in the form of bicycle sharrows, sidewalks and neighborhood bike routes. The committee was then reminded that these are all significantly less expensive than dedicated bike lanes, and shared use trails.
- Neighborhood bike routes would simply require the use of signs to steer bicyclists in the appropriate direction.
- Some of the proposed trail segments, such as the SEPTA corridor, would be developed by the County.
- The costs for certain trail segments could be transferred to developers as part of the development or redevelopment process.
- Many of the shared use trail segments proposed are very short in length.
- The development of this network is a long-term project.

#### May 14, 2019

A total of thirty one (31) trails and bicycle facilities were proposed and discussed, along with several neighborhood bike routes, for Planning Area 5. Key trails highlighted and discussed included:

- Newtown Rail Trail, and proposed connector trails, between Bristol Road and Holland Road;
- Churchville Lane including a proposed floating bridge/boardwalk over the reservoir running adjacent to Churchville Lane;
- Opportunities for trails on the AQUA PA/Churchville Reservoir property;
- Bicycle sharrows along Upper Holland Road between Bustleton Pike and Holland Road; and,
- A combination of bicycle lanes and a shared use trail along Lower Holland Road between Chapel Drive and Holland Road.

There was also discussion regarding the lack of a proposed trail along Ironworks Creek on properties owned by Bucks County and Northampton Township located between the Green Valley and Pheasant Run neighborhoods, extending from Lower Holland Road to Elm Avenue. While recognizing that the upper stretch of this area off of Lower Holland Road has an existing access road that is already used as a trail to access the pond located approximately 1,100 feet southeast, extending the trail in this area and beyond would be very costly due to the significant amount of wetlands in the area.

A township-wide map showing all of the proposed trails and bicycle facilities was also presented as a reminder of the overall connectivity to be created via this proposed network, and to assess any potential gaps in the proposed network.

No specific follow-up items were identified relative to specific trails or bicycle facilities. The township did request some time to review the proposed trails and bicycle facilities but authorized the planning consultant to move forward with the development of the planning study document.

#### REVIEW OF PRIOR PLANNING EFFORTS AND STUDIES

To ensure consistency between this Plan and other related planning efforts, the following related plans were reviewed, and where applicable, their recommendations incorporated into the development of this plan.

# Bucks County Bicycle Master Plan (2012)

- Identifies two connections within Northampton Township. Connections are defined as routes that provide or have an opportunity to provide a safe bicycle facility for both transportation and recreational purposes. The connections include:
  - The Neshaminy Creek Greenway (along the Neshaminy Creek)
  - State Route 532

# Northampton Township Comprehensive Plan (2018)

• Encourages the use of bike paths and sidewalks to reduce trips of under 2 miles.

# Northampton Township Comprehensive Parks and Recreation Plan Update (2018)

- Establish accessible pedestrian and bicycle routes between parks, schools, and other community nodes.
- Encourage alternative modes of transportation throughout the township
- Establish ordinance/design standards for pedestrian/bicycle routes in accordance with PennDOT Standards

#### Richboro Village Master Plan (2018)

Recommends the implementation of a complete streets program for the Village of Richboro, such style
of development is consistent with bike-friendly community design.

## Holland Village Master Plan (2014)

Identifies the potential of bike lanes to run along Buck Road through the Village of Holland

# Churchville to Playwicki Park (2008)

• Sets a vision to link the Churchville Nature Center to Playwicki Park via a greenway that roughly parallels the Mill and Neshaminy Creeks.

## Northampton Township Sidewalk Prioritization Study (2005)

- Recommends the use of trails to address several needs:
  - Serve as a connection for the mobility impaired to enjoy the recreation facilities the township offers
  - Use unpaved trails in passive parks as an environmental resource protection strategy
  - Identifies the bicycling as a aspirational activity for all age groups from 6 to 65+ to combat inactivity
- Developed a list of key connections, implementation timeline, and focus areas to expand to sidewalk network within the township. This study can help supplement and fill the gaps with in the township's sidewalk network.

#### **CREATION OF A COMMUNITY PROFILE**

To ensure that the trails and bicycle network addresses the specific needs of the Northampton Township community, part of the plan development process consisted of developing a Northampton Township Community Profile. This profile, which is contained in Chapter 3 of this study, provided an overview of the community by analyzing and inventorying several aspects of the community including:

- Context of the community in the region;
- Land Use characteristics;
- · Demographics;
- Natural Features including water resources, woodlands, topography, riparian corridors, floodplains, and agricultural lands;
- Man-Made Features including the road network, utility corridors, existing trails, commercial districts, schools, and parks and open space; and
- Historic Resources.

#### IDENTIFICATION OF PROPOSED TRAILS AND BICYCLE FACILITIES

As discussed previously, the proposed trails and bicycle facilities identified in this document were derived from discussions between the township Board of Supervisors, township staff, and the Bucks County Planning Commission.

Key factors considered in identifying potential trails and bicycle facilities included:

- Establishing connectivity to adjacent neighborhoods, commercial areas, park and recreational sites, historic resources, and schools;
- Ensuring that routes are safe and well protected;
- Utilizing sidewalks and existing trails to maximize the network's efficacy;
- Ensuring that network can accommodate a variety of different age groups and user abilities; and
- Designing trail and bicycle facilities to minimize future maintenance requirements.

To assess the feasibility of each proposed trail and bicycle facility, and to identify potential constraints and opportunities, a variety of approaches were used including:

- Site visits and field work;
- Bucks County Geographic Information System (GIS) mapping;
- Aerial photography; and
- An assessment of the roads network in terms of right-of-way width, pavement width, speed limits, and average daily traffic to determine the opportunity for sidepath trails, bicycle lanes and bicycle sharrows.

While all of the trails and bicycle facilities proposed are technically possible to develop, township officials need to consider a variety of factors in determining those to be developed including safety, the needs and concerns of adjacent residents, and the ability of the township to fund the costs. Additionally, it should be noted that the development of a township-wide trail and bicycle facilities network is a long-term project given the need to identify sources of funding for both construction and ongoing maintenance of the trails, the time involved in negotiating trail easements where needed, the safety concerns needing to be addressed as well as the engineering and permitting process involved.

#### PRIORITIZATION OF PROPOSED TRAILS AND BICYCLE FACILITIES

The planning process identified 116 different potential trail segments and bicycle facilities, 8 new sidewalk segments, and 52 Neighborhood Bike Routes. Given the magnitude and complexity of such a proposed network, and to assist in implementation of the plan, the next step in the planning process involved the development of a system to prioritize these various segments for implementation.

The system used to evaluate each trail segment consisted of four steps:

# 1. Identification of key criteria reflective of the goals of the network including:

- Magnitude of cost to Northampton Township;
- Ownership of the right-of-way or property on which the trail or bike facility would be located;
- Presence of environmental constraints or extensive engineering requirements;
- Connectivity to neighborhoods as reflected by housing counts;
- Connectivity to schools;
- Connectivity to commercial areas;
- Connectivity to parks, existing trails, senior centers and libraries;
- Connectivity to other proposed trails and bicycle facilities;
- User safety

# 2. Consolidation of trail segments

The 116 different trail segments were consolidated into larger segments to represent more cohesive trails. For example, a proposed trail along Buck Road, initially consisting of 9 separate segments, reflective of different placements, right-of-way ownership, etc. were consolidated into one trail segment for evaluation. The consolidation process resulted in 52 consolidated trail and bicycle facilities to be evaluated. Similarly, the two different alignment options for the Newtown Rail Trail each consisted of between 8 to 9 segments.

# 3. Evaluation/Scoring of each consolidated trail

These consolidated trails were then evaluated and scored against the key criteria identified. The higher the score the more likely the trail would be considered a priority trail for the township. The top performing trails were then reviewed again by staff to ensure they helped attain the overarching goals identified in this plan. This final review then identified the arterial segments that should be priority trails and bicycle facilities for the township. Characteristics of higher and lower scoring trails are outlined in the following table:

TABLE 2 - CHARACTERISTICS OF HIGHER AND LOWER SCORING TRAILS

Higher Scoring Trails	Lower Scoring Trails			
Providing a high degree of user safety	Low degree of user safety			
Providing greater connectivity	Isolated or little connectivity			
Lower to moderate cost to township	High direct cost to township			
Public ownership of right-of-way / limited need for easements	Requires an easement			
Lack of environmental constraints / significant engineering needed	Significant environmental impacts or obstacles			

Ranking of Trails – The identification of the top priority trails and bicycle facilities, including specifics on each is included in Chapter 5. Full details of the prioritization and ranking process are included in Appendix C.

## CHAPTER 4 - NORTHAMPTON TOWNSHIP REGIONAL SETTING

#### REGIONAL SETTING

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

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

MAP 2 - NORTHAMPTON TOWNSHIP REGIONAL SETTING

#### LAND USE

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

TABLE 3 - LAND USE CHARACTERISTICS, 2012

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

## **DEMOGRAPHICS**

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

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

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

TABLE 4 - DEMOGRAPHICS, 2017

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

Source: American Community Survey

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

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

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

TABLE 5 - TARGET POPULATION GROWTH TRENDS

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

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

TABLE 6 - POPULATION AND HOUSING GROWTH

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

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

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

## **NATURAL FEATURES**

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

#### Water Resources

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

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

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

## **Topography**

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

## Riparian Buffers

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

## Floodplains

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

#### Woodlands

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

## **Agricultural Land**

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

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

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

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

#### MAN-MADE FEATURES

#### Road Network

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

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

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

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

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

#### Utilities

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

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

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

#### **Trails**

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

TABLE 7 – EXISTING TRAILS

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

## Parks and Open Space

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

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

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

TABLE 8 - PARKS AND OPEN SPACE RESOURCES

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

<sup>\*</sup>The Churchville Nature Center is a part of a 700 acre preserve, 65 acres of which are readily accessible to the public

#### **Schools**

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

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

TABLE 9 - SCHOOLS AND ENROLLMENT

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

<sup>\*</sup>Students attending Council Rock Schools outside of Northampton are not included.

#### **Commercial Areas**

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

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

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

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

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

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

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

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

#### HISTORIC RESOURCES

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

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

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

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

Table 10 – Historic Resources

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

# CHAPTER 5 - THE TRAILS AND BICYCLE FACILITIES NETWORK

## TYPES OF TRAILS AND BICYCLE FACILITIES

The Northampton Township trail and bicycle network will be comprised of several types of facilities:

TABLE 11 – Types of Trails and Bicycle Facilities

	Trail Type	Description of Trail Type
	Sidewalk	A path with a hard surface on which people walk along one or both sides of a road. The intent is to provide a safe, two-way shared use area for pedestrians where a shared use path cannot be accommodated.
	Shared Use Trails	A trail that permits more than one user group including joggers, walkers, hikers, bicyclists, to occupy the trail at the same time. As the trail is designed to accommodate multiple users including wheeled traffic, these trails would most often be constructed of a hard paved or crushed stone surface. Provides the highest degree of safety for cyclists and pedestrians since these are completely separated from vehicular traffic.
	Floating Boardwalk	Floating Boardwalks are used to span water bodies. Typically used to cover short distances they help promote connectivity by traversing these disruptive barriers.
	Rail Trail Facilities	This type of trail facility consists of utilizing a railroad right- of- way as a pathway for a shared use trail. The rails and ties are removed and the pathway graded for bicyclist and pedestrians alike. User safety is on-par with other Shared Use Trails in that interaction with vehicles is very limited, with the exception of any required road crossings.
Ø₹D	On-Road Bicycle Sharrows	A shared right-of-way on roadways designated with appropriate signage and pavement markings to help encourage use and warn motorists that bicycles may be present in the roadway. Do not provide much safety for bicyclists since they are still in vehicular traffic lanes.
1670	Dedicated Bike Lane	A right-of-way fully dedicated to bicycle traffic. Dedicated bike lanes may have a permanent barrier or be a painted line that separates the cyclist from traffic and pedestrians. While providing increased safety over On-Road Bicycle Sharrows, are typically not used by younger and/or inexperienced riders.
BIKEWAY  TROCK LO  CREEK PARK	Neighborhood Bike Route	This is a simplest form bike facilities which is typically no more than a sign directing residents on the optimal route out of their neighborhood. Utilizes existing roads and is only appropriate for low volume residential roads.

## TRAIL AND BICYCLE FACILITIES DESIGN STANDARDS

Given the different types of trails and bicycle facilities that will be part of the township trail and bicycle facilities network, and given the potential for different types of the same type of trail in terms of width, slope, etc., the township will need to consider adopting trail design standards for trails and pedestrian and bicycle facilities. These standards are designed to:

- Promote consistency of standards and guidelines across the township trail and bicycle facilities network.
- Increase user safety, comfort and convenience.
- Promote universal access, where possible, to users with a broad range of skill levels and abilities, including children, older adults and people with disabilities.
- · Minimize impact to sensitive natural resources.
- Increase the ease of long-term trail and facility maintenance by recommending the use of materials and construction practices appropriate for the trail being developed.

The Northampton Township trail and bicycle facilities standards outlined in Table 9 were derived from multiple sources and are intended as a planning tool to allow for flexibility in design, appropriate to the location, site-specific environmental conditions, and expected users. However, the guidelines are not intended to be engineering specifications or replace existing mandatory or advisory state and federal standards including:

- American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design, and Operation of Bicycle Facilities
- ADA Accessibility Guidelines for Buildings and Facilities (ADAAG)
- ADA Standards for Accessible Design
- Federal Access Board Accessibility Guidelines for Outdoor Developed Areas (AGODA)
- Public Right of Way Accessibility Guidelines (PROWAG)
- Manual on Uniform Traffic Control Devices (MUTCD)
- Pennsylvania Trail Design & Development Principles

TABLE 12 - RECOMMENDED TRAIL & BICYCLE FACILITIES STANDARDS

Facility	Minimum Width	Minimum Shoulder Width	Sur	face	Runnin	g Slope	Cross	Slope	Minimum Vertical Clearance	Signage
		Each Side	Desired	Acceptable	Minimum	Maximum	Minimum	Maximum	Each Side	
					Trails					
Shared Use Trail – Asphalt or Crushed Stone	10 feet	2 feet	Asphalt	Crushed Stone	1%	5%**	1%	2%	8 feet ***	Trailhead and Wayfinding Signage
Floating Boardwalk	10 feet	-	Wood/ Synthetic	-	1%	5%	1%	2%	8 feet ***	3" edge protection for boardwalks 30" or less above grade /42" handrails for 30"+ above grade
Rail Trail	12 feet	2 feet	Crushed Stone	-	1%	5%	1%	2%	8 feet ***	Trailhead and Wayfinding Signage
				On-R	oad Bike Fac	ilities				
On-Road / Bike Sharrows	-	-	Asphalt	Asphalt	-	-	-	-	8 feet	MUTCD: Shared Lane Markings and W6-101
Bike Lanes	5 feet	-	Asphalt	Asphalt	-	-	-	-	-	MUTCD: Bike Lane Sign R3 -17
Neighboord Bike Routes	-	-	Asphalt	Asphalt	-	-	-	-	-	MUTCD: Signange in accordance with 9B-1

Anything less than 5 feet requires a passing space at intervals no less than 1,000 feet

## TRAIL AND BICYCLE FACILITIES DESIGN ELEMENTS

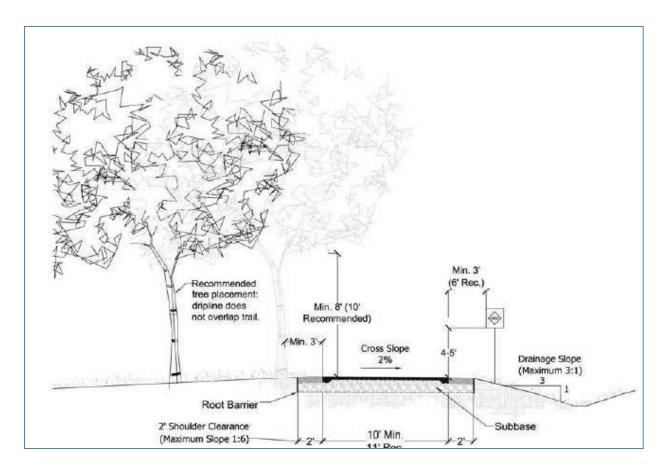
## Trail Surface, Width, Slope and Vertical Clearance

As shown in Table 9, trail widths, surfaces, slopes and vertical clearances for the trails as part of the Northampton Township trail and bicycle facilities network will vary dependent on the type of facility. These differences are driven by the type of users the trail is designed to accommodate. For a bike lane can be narrower and a directly parallel a street whereas with sharrows the bicycle rider would share the road with cars. In contrast, the recommended width for shared use trails is 10 feet with surfaces needed to accommodate wheelchairs, bicyclists and other user groups.

The recommended typical design cross-section for a shared use trail is shown below. This design would be modified to fit various environmental conditions that are encountered.

<sup>\*\*</sup> Following variances are allowable: 8.3 percent maximum for distances up to 200 feet, 10 percent maximum for distances up to 30 feet /12.5 percent maximum for up to 10 feet

<sup>\*\*\*</sup> Minimum clearance overpasses: 10 feet



## Trail Safety Signage

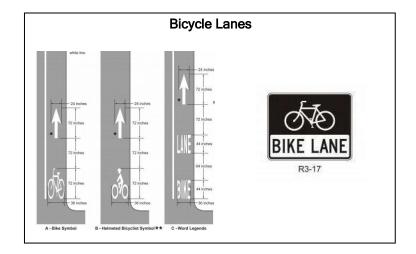
Although the trail and bicycle facilities network is designed to minimize the extent to which users will be on-road, there may be sections where the trail will need to utilize existing streets or roadways which carry low volumes of motor vehicle traffic. In these situations, the *Manual on Uniform Traffic Control Devices* recommends a combination of signage and on-road pavement markings to help improve pedestrian safety.

<u>Bicyclists in Roadway:</u> The regulations and signage requirement vary dependent upon the speed limit of the road:

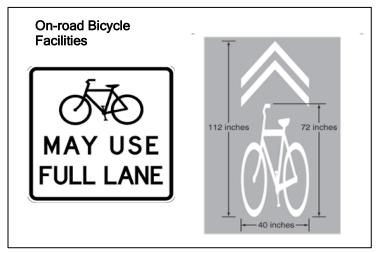
- Roads with a speed limit of greater than 35 miles per hour: Section 9B.18 of the Manual on Uniform
  Traffic Control Devices specifies that Share the Road signs should be used on roadways with a speed
  limit above 35 mph where there is a need to warn motorists to watch for bicyclists traveling along the
  roadway.
- Roads with a speed limit 35 miles per hour or less: Section 9C.07 Shared Lane Marking specifies the
  parameters for the use of Shared Lane Markings, also known as Bicycle Sharrows. Specifically,
  Shared Lane Markings may be used to:
  - Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same trafficlane;
  - Alert road users of the lateral location bicyclists are likely to occupy within the traveled way;
  - Encourage safe passing of bicyclists by motorists; and
  - o Reduce the incidence of wrong-way bicycling.

Examples of the recommended pavement markings and signage are shown on the following page.

#### Manual on Uniform Traffic Control Devices - Pavement Markings and Signage







In addition to signage and pavement markings being used to alert motorists of the existence of trail users within or adjacent to the roadway, Rectangular Rapid Flashing Beacons and clearly marked crosswalks will be used anytime the trail crosses a roadway where the crosswalk approach is not controlled by a yield sign, stop sign, or traffic-control signal; or at a crosswalk at a roundabout.

## **Emergency Signage**

To improve emergency response to trail incidents, it is recommended that as the Northampton Township trail and bicycle facilities network grows, consideration be given to incorporating an Emergency Locator System. This system would place signage markers with unique location identifiers at every



eighth of a mile. These assigned geographic coordinates would allow the Bucks County Department of Emergency Communications, to easily determine the best route for reaching the emergency.

#### Parking Areas and Trailheads

Trailhead parking areas provide points of access for trail users. These access points will not only accommodate people from the immediate area, but those who have traveled farther to use the trail. It is anticipated that the majority of trail users will be local residents who will likely walk or bike to the trail from

their homes; however, there may be some trail users who will choose to drive. At this time, the intent is not to construct any specific trailhead parking areas, but instead to make use of existing parking lots available at township facilities, schools, and commercial centers. As each trail segment is developed, the design phase should determine the need for any additional trailheads and consider where these might be feasible.

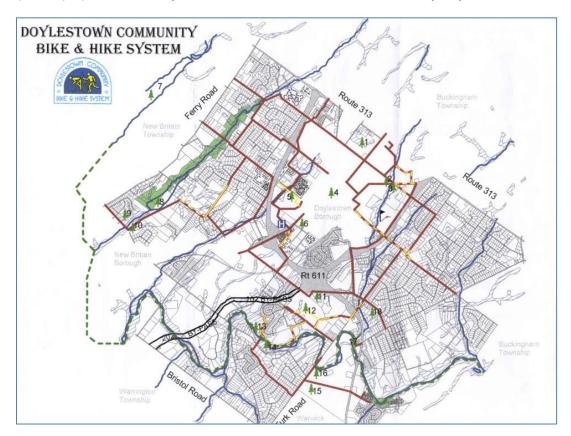
#### **Physical Barriers**

In certain areas, physical barriers such as wood rail fencing, dense shrubbery, or other type of physical barrier may need to be installed along the trail to prevent users from traversing the side slopes. Typically this barrier should be installed along the top of slope to protect trail users. In general, the greater the height of the drop-off, the greater the need for protection. According to AASHTO guidelines, the fence should be set at a height of 3.5 feet (42 inches). Rub-rails are recommended at a height of approximately 3-feet from grade to prevent snagging of handlebars. All fences should be smooth and free of protruding objects such as bolts.

# EXAMPLE OF A SIMILAR TRAIL & BICYCLE FACILITIES NETWORK

The Doylestown Community Bike and Hike system is a similar trail network to what is proposed for Northampton Township. The Doylestown Community Bike and Hike Committee (DBHC) was established with the expressed goal of connecting principal population centers, places of work, schools, commercial areas, historical and cultural sites, park and recreation areas, mass transit and other intermodal connections in both Doylestown Township and Doylestown Borough. Over 26 miles of bicycle and hike paths have been established, contributing greatly to the health, safety and well-being of Doylestown residents. The rapid growth of Doylestown Township caused main roads and smaller roads to become very congested, with access to Doylestown becoming dangerous for pedestrians and bicyclists.

This trail system features a combination of both paved asphalt trails, natural surface and crushed stone surfaces and includes trails within the township's park system, trails along the right-of-way of roads, trails behind private properties, and bicycle facilities such as the Route 202 Parkway bicycle lanes.



## Doylestown Community Bike and Hike System

















#### THE TRAILS & BICYCLE ROUTE NETWORK

The Trail and Bicycle Plan Map provided at the end of this chapter illustrates the proposed Northampton Township trail and bicycle network. Trails and bicycle routes traverse parkland, open space, private property, and include crushed stone trails, paved asphalt trails, boardwalks, and on-road bicycle facilities. Upon analysis of documents, mapping, site conditions, right-of-way, speed limits, and road widths, a total of 116 trails and bicycle facilities segments have been proposed. In addition, 53 Neighborhood Bike Routes are also identified throughout the township. In total, the network encompasses 101.5 miles as shown in Tables 13 and 14.

One of the goals was to provide connectivity throughout the township, as well as have trails be off-road to the extent possible. However, various barriers prevented full off-road connectivity. There are areas of the township that do not have trails suggested or where off-road trails are not possible. This is primarily a function of environmental constraints. A total of 65 Shared Use Trail segments encompassing 18.5 miles are proposed.

Many on-road bicycle facilities segments have been identified in the plan including dedicated bicycle lanes (11 segments/5.0 miles), roads with bicycle sharrows (29 segments/26.6 miles), and Neighborhood Bike Routes (53 segments/45.4 miles). These will be fairly inexpensive to implement as they primarily involve the installation of signage, avoiding the additional maintenance requirements of bicycle sharrows painted on the road. As with off-road trails, bicycle lanes were recommended over bicycle sharrows where possible due to the separation of motorists from bicyclists. However, in those instances where pavement widths or other constraints would not allow for dedicated bicycle lanes, on-road routes with bicycle sharrows were recommended. However, there were also instances where traffic volumes and/or speed limits would not allow for us to recommend bicycle sharrows.

In addition to trails and bicycle facilities, a total of 11 sidewalk segments have been proposed. These include 3 segments that are greater than 0.25 miles in length and will serve as trails in areas where conditions would not allow for a shared use trail. The remaining 8 sidewalk segments, noted in the plan as SW, are very short segments that primarily serve to fill in gaps in the system.

The remainder of the network is comprised of the proposed Newtown Rail Trail (8 segments/4.48 miles).

TABLE 13	<ul><li>PROPOSED</li></ul>	TRAIL & E	BICYCLE F	-ACILITIES (	SEGMENTS BY	TYPE OF F	-ACILITY BY F	PLANNING A	AREA)
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Area	Shared Use Trails / Boardwalk	Newtown Rail Trail	Bike Lanes	Bike Sharrows	Sidewalks	Total Trails & Bike Facilities	Neighborhood Bike Routes	Total
1	9	-	2	9	-	20	3	23
2	4	-	1	3	4	12	14	26
3	17	4*	4	5	4	34*	7	41
4	15	1	3	6	2	27	11	38
5	20	3	1	6	1	31	18	49
Total	65	8*	11	29	11	124*	53	177

TABLE 14 - PROPOSED TRAIL & BICYCLE FACILITIES (MILEAGE BY TYPE OF FACILITY BY PLANNING AREA)

Area	Shared Use Trails / Boardwalk	Newtown Rail Trail	Bike Lanes	Bike Sharrows	Sidewalks	Total Trails & Bike Facilities	Neighborhood Bike Routes	Total
1	2.67	-	1.27	11.04	-	14.98	3.36	18.34
2	1.30	-	0.92	3.26	1.05	6.53	12.14	18.53
3	5.11	2.35*	1.84	4.01	0.64	13.95*	6.32	19.63
4	4.44	0.22	0.66	4.02	0.48	9.81	9.03	18.63
5	5.02	1.91	0.30	4.29	0.31	11.83	14.51	26.34
Total	18.54	4.48*	4.99	26.62	2.48	57.11*	45.36	101.48

Segment 48 and 48A are counted once in the number of segments and mileage since they represent different alignments of the same length for the same trail corridor

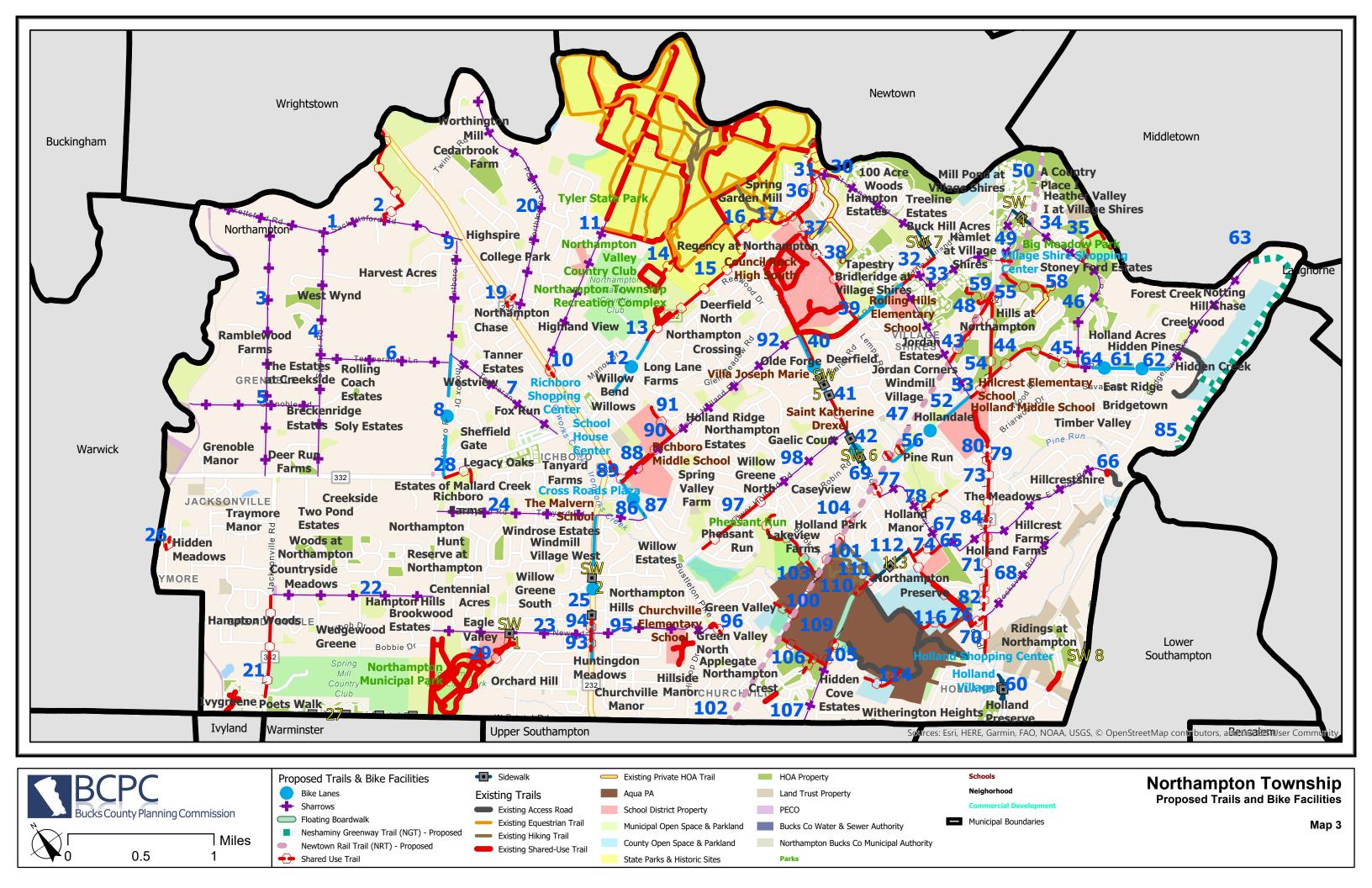


TABLE 15 - PROPOSED TRAIL & BICYCLE FACILITIES BY TYPE

aamant	Location	Regin and End Paints	Planning Area	Leng
egment		Begin and End Points	Planning Area	(Mile
2 10	Bryan's Farm (Neshaminy Greenway Trail)	Sackettsford Road to Neshaminy Creek	1	0.8
13	Second Street Pike Newtown Richboro Road	Highland Drive to Twining Ford Road  Frontage of Northampton Township Recreation Complex	1	0.0
14	Tyler State Park	Northampton Township Recreation Complex to No. 1 Lane Trail	1	0.4
15	Newtown Richboro Road	Frontage of Tyler State Park	1	0.6
16	Tyler State Park	Portion of Cooper Trail	1	0.3
17	Tyler State Park	Copper Trail to Newtown Richboro Road	1	0.0
18	Newtown Richboro Road	Cooper Trail Connection to Spring Garden Mill Road	1	0.0
	Advent Lutheran Church/Northampton Bucks County			
19	Municipal Authority	Second Street Pike to Anselm Drive	2	0.
21 26	Jacksonville Road Hidden Meadows Connector	Ashley Drive to Pulinski Road Hill Road to Steam Whistle Drive	2	0.
28	Richboro Farms Connector	Joshua Drive to intersection of Hatboro Road and Almshouse Road	2	0.
29	New Road Trailhead & Maureen Welsh Elementary School Trail (In Design)	New Road to Northampton Municipal Park	2	0.:
30		Langharna Diayara Thaatar/Caring Cordon Mill to Ct. Langarda Bood	3	0.
32	Neshaminy Greenway Trail	Langhorne Players Theater/Spring Garden Mill to St. Leonards Road	3	0.
35	Neshaminy Greenway Trail Neshaminy Greenway Trail	St. Leonards Road to Rolling Hills Elementary School Big Meadow Park	3	0
	-	-		
36 37	Newtown Richboro Road (PennDOT ROW)	Rock Way to St. Leonards Road	3 3	0.
	Council Rock High School South	Richboro Road to Middle Holland Road		0.
38	Rock Way		3	0.
41	Holland Road	Vandeerver Avenue to Rotterdam Road West	3	0.
44	East Holland Road	Buck Road to Belmont Way	3	0.
45	East Holland Road	Belmont Way to Stoneyford Road	3	0.
51	East Holland Road (West side ROW)	Amsterdam Avenue to Sidewalk at Pine Run	3	0.
53	East Holland Road	Old Jordan Road to Buck Road	3	0.
54	Buck Road	East Holland Road to Newtown Rail Trail Bridge	3	0.
55	Buck Road to Newtown Rail Trail	Newtown Rail Trail to Buck Road	3	0.
56	Newtown Rail Trail Connector	East Holland Road to Newtown Rail Trail	3	0.
57	Newtown Rail Trail Connector	East Village Road to Newtown Rail Trail	3	0.
58 59	Newtown Rail Trail Connector - Hills of Northampton  Newtown Rail Trail Connector - Village Shires	Existing Trail to Newtown Rail Trail  Potters Place to Newtown Rail Trail	3	0.
59	Neighborhood	Pollers Place to Newtown Rail ITali	3	0.
70	Buck Road	Crescent Drive to Holland Road	4	0.
71	Buck Road	Mallard Road to Northampton Presbyterian Church	4	0.
72	Buck Road	Northampton Presbyterian Church Frontage to E Heron Road	4	0.
73	Buck Road	Pine Run Creek Bridge/Woodlake Drive to Kings Way Drive	4	0.
74	Holland Road	Hope Road to Churchville Lane	4	0.
75	Holland E.S./Lower Bucks Holland Outdoor Recreation	Crescent Drive to Holland Road	4	0.
76	Rocksville Road	Holland Road to Buck Road	4	0.
77	Holland Road	E Patricia Road to Newtown Rail Trail	4	0.
78	Pine Run	Beverly Road/Mallard Road/Woodlake Drive	4	0.
79	Buck Road	Kings Way Drive to start of sidewalk south of Forrest Drive	4	0.
80	Buck Road	Pine Run Frontage at Forrest Drive	4	0.
81	Buck Road	TMP 31-031-001 & 175' SW from Mallard Road	4	0.
82	Buck Road	Rocksville Road to TMP 31-031-001	4	0.
85	Neshaminy Greenway Trail (Proposed)	Bridgetown Pike to Playwicki Park	4	2.
84	Buck Road	E Heron Road to Woodlake Drive	4	0.
88	Upper Holland Road/Richboro Middle School	Bustleton Pike to just west of Torresdale Drive	5	0.
89	Bustleton Pike & Upper Holland Road	Second Street Pike to Township Road	5	0.
90	Upper Holland Road	Township Road to Richboro Elementary School Trail	5	0.
91	Richboro Elemenary School	Cedar Drive to Upper Holland Road	5	0.
93	Second Street Pike	Cherry Blossom Drive to New Road	5	0.
94	Second Street Pike	New Road to Heather Road	5	0.
96	Bustleton Pike	Hilltop Drive to Green Valley Drive	5	0.
97	Lower Holland Road	Chapel Drive to Lark Drive	5	0.
99	Newtown Rail Trail Connector Trail	Pheasant Run Park to Elm Avenue	5	0.
100	Newtown Rail Trail Connector Trail	Schan Drive to Newtown Rail Trail	5	0.
101	Newtown Rail Trail Connector Trail	Brook Drive, Aqua Drive & Cameron Drive	5	0.
105	Newtown Rail Trail Connector Trail	Churchville Lane to Newtown Rail Trail	5	0.
106	Northampton Crest Connector Trail	Radcliffe Drive to Aqua PA Trail	5	0.
108	Churchville Lane	Northampton Crest to Churchville Reservoir	5	0.
108		·	5	
	Churchville Lane*	Floating Boardwalk  Churchville Poserveir to Churchville Nature Center		0.
110	Churchville Lane	Churchville Reservoir to Churchville Nature Center	5	0.
111	Churchville Lane	Churchville Nature Center	5	0.
114	Bucks County - Churchville Reservoir Connector	Lake Drive to AQUA PA property	5	0.
115	Churchville Reservoir Connector Trail	Bucks County (Lake Drive) to Churchville Access Road	5 5	0.
116	Churchville Farm	Churchville Reservoir to Holland Road		0.

TABLE 15 – PROPOSED TRAIL & BICYCLE FACILITIES BY TYPE (CONTINUED)

Newtown Rail Trail					
Segment	Location	Begin and End Points	Planning Area	Length (Miles)	
47	SEPTA owned right-of-way	East Holland Road to Old Jordan Road	3	0.77	
48	SEPTA owned right-of-way	Old Jordan Road to Buck Road	3	0.56	
48A	Newtown Rail Trail Alternate - Bucks County Roses'	Bucks County Roses	3	0.56	
49	SEPTA owned right-of-way	Buck Road to Stoneyford Road	3	0.51	
50	SEPTA owned right-of-way	Stoneyford Road to Neshaminy Creek	3	0.52	
69	SEPTA owned right-of-way	Holland Road to East Holland Road	4	0.22	
102	SEPTA owned right-of-way	Bristol Road to Bustleton Pike	5	0.32	
103	SEPTA owned right-of-way	Bustleton Pike to Churchville Nature Center	5	1.00	
104	SEPTA owned right-of-way	Churchville Nature Center to Holland Road	5	0.60	
	'mileage not included in final amount since alternative	Total Proposed Newtown Rail Trail		4.48	

Bike Land	es			
Segment	Location	Begin and End Points	Planning Area	Length (Miles)
8	Hatboro Road	Almshouse Rd to Temperance Lane	1	0.84
12	Newtown Richboro Road	West Pickering Bend to Harmony Drive	1	0.43
25	Second Street Pike	Windsor Drive to Tanyard Road	2	0.92
39	Middle Holland Road	Rock Way to Old Jordan Road	3	0.38
40	Holland Road	Rotterdam Road West To Middle Holland Road/Upper Holland Road	3	0.46
42	Holland Road	East Holland Road to Lower Holland Road/Vanderveer Avenue	3	0.28
52	East Holland Road	Bend near Pine Run to Old Jordan Road	3	0.72
60	Holland Village - Buck Road	Elaine Drive to Holland Commons & Holland Village SC	4	0.15
61	E Holland Road	850' Frontage of East Ridge & Hidden Pines up to Pepperell Dr/ Stallion Cir	4	0.16
62	E Holland Road	Pepperell Dr/Stallion Cir to Bridgetown Pike	4	0.35
87	Bustleton Pike	Tanyard Road/Anthony Drive to Upper Holland Road	5	0.30
		Total Propos	ed Bicycle Lanes	4.99

Segment	Location	Begin and End Points	Planning Area	Length (Miles)
1	Sackettsford Road (Neshaminy Greenway Trail)	New Hope Ivyland RR to Second Street Pike	1	1.21
3	Old Jacksonville Road	Almshouse Road to Sackettsford Road	1	1.75
4	Spencer Road	Almshouse Road to Sackettsford Road	1	1.66
5	Grenoble Road	New Hope Ivyland RR to Spencer Road	1	0.89
6	Temperance Lane	Spencer Rd to Hatboro Rd	1	0.89
7	Temperance Lane	Hatboro Rd to Almshouse Rd	1	0.91
9	Hatboro Road	Temperance Lane to Sackettsford Road	1	0.78
11	Twining Ford Road	Second Street Pike to Tyler State Park	1	1.16
20	Worthington Road	Second Street Pike to Neshaminy Creek	1	1.79
22	Pulinski Road	Jacksonville Road to Hatboro Road	2	1.10
23	New Road	Hatboro Road to Second Street Pike	2	1.09
24	Tanyard Road	Hatboro Road to Second Street Pike	2	1.08
31	Neshaminy Greenway Trail	Richboro Road to Middle Holland Road	3	1.06
33	Neshaminy Greenway Trail	Middle Holland Road to Stoneyford Road	3	0.65
34	Neshaminy Greenway Trail	East & West Village Road to Big Meadow Park	3	0.59
43	Old Jordan Road	Middle Holland Road to East Holland Road	3	0.89
46	Stoneyford Road	Big Meadow Park to East Holland Road	3	0.82
63	Bridgetown Pike	East Holland Road to Newtown-Langhorne Road	4	1.10
64	E Holland Road	Stoneyford Road to widening of road 850' northwest of Pepperell Drive	4	0.10
65	Crescent Drive, Mallard Road & Heron Road	Holland Elementary School to Buck Road	4	0.41
66	E Heron Road	Buck Road to Bridgetown Pike	4	0.97
67	E Patricia Road/Beverly Road	Holland Road to Crescent Drive	4	0.67
68	Rocksville Road	Buck Road to Wooden Bridge Road	4	0.77
86	Tanyard Road	Second Street Pike to Bustleton Pike	5	0.34
92	Upper Holland Road	Bustleton Pike to Holland Road	5	1.57
95	New Road	Second Street Pike, Mehler Drive, Hilltop Drive to Bustleton Pike	5	0.88
98	Lower Holland Road	Lark Drive to Holland Road	5	0.66
107	Churchville Lane	Bristol Road to Hidden Cove Drive	5	0.51
112	Churchville Lane	Lakeside Drive to Holland Road	5	0.32
		Total Proposed Bik	a Routes/Sharrows	26.62

Sidewalks				
Segment	Location	Begin and End Points	Planning Area	Length (Miles)
27	Bristol Road	Wordsworth Drive to Hatboro Road	2	0.92
SW 1	New Road (In Design)	Township property adjacent to and southeast of Maureen Welsh School	2	0.03
SW 2	Second Street Pike	Merry Dell Drive to W Buttonwood Drive	2	0.05
SW 3	Second Street Pike	Heather Road to Locust Road	2	0.06
SW 4	Stoneyford Road	East Village Road to bridge over Newtown Rail Line	3	0.15
SW 5	Holland Road	Rotterdam Road West to Karen Road	3	0.10
SW 6	Holland Road	East Holland Road to Vanderveer Road	3	0.20
SW 7	St. Leonards Road	Treeline Drive to Middle Holland Road	3	0.20
83	Holland Village - Buck Road	Elaine Drive to Holland Commons & Holland Village SC	4	0.27
SW 8	Bridgetown Pike	Bellwood Drive to Vernasa Drive/Playwicki Farm Connection	4	0.21
113	Churchville Lane	Lakeside Drive to Holland Road	5	0.31
		Total	Proposed Sidewalks	2.48

TABLE 15 – PROPOSED TRAIL & BICYCLE FACILITIES BY TYPE (CONTINUED)

_	nood Bike Routes (NBR)		Length
Segment	Neighborhood(s)	Planning Area	(Miles)
NBR 1	Sheffield Gate, Westview, Northampton Chase	1	1.26
NBR 2	Highland View, College Park	1	0.95
NBR 3	Tanner Estates, Highland Farms	1	1.15
NBR 4	Brookwood Estates	2	1.32
NBR 5	Woods at Northampton, Reserve at Northampton	2	1.31
NBR 6	Orchard Hill	2	1.47
NBR 7	Eagle Valley	2	0.79
NBR 8	Hampton Woods, Wedgewood Greene	2	0.43
NBR 9	ly Greene	2	0.14
NBR 10	Hidden Meadows	2	0.48
NBR 11	Traymore Manor	2	0.10
NBR 12	Estates of Mallard Creek, Legacy Oaks	2	1.50
NBR 13	Centennial Acres	2	0.70
NBR 14	Willow Greene South, Windmill Village West	2	1.50
NBR 15	Northampton Hunt	2	0.90
NBR 16	Estates of Mallard Creek, Richboro Farms	2	0.36
NBR 17	Northampton Township Business & Technology Center	2	1.14
	Windmill Village		
NBR 18	•	3	1.93
NBR 19	Buck Hill Acres	3	0.34
NBR 20	Treeline Estates	3	0.26
NBR 21	Hampton Estates	3	0.61
NBR 22	100 Acre Woods	3	0.63
NBR 23	Stoney Ford Estates	3	0.82
NBR 24	Hills at Northampton#	3	1.72
NBR 24	Hills at Northampton#	4	0.57
NBR 25	Hidden Pines	4	0.46
NBR 26	Holland Acres	4	0.71
NBR 27	East Ridge	4	0.61
NBR 28	Bridgetown	4	0.54
NBR 29	Briarwood Dr, Zelkova Dr, Wood Dr	4	0.87
NBR 30	Rolling Hills	4	0.44
NBR 31	Timber Valley	4	0.83
NBR 32	Pine Run	4	1.15
NBR 33	The Meadows	4	0.63
NBR 34	Hillcrestshire	4	1.65
NBR 35	Hillcrest Farms	4	0.58
NBR 36	Long Lane Farms	5	0.73
NBR 37		5	
	Deerfield North		1.20
NBR 38	Northampton Crossing	5	0.24
NBR 39	Northampton Estates	5	0.53
NBR 40	Holland Ridge	5	0.78
NBR 41	Spring Valley Farm	5	2.33
NBR 42	Willow Greene North	5	0.89
NBR 43	Northampton Hills	5	1.07
NBR 44	Pheasant Run	5	1.42
NBR 45	Caseyview/Estates at Holland	5	0.62
NBR 46	Churchville Manor	5	1.05
NBR 47	Hillside Manor	5	0.21
NBR 48	Green Valley North	5	0.29
NBR 49	Green Valley	5	1.21
NBR 50	Brook Drive	5	0.31
NBR 51	Lakeview Farms	5	0.47
NBR 52	Northampton Crest	5	0.36
NBR 53	Hidden Cove Estates	5	0.81
	#Reflects neighborhood being divided between Planning Areas 3 & 4	Total Proposed Neighborhood Bike Routes	45.36

Following the discussion regarding the prioritization of trails, an overview of each Planning Area, including an inventory of land use, natural features and man-made features is provided. These Planning Area overviews also include descriptions of trail or bicycle route segment, including maps.

## **PRIORITY TRAILS & BICYCLE FACILITIES**

Due to the complexity of the proposed trail and bicycle facilities network, as reflected by the both the various types of segments and number of trails being proposed, it was important to establish a set of priorities for trail development. To achieve this an evaluation and scoring process was developed to objectively evaluate the various facilities and be able to identify the priority trails and bicycle facilities.

Below is a description of the evaluation process used for prioritizing the trail segments. It should be recognized that the priorities will be dynamic. This is a function of many factors including development opportunities allowing for a lower scoring/ranked trail or bicycle facility to be built by a developer, the township having the ability to secure right-of-way for a lower-ranked trail project, a road resurfacing project taking place, the County taking the lead on a specific project, or the availability of funding. The township should review the priorities periodically to reflect shifting priorities and either add new trail segments that have been identified, or remove those that have been built or are no longer viable or a possibility.

## Methodology

To identify the priority trails, the Bucks County Planning Commission identified and consolidated segments primarily based on proximity, i.e. segments that were part of the same corridor such as the Newtown Rail Trail, Buck Road, and Newtown Richboro Road corridors, or served as connectors between two or more destinations. The 8 connector trails to the Newtown Rail Trail, 8 small sidewalk segments (less than 0.25 miles), and 53 Neighborhood Bike Routes were excluded as no one connector trail or neighborhood was deemed more important than another, leaving a total of 108 segments. Consolidation of the 108 segments brought the total number of trails and bicycle facilities to review down to 53. Each of these consolidated trails/bicycle facilities were then scored against nine criteria in three categories as shown in Table 12 including Feasibility, Safety, and Connectivity.

TABLE 16 - EVALUATION CRITERIA

Feasibility	Connectivity
Ownership of right-of-way	Connectivity to Schools
Costs to the Township for constructing the trail/bicycle facility	Connectivity to Neighborhoods (Based on Housing counts)
Presence of environmental constraints and/or extent of engineering required	Connectivity to existing trails, parks, libraries and senior centers
Safety	Connectivity to Commercial Areas
Degree of safety that the proposed facility provides to trail/bicyclists users	Connectivity to other proposed trails and bicycle facilities

Every category, with the exception of user safety, was scored on scale of 0 to 3, with the ability to rate the feature at a 0.25 interval. Categories for the feasibility of a trail were judged on the strain a proposed trail would have on Northampton Township's resources, be they financial, environmental, engineering, or acquisition. Trails that would cause a greater strain on township resources were given a lower score while those that caused less strain on township resources were given a higher score.

Example- A trail running on township owned land through a flat preserved open field would be given a 2.75 or 3. The township wouldn't need to spend money on land acquisition, the engineering cost are low as trail is easily built, and there are no environmental constraints as its history as a preserved open space kept it free from environmental degradation. Compare that trail to a trail proposed on a privately owned wetland. The township would need to spend time and money acquiring the right to build the trail. The cost is then compounded by high engineering costs, a wetland construction would require extensive infrastructure to reduce impacts on the wetland itself, driving development cost. Lastly, a boardwalk style trail would likely need to be built to navigate the wetland, driving up construction and maintenance cost bringing its overall score down to a 0.75 or 0.5. Scoring trails for connectivity was much simpler. Categories regarding connectivity solely looked at the number of connections a proposed trail had to schools, homes, community assets, commercial areas, and/or other trails. A trail with a high number of connections to schools, homes,

and community assets, would score higher than a trail with a limited number of connections to schools, homes, and community assets.

User safety was scored on a 0.5 to 3 scale. The logic behind this was that any of the facilities identified in this plan were an improvement over no facilities, which would warrant a zero. Facilities that provide a high level of user safety, such as shared use trails, were given a higher score. In contrast, facilities such as sharrows were given a score 0.5 because bicyclists are provided some degree of safety. Additionally, as the consolidated segments were often comprised of different types of facilities, meaning a user would experience varying degrees of safety along the course of a trail. To adjust for this we divided the length of each segment by the total length of the trail to discover the percentage that trail type comprised of the overall trail. This percentage was then multiplied by the score given to that trail type, and each segment's score was then added together to get the final score for the trail.

Example - Two trails each a mile in length. The first trail is a complete shared use trail, thus it is given a 3 according to the rating system. The second trail is .5 miles of shared use trail and .5 miles of stand-alone bike sharrows. This trail would be assigned a value of 1.75 which is based on 3.0 points for the 0.5 mile shared use trail segment and 0.5 points for the by 0.5 of bicycle sharrows. Based on these scoring categories, the maximum number of points for any particular consolidated trail or bike facility was 27 points.

Additional details on the scoring and evaluation can be found in Table 13. Scoring and rankings for all 53 consolidated and trail and bicycle facilities can be found in Appendix C.

The remainder of this chapter consists of two parts.

#### 1. Priority Trails

The first section contains information on each of the top 11 priority trail and bike facilities proposed including:

- Description of the proposed facility, including the segments comprising it, and associated alignment;
- Map showing its location;
- Detailed scoring evaluation information; and
- Photos along the proposed alignment.

#### 2. Trail & Bicycle Facility Segments by Planning Area

The second section is devoted to an overview of each Planning Area and contains the following information:

- An overview of the Planning Area including information on land use, natural resource features, man-made features including commercial areas, schools, park and recreation areas, historic resources, the street network, and existing trails.
- A table detailing the proposed trail and bicycle facilities, organized by type, for that planning area;
- A map showing the proposed trails and bicycle facilities;
- o A brief description of each segment and its connectivity to other trails and resource features; and
- A series of smaller maps, based on geographic proximity, designed to provide more detail regarding the location and alignment of the segments. The groupings represented on each of these maps is not intended to represent anything other than geographic proximity, meaning that they do not represent consolidated segments.

TABLE 17 – EVALUATION CRITERIA AND SCORING SCALE

Category- Feasibility	Feature Value and Description
	<b>0</b> - Very High Cost (Township trails where township builds & maintains and the trail includes expensive items such as retaining walls, bridges, boardwalks or requires lane realignment)
Cost to Northampton Township	1 - High Cost (Township trails which the township builds & maintains. Requires minimal engineering and has few, if any, bridges, boardwalks, retaining walls, etc.)
Cost to Northampton Township	2 - Moderate Cost (Township installs bike lanes requiring resurfacing of road and reconfiguration or narrowing of traffic lanes to accommodate inclusion of bike lanes / Twsp installs sidewalks
	<b>3</b> - Low Cost (County builds trail with Twsp maintaining / PennDOT resurfaces with Twsp maintaining / Twsp installs and maintains bike sharrows)
	0 - Will require an easement(s)
Ownership of right-of-way (ROW)	1 - Dependent upon PennDOT for resurfacing of state road
Ownership of right-or-way (ROW)	2 - Will require ROW agreement from PennDOT / Lease from SEPTA / Easement from County or State agency
	3 - Township owns ROW
	0 - Significant presence of wetlands and steep slopes (50% or more of the project area)
	1 - Moderate presence of wetlands and steep slopes (25% - 50% of the project area)
Presence of Natural Resource and Manmade Constraints	2 - Limited presence of wetlands and/or steep slopes (Less than 25% of the project area) OR Speed limit will need to be reduced to 35 MPH to allow for Bike Sharrows
	3 - No environmental constraints (Would also apply to the majority of on-road bike facilities such as sharrows and/or bike lanes given that the road itself already exists)

Category- Safety	Feature Value and Description
User Safety	0.5 - Bike Sharrows Only / Bike Lanes Only / Sidewalk Only
	1 - Bike Sharrows & Sidewalks
	2 - Bike Lanes with Sidewalks
	3 - Dedicated Shared use Trail

Category- Connectivity	Feature Value and Description
	0 - No school connectivity
Connectivity to Schools	1 - Connectivity to one school
Connectivity to Schools	2 - Connectivity to two schools
	3 - Connectivity to three schools
	0 - No commercial connectivity
Connectivity to Commercial	1 - Connectivity to one commercial area
Connectivity to Commercial	2 - Connectivity to two commercial areas
	3 - Connectivity to three commercial areas
	0 - No commercial connectivity
Connectivity to Recreational Facilities such as Parks / Existing	1 - Connectivity to one recreational facility
Trails / Libraries / Senior Centers	2 - Connectivity to two recreational facilities
	3 - Connectivity to threeor more recreational facilities
	Q - 0 trail connections
Potential Future Connectivity	1 - 1 to 2 future proposed trail connections
	2 - 3 - 5 future proposed trail connections
	3 - 6+ trail future proposed trail connections
	0 Levelle 4001 - 25 - 25
	0 - Less than 100 housing units
Connectivity to Neighborhoods	1 - 100 - 499 housing units
	2 - 500 -999 housing units
	3 - 1000+ housing units

## PRIORITY TRAILS AND BICYCLE FACILITIES RANKING

The following trails and bicycle facilities achieved the highest scores across the nine categories. These 11\* trails and bicycle facilities should be given priority by the township as it implements the recommendations contained in this plan.

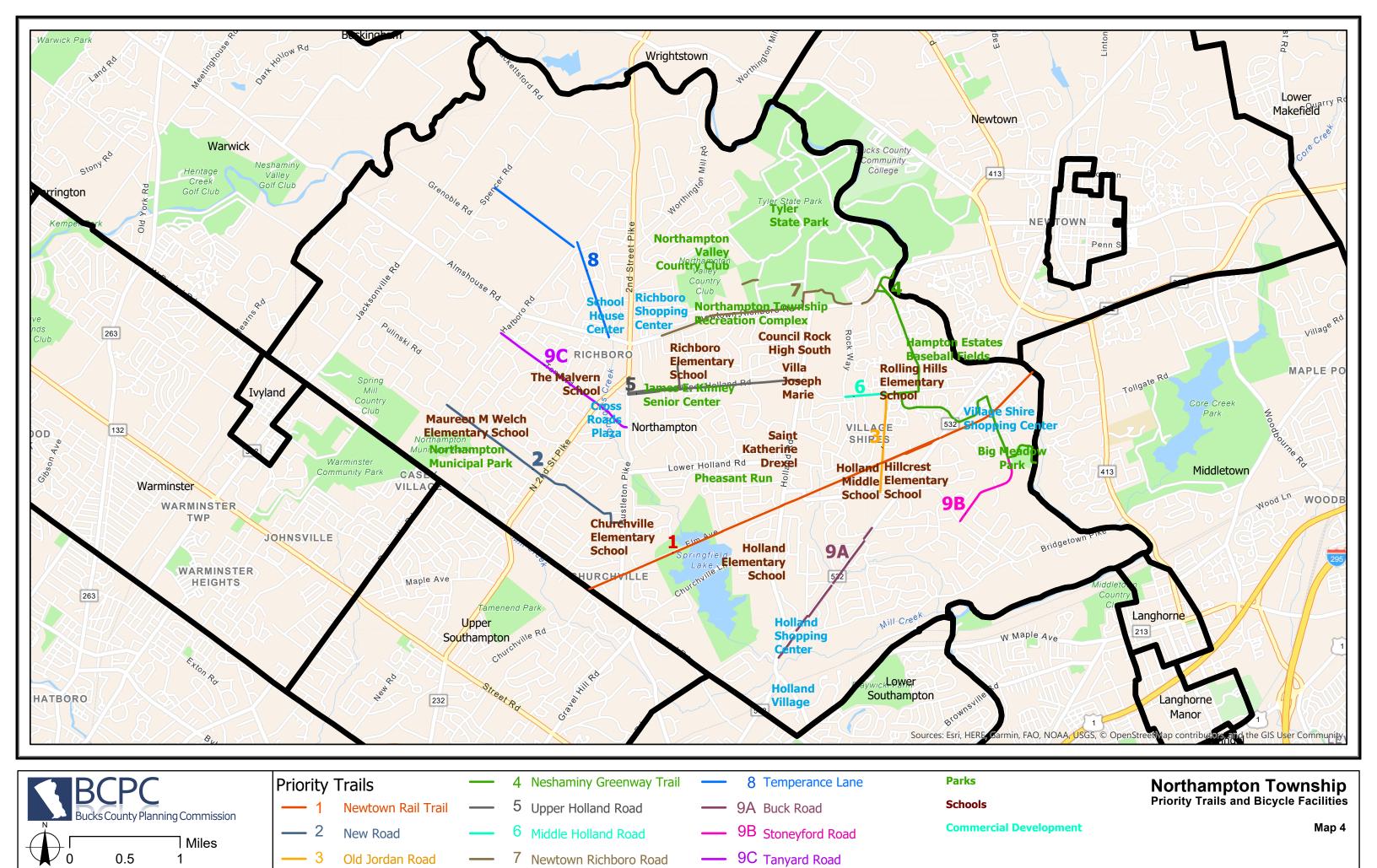
- Newtown Rail Trail (20.50) Continuous shared use trail contained fully within the SEPTA right-of-way of the former Fox Chase-Newtown train line from Bristol Road to the Neshaminy Creek
- 2 New Road (18.61) Spans the length of New Road from Hatboro Road to Bustleton Pike
- 3 Old Jordan Road (17.75) Will join East and Middle Holland roads to connect to the Newtown Rail Trail
- **4 Neshaminy Greenway Trail** (17.46) Links the center of Village Shires to the County's proposed Neshaminy Greenway trail which would extends along the Neshaminy Creek from Chalfont to the Delaware River.
- 5 Upper Holland Road (16.50) Bike facilities would cover the length of Upper Holland Road from Second Street Pike to Holland Road
- 6 Middle Holland Road (15.00) Dedicated bike lanes would link Council Rock South to Old Jordan Road and the Newtown Rail Trail
- 7 Newtown Richboro Road (14.81) Extends from the commercial center of Richboro to the intersection of St. Leonards Road and Newtown Richboro Road. Would connect to the Northampton Township Recreation Complex and, via the proposed Neshaminy Greenway Trail, connectivity to Tyler State Park
- **8 Temperance Lane** (14.50) Connects the northwestern portion of the township to the commercial center of Richboro
- **9A Buck Road** (14.00) Links the Village of Holland to Holland Middle School, spanning Buck Road from the intersection of Holland and Buck roads, and East Holland Road, via the existing pathway on the Hillcrest Elementary and Holland Middle School property
- **9B** Stoneyford Road (14.00) Links the neighborhoods along Stoneyford Road, and those near the intersection of Stoneyford Road and East Holland Road, to Big Meadow Park and the Neshaminy Greenway Trail at Big Meadow Park
- **9C Tanyard Road** (14.00) Running from Jacksonville Road to Bustleton Pike this segment would provide easy access to Richboro
  - \* The last three segments all scored and ranked equally resulting in a total of 11 high-ranking trails

It should be noted that these priority trails encompass the entire township meaning that each Planning Area and area of the township are represented.

TABLE 18 - TABULATION OF SCORES FOR TOP PRIORITY TRAILS AND BICYCLE FACILITIES

Area	Trail No	Trail Name	Begin and End Points	Trail Type	Trail Sponsor	Mileage	Cost to Northampton Township to Construct	ROW Ownership	Presence of Natural Resource and Manmade Constraints	Connectivity to Neighborhoods	Connectivity to Schools	Connectivity to Commercial	Connectivity to Parks / Existing Trails / Libraries / Senior Centers	Potential Future Connectivity	User Safety	Total Score (27 Points Maximum)	FINAL FANK OUT OF 53
3, 4 & 5	47-50/69/ 102-104	Newtown Rail Trail	Bristol Road to Neshaminy Creek (Shared Use Trail within SEPTA Right-of-Way)	Shared Use Trail	County	4.48	3.0	20	25	3.0	0.0	2.0	3.0	3.0	3.0	21.5	1
2&5	23 / 95	New Road	Hatboro Road to Bustleton Pike via Mehler & Hilltop	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (1.52 miles)	Township	1.97	3.0	3.0	3.0	3.0	2.0	0.0	1.0	3.0	0.6	18.6	2
3	43	Old Jordan Road	Middle Holland Road to East Holland Road	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (0.45 miles)	Township	0.89	3.0	3.0	3.0	3.0	3.0	0.0	0.0	2.0	0.8	17.8	3
3	30 - 35	Neshaminy Greenway Trail	Tyler State Park/Langhome Players to Big Meadow Park	Shared Use Trail & Bike Sharrows	County	3.58	3.0	1.8	0.0	3.0	1.0	1.0	3.0	3.0	1.7	17.5	4
5	88 - 92	Upper Holland Road	Bustleton Pike to Holland Road	Bike Sharrows - Existing Sidewalks & Shared Use Trail	Township	2.71	1.8	1.0	2.5	20	2.0	2.0	3.0	1.0	1.3	16.5	5
3	39	Middle Holland Road	Rock Way to Old Jordan Road	Bike Lanes - Existing Sidewalk	Township	0.38	3.0	1.0	3.0	20	1.0	0.0	1.0	2.0	20	15.0	6
1&3	12 - 18 / 36	Newtown Richboro Road	West Pickering Road to St. Leonards	Bike Lanes - Existing Sidewalks & Shared-Use Trail	Township	2.27	1.0	1.5	1.5	20	1.0	0.0	3.0	2.0	28	14.8	7
1	6-7	Temperance Lane	Spencer Road to Almshouse Road	Bike Sharrows - No Sidewalks	Township	1.80	3.0	3.0	3.0	1.0	0.0	2.0	0.0	2.0	0.5	14.5	8
4	70 - 73 / 79 - 82 / 84	Buck Road	Holland Road to Schools	Shared Use Trail	Township	1.47	0.0	0.0	1.0	3.0	20	1.0	1.0	3.0	3.0	14.0	9 <b>A</b>
3	46	Stoneyford Road	Big Meadow Park to East Holland Road	Bike Sharrows - Existing Sidewalks	Township	0.82	3.0	3.0	3.0	1.0	0.0	0.0	1.0	2.0	1.0	14.0	9B
2&5	24 / 86	Tanyard Road	Hatboro Road to Bustleton Pike	Bike Sharrows - Existing Sidewalks	Township	1.42	3.0	3.0	3.0	20	0.0	1.0	0.0	1.0	1.0	14.0	9C

Area	Trall No	Trall Name	Trall Type	Trail Sponsor	Mileage	ROW OWNERSHIP	NUMBER OF HOUSING UNITS CONNECTED	SCHOOLS	COMMERCIAL AREAS	PARKS, EXISTING TRAILS, LIBRARIES, SENIOR CENTERS			CONNI	ECTING TR/	AIL NUM	BERS			TOTAL NUMBER OF CONNECTIONS TO OTHER PROPOSED TRAILS	FINAL RANK OUT OF 53
3, 4 & 5	47 - 50 / 69 102 - 104	/ Newtown Rail Trail	Shared Use Trail	County	4.48	SEPTA ROW	2,109		Village Shires Shopping / Churchville Del Center / Churchville	Newtown Rail Churchville Churchville Churchville Trail (Under Nature Center Historic District Reservoir Construction)	100	101 105	99	77 51	56	54/55	43 57	58 34	12	1
2 & 5	23 / 95	New Road	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (1.52 miles)	Township	1.97	Northampton Township	1,093	Maureen Weish Churchville E.S.		Northampton Municipal Park	29	93 94	96	25 22					6	2
3	43	Old Jordan Road	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (0.45 miles)	Township	0.89	Northampton Township	1,388	Rolling Hills Hillcrest E.S. Holland M.S. E.S.			32	39 47/48	52	53					5	3
3	30 - 35	Neshaminy Greenway Trail	Shared Use Trail & Bike Sharrows	County	3.58	Northampton Twsp/Village Shires/PennDOT	3,255	Rolling Hills E.S.	Village Shires Shopping Center	Tyler State Park Big Meadow Tyler State Park Estates Ball Fields	36	39 43	57	49 50	46				7	4
5	88 - 92	Upper Holland Road	Bike Sharrows - Existing Sidewalks & Shared Use Trail	Township	2.71	Npton Bucks Muni Auth / CR School District / Twsp / Various	579	Richboro E.S. Future Sloane School	Addisville Cross Roads Commons Plaza	Existing trails James Kinney Northampton along Middle Senior Center Free Library Holland & Holland Rd	87	40							2	5
3	39	Middle Holland Road	Bike Lanes - Existing Sidewalk	Township	0.38	PennDOT	998	Rolling Hills E.S.		Existing trail / wide sidewalk along Middle Holland Rd	32	38 43							3	6
1 & 3	12 - 18 / 36	Newtown Richboro Road	Bike Lanes - Existing Sidewalks & Shared-Use Trail	Township	2.27	Township/PennDOT/Tyler State Park		Council Rock South H.S.		Northampton Tyler State Park Existing Trail Tyler State Park Recreation Existing Trails along Newtown- Complex Existing Trails Richboro Rd	30	31 38							3	7
1	6 - 7	Temperance Lane	Bike Sharrows - No Sidewalks	Township	1.80	Northampton Township	423		School House Village of Center Richboro		4	8 9							3	8
4	70 - 73 / 79 - 82 / 84	Buck Road	Shared Use Trail	Township	1.47	PennDOT/Private/Heritage Conservancy	1,118	Holland M.S. Hillicrest E.S.	Pheasant Valley Center	Existing trail on school property	68	76 65	66	74 75					6	9A
3	46	Stoneyford Road	Bike Sharrows - Existing Sidewalks	Township	0.82	Northampton Township	483			Big Meadow Park	34	35 45	64						3	9B
2 & 5	24 / 86	Tanyard Road	Bike Sharrows - Existing Sidewalks	Township	1.42	Northampton Township	988		Cross Roads Plaza		25	87							2	9C



7 Newtown Richboro Road

Old Jordan Road

0.5

## PRIORITY 1 - NEWTOWN RAIL TRAIL

# Bristol Road to the Neshaminy Creek via the SEPTA-owned Newtown Rail Line right-of-way - 4.5 miles

The proposed alignment of the Newtown Rail Trail presents Northampton Township with a rare opportunity to provide its residents with the critical foundation for a township wide trails network that links it to assets from across the region at minimal cost to the Township itself. With design and construction funded by the County, Northampton Township residents would have an alternative method of transportation to traverse the township and access the region's broader trail network to places outside the township. Below is a brief narrative describing the proposed alignment.

- The trail would start at the intersection of Bristol Road and Knowles Avenue picking up where the Upper Southampton portion of the trail ends. Continuing northeasterly within the SEPTA right-of-way, the trail would run parallel to Knowles Avenue to its intersection with Bustleton Pike at the historic Churchville Train Station (Segment 102). Once serving as the passenger station for the rail line the station area could be repurposed to accommodate parking for trail users as well as include a "parkette". In addition, the trail could help spur economic development in this area as the Churchville Deli, and other new business, could supply needed goods and services for trail users.
- The trail would then cross over Bustleton Pike running alongside Elm Avenue on its southeasterly side to Holland Road (Segments 103 and 104). It is on this portion that the trail would make connections to existing pathways within the Churchville Nature Center.
- Upon reaching Holland Road, the trail would continue through a wooded area and run behind Sundance Kennel (Segment 69).
- The trail would then proceed across East Holland Road and continue behind the neighborhoods of Windmill Village and Hollandale to Old Jordan Road (Segment 47).
- Crossing over Old Jordan Road the trail would continue within the SEPTA right-of-way between the Jordan Corners and Jordan Estates neighborhoods, and eventually alongside Spring Avenue (Segment 48).
- As the trail parallels Spring Avenue it begins to rise above the grade of the road, to create a bridge over Buck Road. Continuing with the SEPTA right-of-way, the trail would run between the Village Shires, Hills at Northampton and Stoney Ford Estates neighborhood before reaching the underpass at Stoneyford Road. (Segment 49). This segment would provide access to residents of the Village Shires neighborhood via the overflow parking lot currently located along side of the SEPTA right-of-way and provide trail users with access to the Village Shires shopping center.
- After traveling under Stoneyford Road, the trail would continue through various Village Shires neighborhoods on both side before crossing the Neshaminy Creek via a newly restored trestle bridge and into Middletown Township (Segment 50).

From Old Jordan Road forward, the trail does not intersect with any until road until it reaches South State Street in Newtown Borough, providing for an uninterrupted trail ride of 2.5 miles.

#### Newtown Rail Trail segments:

Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
3	47	Newtown Rail Trail (Proposed)	East Holland Road to Old Jordan Road	Rail Trail	0.77
3	48	Newtown Rail Trail (Proposed)	Old Jordan Road to Buck Road	Rail Trail	0.56
3	48A	Newtown Rail Trail (Proposed) - Bucks County Roses Alignment#	Bucks County Roses	Rali Trali	0.56
3	49	Newtown Rail Trail (Proposed)	Buck Road to Stoneyford Road	Rail Trail	0.51
3	50	Newtown Rail Trail (Proposed)	Stoneyford Road to Neshaminy Creek	Rail Trail	0.52
4	69	Newtown Rail Trail (Proposed)	Holland Road to East Holland Road	Rail Trail	0.22
5	102	Newtown Rail Trail (Proposed)	Bristol Road to Bustleton Pike	Rail Trail	0.32
5	103	Newtown Rail Trail (Proposed)	Bustleton Pike to Churchville Nature Center	Rail Trail	1.00
5	104	Newtown Rail Trail (Proposed)	Churchville Nature Center to Holland Road	Rail Trail	0.60

# Mileage excluded from Total Mileage since it is an alternate to Segment 48

The Newtown Rail Trail is the highest ranking trail among the 53 consolidated segments due to a combination of factors including:

- The highest level of user safety since this is a completely off-road facility with limited road crossings;
- Having to secure a lease or easement from only one property owner, SEPTA, who has already shown a great willingness to reuse these underutilized rail corridors for trail purposes;
- A very high degree of connectivity to households, existing recreational facilities, and other proposed trails and bicycle facilities both within the township, as well as part of a greater regional network; and
- Low cost to the township since the County would fund the design and construction;

#### Newtown Rail Trail scoring evaluation:

Priority 1		
Newtown Rail Trail - 4.5 miles		
Segments - 47, 48, 49, 50, 69, 102, 103, 104		
Shared Use Rail Trail in SEPTA right-of-way	Points	Rationale
Cost to Northampton Township	3.00	Cost would be limited to long-term maintenance of the trail since the County would fund the construction of the trail
ROW Ownership	2.00	Although the right-of-way is owned and controlled by SEPTA, they are willing to provide a 30-year lease, subject to one or both of two, 10 year extensions. Upon termination of the lease, the lease holder will be responsible for restroing the premises to the condition that existed at the beginning of the lease agreement, without requiring restoration of the rail materials. To date, SEPTA has not terminated any existing lease agreements they've granted for trail projects.
Presence of Natural Resource and Manmade Constraints	2.50	Will require some design and engineering work associated with the various road crossings, some adjacent slope issues, etc.
Connectivity to Neighborhoods	3.00	Cornects to over 2,100 housing units located in the Churchville district; Northampton Crest; along Elm Avenue and adjacent neighborhoods including Applegate, Casey View, Lakeview Farms and Holland Park; Hollandale; Windmill Village; Jordan Estates & Jordan Corners; Village Shires; Hills at Northampton; and Stoney Ford Estates
Connectivity to Schools	0.00	Although in close proximity to Rolling Hills Bernentary School, and indirectly connected to Hillcrest Bernentary School and Holland Middle School via sidewalks, the trail is not immediately adjacent to these schools
Connectivity to Commercial	2.00	Cornects to Village Shires Shopping Center and Chuchville Deli and other commercial businesses in Churchville
Connectivity to Parks /Existing Trails /Libraries /Senior Centers	3.00	Connects to Newtown Rail Trail (Upper Southampton Township), Churchville Nature Center & Reservoir, and Churchville Historic District
Potential Future Connectivity	3.00	Given that this trail spans the township, it would connect to 12 other proposed trails and bicycle facilities along its route
User Safety	3.00	This would be an entirely off-road, continuous shared use trail with limited road crossings which translates to a high degree of trail user safety since interactions with vehicles would be limited
Total Score (27 Points Maximum)	21.50	

Although this is the highest ranking trail, the township did request that we explore all potential alignment options for a continuous, uninterrupted shared use trail, particularly in the area between Holland Road and Buck Road. Our analysis can be found below.

#### Spring Avenue

Recognizing that the trail within the SEPTA right-of-way would be in close proximity to Spring Avenue as the trail approaches the bridge over Buck Road, and that the Bucks County Roses property may be redeveloped, as an alternative, the township could attempt to secure an easement on the property running adjacent to the SEPTA right-of-way which would allow for placement of the trail away from the six homes located along Spring Avenue, while still fulfilling the primary objective of providing a continuous shared use trail. However, it should be noted that development of the trail in this area is not dependent upon securing an easement with the owner of Bucks County Roses. Instead, it is just presented as an alternative.

#### East Holland Road and Buck Road

Similarly, recognizing that the trail between East Holland Road and Old Jordan Road will pass behind or adjacent to a total of 58 homes between East Holland Road and in the area of Old Jordan Road, the township requested that the plan explore other alignment options in this area while still meeting the goal of providing a continuous, uninterrupted shared use trail.

Street	Neighborhood	Number of Homes adjacent to SEPTA railroad right-of-way
Amsterdam Avenue	Windmill Village	4
Rotterdam Road East	Windmill Village	19
Windmill Drive	Windmill Village	7
Old Jordan Road	Intersection with Rail Trail	6
Jefferson Court	Hollandale	5
Grant Drive	Hollandale	13
Penn Circle	Hollandale	4
	Total	58

First it is necessary to understand the requirements associated with placing a trail within the right-of-way of a road versus those associated with a railroad right-of-way. More specifically, the minimum right-of-way width required for a continuous shared use trail adjacent to a roadway, commonly referred to as a sidepath trail, is typically 55 to 60 feet, assuming that the road is centered in that right-of-way area. This is based upon approximately 28 feet being needed for the travel lanes, buffer, trail and shoulder combined:

- 11 foot wide travel lane
- 5 foot wide buffer required between the trail and travel lane
- 10 foot wide trail
- 1-2 foot wide shoulder on non-buffered side of trail

Even if the trail width is reduced to 8 feet, which would eliminate several funding sources which typically require 10 foot wide trails, the overall right-of-way width needed is only reduced to 52 feet. It is essential to understand these dimensional requirements as they are one of the factors that determine the feasibility of establishing a continuous shared use trail.

Recognizing that the road right-of-way width might not be able to accommodate a continuous shared use trail, the analysis also examined options for securing the right-of-way needed by securing easements from adjacent property owners, as well as determining if there was existing publically-held land owned by the township or county that could be used.

#### East Holland Road - Amsterdam Avenue to Old Jordan Road Road Ownership - PennDOT Right-of-way

Section	Right-of-Way Width	Length (Miles)	Continuous Shared Use Trail possible within right-of-way	Publically held lands adjacent to this segment	Other land owners that could be approached for an easement
Amsterdam Avenue to bend in road	60 feet	0.11	Yes	Northampton Township	Private individuals
Bend in road to Tax Parcel 31-048-060	50 feet	0.20	No	Northampton Township	Private individuals
Tax Parcel 31-048-060 through Tax Parcel 31-048-062 (Frontage along Pine Run neighborhood)	40 feet	0.11	No	No	Private individuals
Tax Parcel 31-048-062 to Tax Parcel 31-064-197 (Frontage along entrance to Hollandale neighborhood at Grant Drive). Accomodates acceleration and deceleration lanes into neighborhood	65 feet	0.09	Yes	No	Private individuals
Tax Parcel 31-064-07 to Old Jordan Road	50 feet	0.31	No	Northampton Township	Council Rock School District & Private Individuals
Total		0.82			

#### Conclusion:

The varying right-of-way widths along East Holland Road would prevent the establishment of a continuous shared use trail solely within the right-of-way.

It would be possible to develop a fragmented, but not continuous, shared use trail along a portion of the East Holland Road corridor including:

- Township-owned parcels bounded by the rail corridor to the north, the Hollandale neighborhood to the east, and East Holland Road to the south and west (Tax Map Parcels 31-048-059 and 31-048-058);
- Township-owned open space along the north side between the two Grant Drive entrances into the Hollandale neighborhood (Tax Map Parcel 31-064-197); and
- Council Rock School District property along the south side of East Holland Road from Old Jordan Road to Buck Road. This assumes that the school district would provide an easement for the trail.

However, there are other constraints that would prevent the establishment of a continuous shared use trail along the remaining portions of East Holland Road including:

 Challenges associated with providing a safe crossing of East Holland Road to connect the segments identified above which would be possible to construct;

- Limited right-of-way width;
- Presence of buildings and structures close to the existing roadway (often 30 feet or less); and
- Slopes/utility poles along the south side of East Holland Road in front of Holland Elementary School.

Due to these constraints, a continuous shared use trail along East Holland Road from Amsterdam Avenue to Old Jordan Road is not feasible. However, recognizing that the pavement width along this this portion varies from 32 feet to 40 feet, there is the potential for establishing bike lanes from the bend in East Holland Road to Old Jordan Road, supplemented by a trail in the right-of-way of East Holland Road from Amsterdam Avenue to the bend in the road. Although the bike lanes, combined with various street intersections and crossings, do not allow for family biking and walking, they would benefit experienced bicyclists. Because of this, these two segments are included in the plan as Segments 51 and 52. More details about these can be found in the Planning Area overview.

Segment	Location	Segment End Points	Distance (Miles)
51	East Holland Road (West side ROW)	Amsterdam Avenue to Existing sidewalk at Pine Run	0.10
52	East Holland Road	Bend near Pine Run to Old Jordan Road	0.72

#### East Holland Road -Old Jordan Road to Buck Road

## Road Ownership - PennDOT

Right-of-way

Section	J		Continuous Shared Use Trail possible within right-of-way	,	Other land owners that could be approached for an easement
Old Jordan Road to Buck Road	50 feet	0.17	No	Yes	Council Rock School District

#### Conclusion:

Although a continuous shared use trail cannot be established within the right-of-way of East Holland Road for this portion, a continuous shared use trail could be established along the frontage of the Council Rock School District property in front of Hillcrest Elementary and on the township-owned parcel at the southwest corner of the intersection of East Holland Road and Buck Road. As there are trail and bicycle facilities proposed along East Holland Road east of its intersection with Buck Road, this trail has been included in the plan as Segment 53 as it would fill a missing link between the bike lanes proposed along East Holland Road and the facilities to the east of Buck Road.

Segment	Location	Segment End Points	Distance (Miles)
53	East Holland Road	Old Jordan Road to Buck Road	0.17

## Buck Road - East Holland Road to SEPTA Railroad Bridge

Road Ownership - PennDOT Right-of-way

Section	Right-of-Way Width	Length (Miles)	Continuous Shared Use Trail possible within right-of-way	Publically held lands adjacent to this segment	Other land owners that could be approached for an easement
East Holland Road to Tax Parcel 31-064-226 (Jordan Corners HOA Property)	60	0.04	No due to placement of lanes and turn lane off of westbound East Holland onto northbound Buck Rd	No	Hills at Northampton HOA
Frontage along Tax Parcel 31-064-226 (Jordan Corners HOA Property) to Tax Parcel 31-035-007-002	70	0.12	Yes along the northwest side of the right-of-way	No	Jordan Corners HOA and Hills at Northampton HOA
Tax Parcel 31-035-007-002 through Tax Parcel 31-035- 007-005 (Start of Bucks County Roses property - Tax Parcel 31-035-007-006)	50	0.20	No	No	Hills at Northampton HOA and private property holders
Tax Parcel 31-035-007-006 (Bucks County Roses property to SEPTA Railroad Bridge	50	0.22	No	Northampton Township	Bucks County Roses and Hills at Northampton HOA
Total		0.58			

#### Conclusion:

The varying right-of-way widths along Buck Road, which vary from 50 feet to 60 feet, with the majority being 50 feet, would prevent the establishment of a continuous shared use trail solely within the right-of-way along Buck Road between East Holland Road and the SEPTA Railroad Bridge.

It would be feasible to establish a continuous shared use trail along the southeast right-of-way of Buck Road by acquiring the required right-of-way via a combination of making use of the existing emergency breakdown/turning lane in front of the Hills at Northampton neighborhood, and by securing an easement from the Hills at Northampton HOA. However, it would not be possible to transition back to the SEPTA railroad right-of-way on that side of Buck Road due the presence of steep slopes associated with the unnamed tributary to the Neshaminy Creek that passes under Buck Road in that vicinity.

Alternatively, it would be possible, assuming a significant degree of cooperation from PennDOT, and the completion of a traffic impact study, to establish a continuous shared use trail along the northwest side of Buck Road from East Holland Road to the SEPTA railroad right-of-way. However, this would involve:

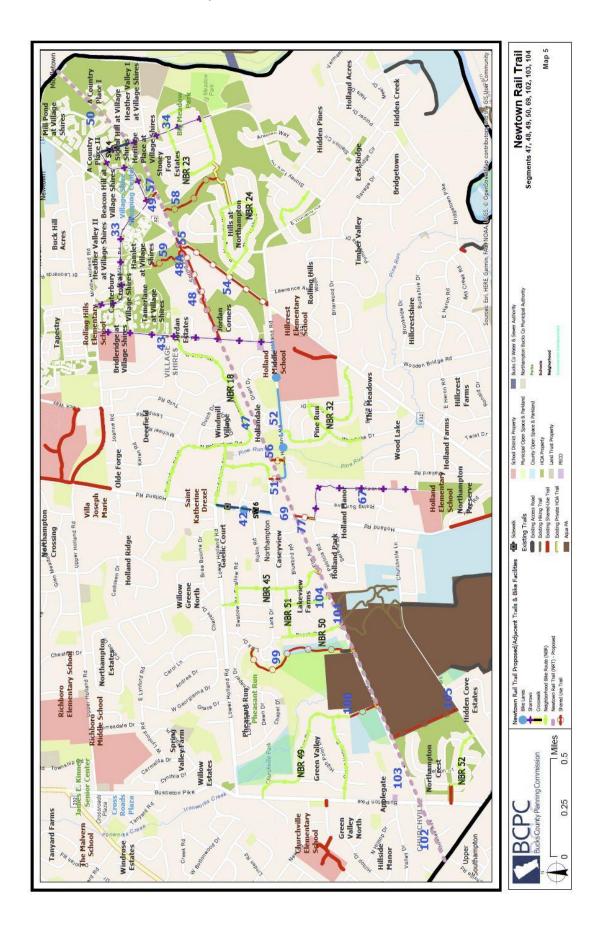
- Realignment of the existing travel lanes and emergency breakdown/turning lane. More specifically,
  the existing emergency breakdown/turning lane would become the northbound travel lane; the current
  northbound travel lane would become the new southbound travel lane; and the existing southbound
  travel lane would be the space in which the new continuous shared use trail is constructed. This
  realignment would be challenging at the existing railroad bridge and at the intersection with East
  Holland Road.
- 2. This proposed alignment would also require that the trail switch back and forth upon itself, and require retaining walls, to transition from Buck Road up to the SEPTA right-of-way on the township-owned parcel bordered by the SEPTA right-of-way on the north, Buck Road on the southeast, and Bucks County Roses to the west (Tax Map Parcel 31-035-008-001).

However, as there are proposed trail facilities planned along Buck Road from the Holland Elementary School and Hillcrest Middle School property extending down to the Village of Holland, this segment could serve as a link for trail users wanting to exit the Newtown Rail Trail to travel to the Village of Holland. Similarly, this segment would also serve as a connector to the proposed trails and bicycle facilities proposed along East Holland Road. Because of this, these proposed facilities have been included in the plan and are identified as follows:

Segment	Location	Segment End Points	Distance (Miles)
54	Buck Road	East Holland Road to Newtown Rail Trail Bridge	0.61
55	Buck Road to Newtown Rail Trail	Newtown Rail Trail to Buck Road	0.08

## Key Points/Findings:

- The development of a continuous and uninterrupted shared use trail with the SEPTA-owned Fox Chase Newtown rail corridor has the potential to serve as the primary spine of the proposed Northampton Township Trails and Bicycle Facilities Network given that it spans the majority of the township; has numerous opportunities for connecting trails; connects to over 2,100 households; connects to recreational and commercial destinations both within and outside the township; and would be a fairly low cost for the township, limited to minor maintenance, as the County would fund the design and construction of the trail.
- The proposed alignment within the SEPTA railroad right-of-way is the safest and least expensive option for providing a continuous shared use trail, particularly as it relates to the segment between Holland Road and Buck Road.
- There is recognition that the trail will pass behind or adjacent to approximately 60 homes and 1 business located between Holland Road and Buck Road, and that there are some concerns regarding privacy. As is being planned for the portion of the rail trail within Upper Southampton Township, the County would provide landscape buffering, fencing and signage to minimize the impact to adjacent residences.
- An analysis of other potential alignments for a continuous shared use trail in this segment resulted in a fragmented system that would require users to make use of on road bicycle lanes and sidewalks for certain segments. As this did not meet the goal of providing the highest level of user safety, particularly among inexperienced cyclists and families with children who would be uncomfortable riding along the roadways, these alignments were determined to not be as viable as the continuous shared use trail proposed within the SEPTA right-of-way. However, the plan recognizes that there are complimentary facilities such as bike lanes and some short segments of shared use trails that could be developed in addition to the Newtown Rail Trail to serve residents in these neighborhoods.
- Although it might be possible to establish a continuous shared use sidepath trail along the northwest right-of-way of Buck Road, it will be very costly and would require coordination and further study given that it involves the realignment of existing traffic lanes.









## Master Trail and Bicycle Plan

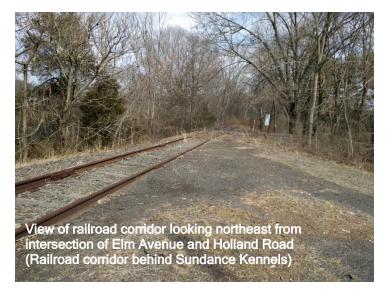




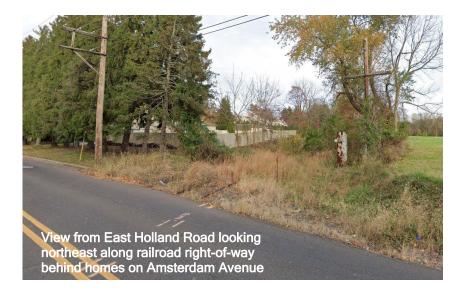




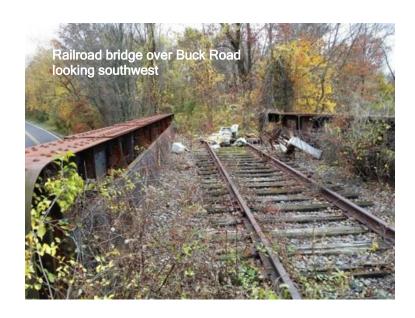


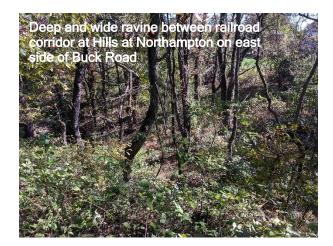


















# PRIORITY 2 - NEW ROAD

### Hatboro Road to Bustleton Pike via Mehler & Hilltop- 1.97 miles

The proposed trail/bicycle facility along New Road would be in the form of bicycle sharrows extending approximately 2.0 miles from Hatboro Road to Bustleton Pike. At the southeast end, the trail/bike facility would not continue direct on New Road to Holland Road. Instead, southbound users would turn right onto Mehler Drive, then left onto Hilltop Drive to connect to the existing trail/pathway leading out to Bustleton Pike. This pathway would need to be upgraded/widened. This route serves a critical role of providing connectivity to the proposed Newtown Rail Trail for all of the neighborhoods located along New Road.

### New Road segments:

Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
2	23	New Road	Hatboro Road to Second Street Pike	Bike Route/Sharrows	1.09
5	95	New Road	Second Street Pike, Mehler Drive, Hilltop Drive to Bustleton Pike	Bike Route/Sharrows	0.88

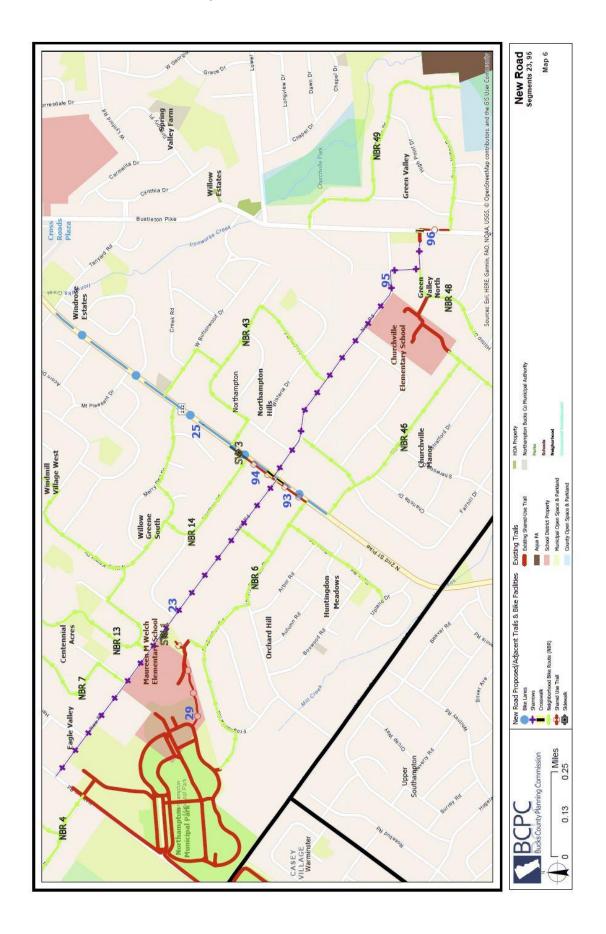
## New Road scoring evaluation:

Priority 2 New Road - 2.0 miles		
Segments - 23, 95		
Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (1.52 miles)	Points	Rationale
Cost to Northampton Township	3.00	The installation of bicycle sharrows is low cost due to it only involving paint and the stencil/template. Because of this, this trail receives a favorable score relative to the cost to the township.
ROW Ownership	3.00	New Road is a township owned /maintained road meaning that it can install the sharrows at any time without having to gain cooperation or depend upon the PennDOT resurfacing schedule
Presence of Natural Resource and Manmade Constraints	3.00	No resources constraints or obstacles to be addressed since bicycle sharrows get incorporated into existing roadways
Connectivity to Neighborhoods	3.00	Cornects to almost 1,100 housing units located in Hampton Hills, Eagle Valley, Centennial Acres, Willow Greene South, Orchard Hill, Churchville Manor, Northampton Hills, and Green Valley North
Connectivity to Schools	2.00	Would provide a connection to Maureen Welch and Churchville Elementary schools
Connectivity to Commercial	0.00	Does not provide any connectivity to commercial areas
Connectivity to Parks /Existing Trails /Libraries /Senior Centers	1.00	Connects to Northampton Township Municipal Park
Potential Future Connectivity	3.00	Assuming full completion of the network outlined in this plan, this trail would connect to 6 other trail and bicycle facilities in the network
User Safety	0.61	As bicycle sharrows do not do anything to separate vehicles and bicyclists, they are scored very low. This is particularly the situation when there are no adjacent sidewalks for other users as they are forced onto the shoulder of the road.
Total Score (27 Points Maximum)	18.61	

- The New Road facility is the second highest priority trail due to:
  - Very low cost since it is exclusively bicycle sharrows;
  - Township controls to the right-of-way so no easements or cooperation from PennDOT is required;
  - No resource constraints or features to be overcome;
  - Connectivity to Northampton Township Municipal Park;
  - o Connectivity to Maureen Welch and Churchville Elementary schools;
  - Connectivity to approximately 1,100 housing units;

- o Connectivity to the greater proposed Northampton Township network.
- Unfortunately, given the lack of sidewalks along much of the corridor, user safety received a low score. The township should attempt to complete the sidewalk network to improve safety for pedestrians.
- Although a short sections of the corridor has a 60' wide right-of-way, the majority of the right-of-way is only 50 feet wide, preventing the installation of a shared use trail.
- Another opportunity to improve user safety would be to widen the pavement width to approximately 32
  feet to allow for the installation of dedicated bicycle lanes instead of bicycle sharrows. Currently,
  pavement widths vary, although some portions are closer to 31 feet.





## PRIORITY 3 - OLD JORDAN ROAD

### Middle Holland Road to East Holland Road - 0.89 miles

This trail/bicycle facility would consist of bicycle sharrows along Old Jordan Road between Middle Holland Road and East Holland Road. It would provide a connection to the proposed Newtown Rail Trail for residents in Tapestry, Windmill Village, Jordan Estates, Wyncoop Court/Old Jordan Woods, and Tamerlane and Bridleridge at Village Shires neighborhood, as well as serve as connector to the facilities proposed along East Holland and Middle Holland roads.

## Old Jordan Road segments:

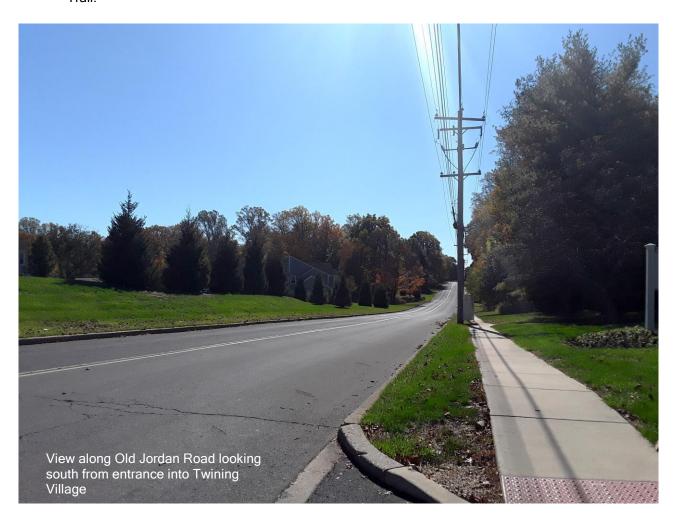
Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
3	43	Old Jordan Road	Middle Holland Road to East Holland Road	Bike Route/Sharrows	0.89

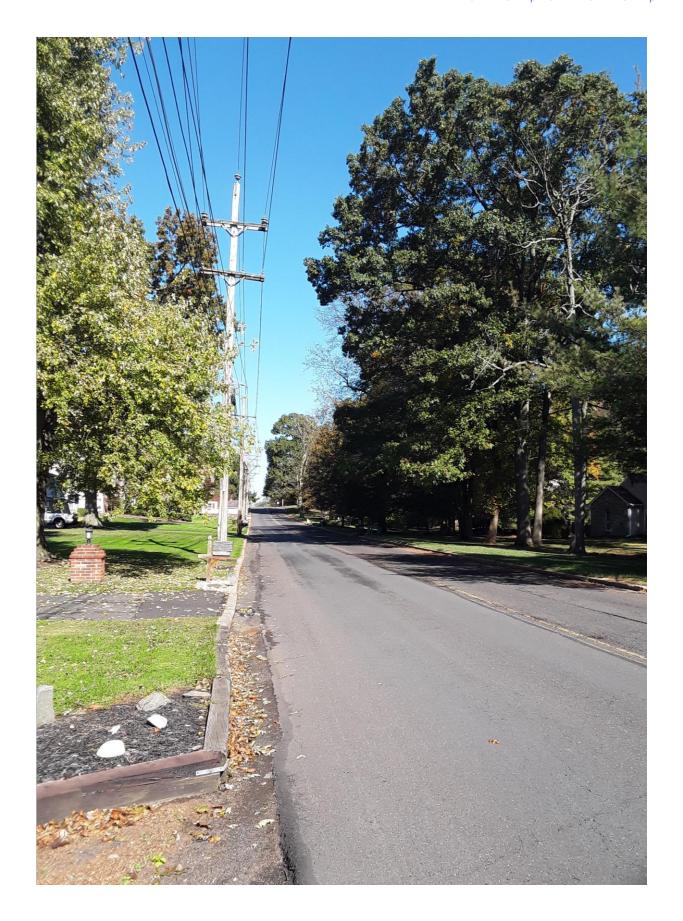
### Old Jordan Road scoring evaluation:

Priority 3		
Old Jordan Road - 0.9 miles		
Segment - 43		
Bike Sharrows - Existing Sidewalks (0.45 miles) / No		
Sidewalk (0.45 miles)	Points	Rationale
Cost to Northampton Township	3.00	The installation of bicycle sharrows is low cost due to it only involving paint and the stencil/template. Because of this, this trail receives a favorable score relative to the cost to the township.
ROW Ownership	3.00	Old Jordan Road is a township owned / maintained road meaning that it can install the sharrows at any time without having to gain cooperation or depend upon the PennDOT resurfacing schedule
Presence of Natural Resource and Manmade Constraints	3.00	No resources constraints or obstacles to be addressed since bicycle sharrows get incorporated into existing roadways
Connectivity to Neighborhoods	3.00	Although less than one mile in length, given its location in a high-density residential area, this trail facility will provide connections to almost 1,400 housing units in Tapestry, Village Shires, Wyncoop Court/Old Jordan Woods, Jordan Estates, Windmill Village and Jordan Corners
Connectivity to Schools	3.00	Provides a direct connection to Rolling Hills and Hillcrest Elementary schools and Holland Midde School
Connectivity to Commercial	0.00	Does not provide any connectivity to commercial areas
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	0.00	Does not connect to any existing recreational facilities
Potential Future Connectivity	2.00	Will connect to five other Trail & bike facility segments in the network
User Safety	0.75	Fairly low score relative to user safety due to cyclists still being in the roadway with vehicular traffic
Total Score (27 Points Maximum)	17.75	

- The Old Jordan Road facility is the third highest ranked priority trail due to:
  - Very low cost given that it consists of easy-to-implement bicycle sharrows;
  - Right-of-way along Old Jordan Road is under the control of Northampton Township eliminating the need for cooperation from PennDOT;
  - No resource constraints to be addressed;
  - o Connectivity to Rolling Hills and Hillcrest Elementary schools and Holland Middle School;
  - Given its location in a higher density residential area, would provide connectivity to almost 1,400 housing units;

- o In addition to providing a connection to the proposed Newtown Rail Trail, this also serves as a connector to the facilities proposed along East Holland and Middle Holland roads.
- Although receiving a relatively low score in terms of user safety given that facility is in the form of bicycle sharrows, user safety could be improved by:
  - Completing the sidewalk network along Old Jordan Road;
  - Considering widening the pavement width to allow for the installation of dedicated bicycle lanes as an alternative to bicycle sharrows.
  - Longer-term, consider acquiring the right-of-way needed to facilitate the installation of a shared use trail particularly along the segment between Middle Holland Road and the proposed Newtown Rail Trail.







# PRIORITY 4 NESHAMINY GREENWAY TRAIL

# Tyler State Park/Langhorne Players to Big Meadow Park - 3.58 miles

This trail/bike facility, part of the much larger Neshaminy Greenway Trail running from Chalfont/New Britain to Neshaminy High School in Middletown Township, would begin at the Langhorne Players Theater/Spring Garden Mill in the form of a shared use trail, and would connect to the existing trail under Richboro Road connecting into Tyler State Park. The trail would traverse up the hill using the former right-of-way of Newtown Richboro Road before reaching St. Leonards Road. As the trail approaches St. Leonards Road it would turn left and follow the existing powerline, eventually ending at the intersection of St. Leonards Road and Indian Summer Drive.

From this intersection, this proposed trail/bike facility becomes bicycle sharrows running southeast along the length of St. Leonards Road between Newtown Richboro Road and Middle Holland Road. At the intersection of St. Leonards and Middle Holland roads, the trail would cross Middle Holland Road and become a shared use trail along the south side of Middle Holland Road extending approximately 0.3 miles west to the intersection of Middle Holland and Old Jordan roads. At this intersection the trail would connect proposed bike sharrows along Old Jordan Road and bike lanes along Middle Holland Road.

At the intersection of Middle Holland Road and West Village Road, the trail/bike facility becomes bicycle sharrows again, extending along West Village Road, crossing Buck Road onto East Village Road, and following East Village Road to its intersection with Stoneyford Road. After crossing Buck Road onto East Village Road, the trail would connect to the proposed Newtown Rail Trail.

At Stoneyford Road, the trail turns right and heads southeast onto Stoneyford Road in the form of bike sharrows, continuing to the entrance to Big Meadow Park. Upon reaching Big Meadow Park, the alignment continues in the form of a shared use trail within the park before connecting to a proposed trail over the Neshaminy Creek as part of the continuation of the Neshaminy Greenway Trail.

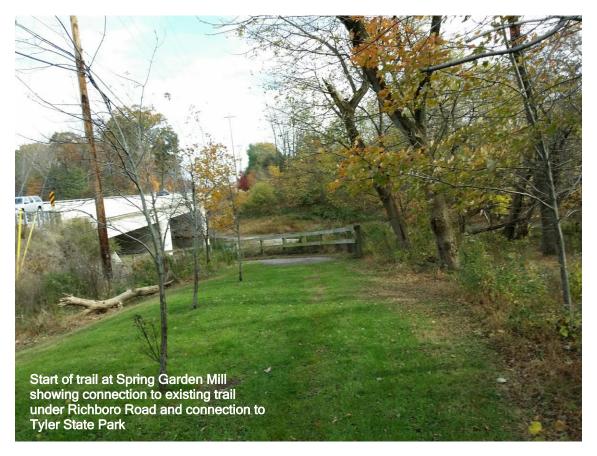
### Neshaminy Greenway Trail segments:

Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
3	30	Neshaminy Greenway Trail	Langhorne Players Theater/Spring Garden Mill to St. Leonards Road	Shared Use Trail	0.41
3	31	Neshaminy Greenway Trail	Richboro Road to Middle Holland Road	Bike Route/Sharrows	1.06
3	32	Neshaminy Greenway Trail	St. Leonards Road to Rolling Hills Elementary School	Shared Use Trail	0.29
3	33	Neshaminy Greenway Trail	Middle Holland Road to Stoneyford Road	Bike Route/Sharrows	0.65
3	34	Neshaminy Greenway Trail	Stonyford Road to Big Meadow Park	Bike Route/Sharrows	0.59
3	35	Neshaminy Greenway Trail	Big Meadow Park	Shared Use Trail	0.58

## Neshaminy Greenway Trail scoring evaluation:

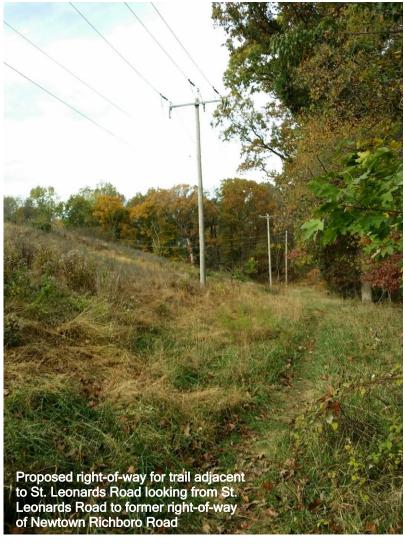
Priority 4		
Neshaminy Greenway Trail - 3.6 miles		
Segments - 30, 31, 32, 33, 34, 35		
Shared Use Trail & Bike Sharrows	Points	Rationale
Cost to Northampton Township	3.00	The installation of bicycle sharrows is low cost due to it only involving paint and the stencil/template. Because of this, this trail receives a favorable score relative to the cost to the township. The cost of constructing the shared use trail components is hard to define specifically at this time as it may be funded by PA DCNR, the county, the township or some combination of the three.
		The right-of-way required for this trail is controlled by four different entities.
		PA Department of Conservation and Natural Resources (PA DCNR) owns the land at the end point of the trail at Spring Garden Mill/Langhorne Players Theater.
		2 - PennDOT owns the right-of-way between the PA DCNR property and St. Leonards Road as well the right-of-way along Middle Holland Road
ROW Ownership	1.75	Village Shires HOA owns the right-of-way/property needed along the south side of Middle Holland Road between St. Leonards Road and Old Jordan Road
		4 - Northampton Township owns the right-of-way for St. Leonards Road, West Village Road, and Stoneyford Road as well as Big Meadow Park
		However, as all of these, with the exception of the Village Shires HOA, are public entities, obtaining control of the right-of-way needed for the trail does not present a significant obstacle
Presence of Natural Resource and Manmade Constraints	0.00	Although much of this consolidated trail/bike facility is in the form of easy to implement bicycle sharrows, the shared use trail segments at the begin/end points will prove to be challenging due to the presence of steep slopes at the northern end, and the presence of wetlands in Big Meadow Park, and the need to align the trail so as not to interfere with the existing athletic fields in the park.
Connectivity to Neighborhoods	3.00	This trail would service over 3,200 households in the Regency at Northampton, Hampton Estates, 100 Acre Woods, Timber Ridge, Treeline Estates, Buck Hill Acres, Doris Avenue, Tapestry, Village Shires, and Stoney Ford Estates neighborhoods
Connectivity to Schools	1.00	Would provide a connection to Rolling Hills Elementary School
Connectivity to Commercial	1.00	Provides a connection to the Village Shires Shopping Center
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	3.00	This trail would provide significant connectivity to several recreational facilities including Tyler State Park, the trails within Tyler State Park, Big Meadow Park, and Hampton Estates Ball Fields
Potential Future Connectivity	3.00	Given its length and location, this facility will connect to seven other Trail & bike facility segments in the network
User Safety	1.71	While some segments of this trail facility are in the form of a highly safe shared use trail, the majority of the trail is in the form of bicycle sharrows which is resulting in a lower score for this criteria
Total Score (27 Points Maximum)	17.46	

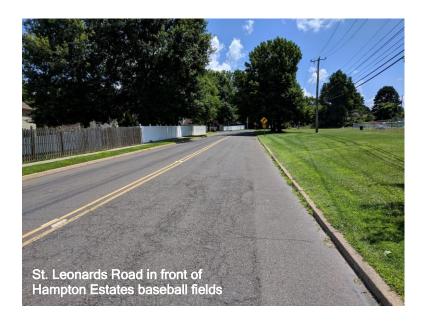
- The Neshaminy Greenway Trail ranked as the fourth highest priority trail due to:
  - Relatively low cost based on it primarily being in the form of bicycle sharrows, as well as being a county-sponsored project;
  - Connectivity to several existing trails and park and recreation facilities including Tyler State Park,
     Big Meadow Park and Hampton Estates Ball Fields;
  - Connectivity to over 3,200 housing units;
  - Connectivity to the township proposed trail network, as well as larger county trails, including the rest of the Neshaminy Greenway Trail; and
  - Some connectivity to schools and commercial areas.
- User safety scores are relatively lower given that much of this trail/bike facility is in the form of on road bicycle sharrows. Although there is the potential to increase user safety in the future by considering widening the pavement width along East Village and West Village roads, and Stoneyford Road to accommodate dedicated bicycle lanes, widening the pavement along St. Leonards Road would prove challenging.



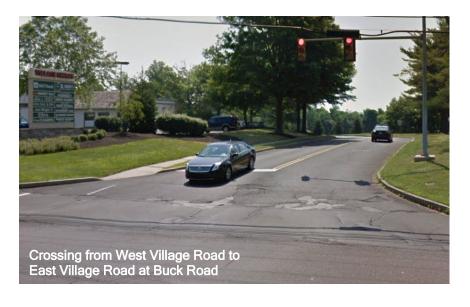








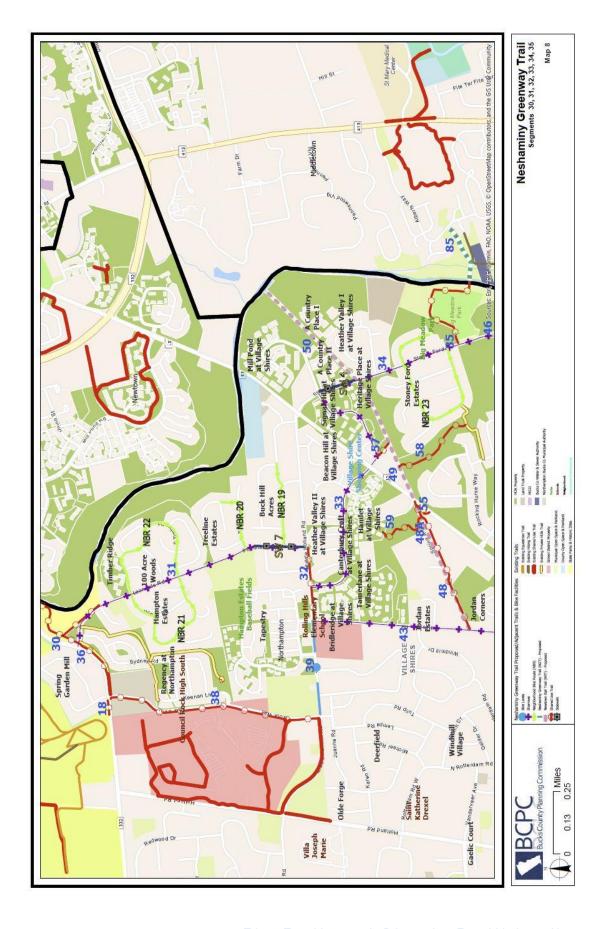












# PRIORITY 5 - UPPER HOLLAND ROAD/BUSTLETON PIKE

# Intersection of Second Street Pike and Bustleton Pike to Upper Holland Road to Holland Road - 2.71 miles

This would begin in the form of a shared use trail running along the east side of Bustleton Pike, spanning from Second Street Pike to Upper Holland Road. To minimize the impact to parking as part of the Richboro Center shopping center, the trail could alternatively be located on Township property along Township Road. Upon reaching Upper Holland Road, the existing sidewalk along the north side of Upper Holland Road running in front of the library, senior center and Richboro Elementary School would be replaced by a shared use trail. An additional shared use trail would be constructed on the south side on the former site of Richboro Middle School. In addition to these shared use trail segments. Bicycle sharrows would extend the full length of Upper Holland Road between Bustleton Pike and Holland Road.

### **Upper Holland Road segments:**

Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
5	88	Upper Holland Road/Richboro Middle School	Bustleton Pike to just west of Torresdale Drive	Shared Use Trail	0.28
5	89	Bustleton Pike & Upper Holland Road	Second Street Pike to Township Road	Shared Use Trail	0.29
5	90	Upper Holland Road	Township Road to Richboro Elementary School Trail	Shared Use Trail	0.32
5	91	Richboro Elemenary School	Cedar Drive to Upper Holland Road	Shared Use Trail	0.25
5	92	Upper Holland Road	Bustleton Pike to Holland Road	Bike Route/Sharrows	1.57

### Upper Holland Road scoring evaluation:

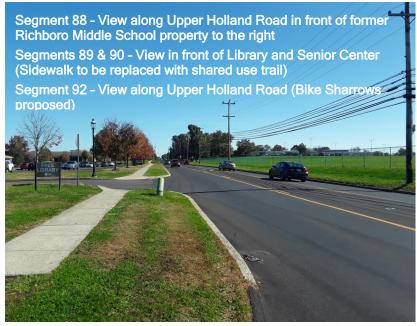
Priority Trail 5 Upper Holland Road - 2.7 miles Segments - 88, 89, 90, 91, 92		
Bike Sharrows - Existing Sidewalks & Shared Use Trail	Points	Rationale
Cost to Northampton Township	1.75	Fairly high costs driven by 1.2 miles of off-road shared use trail construction
ROW Ownership	1.00	Lower score due to need to acquire ROW/easements from Council Rock School District and Municipal Authority for off-road trail segments. Will also require coordination with PennDOT regarding installation of bicycle sharrows since Upper Holland is a PennDOT road.
Presence of Natural Resource and Manmade Constraints	2.50	Will require a fair amount of engineering, particularly given the slopes along the south side of Upper Holland Road on the Council Rock school district property, former Richboro Middle School/future home of Sloane School.
Connectivity to Neighborhoods	2.00	Connects to almost 600 housing units located in Long Lane Farms (150), Northampton Estates (132), Holland Ridge (89), and Northampton Crest (175)
Connectivity to Schools	2.00	Connects to Richboro Elementary School and future Sloane School, and Villa Joseph Marie
Connectivity to Commercial	2.00	Connects to Bustleton Pike and Addisville Commons, Crossroads Plaza
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	3.00	Connects to Northampton Township Library, Senior Center and existing trails as part of Council Rock South High School
Potential Future Connectivity	1.00	Holland Road Bike Lanes and proposed connector trail into Long Lane Farms which serves as a connection to Newtown Richboro Road
User Safety	1.25	Majority of this consolidated segment is in the form of on-road bicycle sharrows offering a lower degree of user safety
Total Score (27 Points Maximum)	16.50	

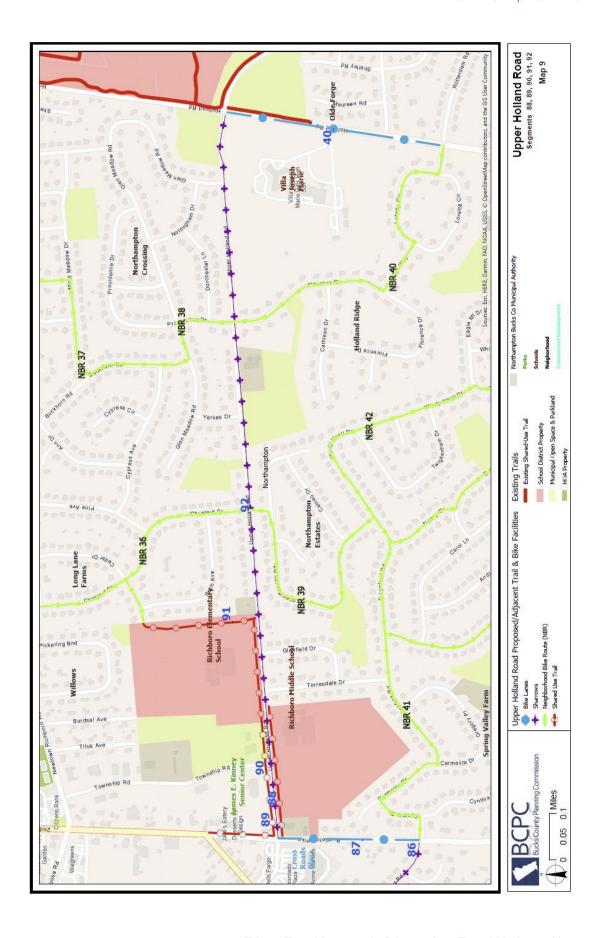
- The Upper Holland Road facility is the fifth highest priority trail due to:
  - Connectivity to recreational facilities such as the Northampton Township Library and Senior Center;
  - o Connectivity to commercial areas and schools; and
  - Connectivity to over 600 housing units.
- Although receiving a relatively low score in terms of user safety given that much of this trail facility is in
  the form of bicycle sharrows, user safety could be improved by considering removing the fairly recently
  installed turn lane extending from Carlisle Drive east to Holland Road and installing dedicated bike
  lanes instead of bicycle sharrows.
- As future redevelopment occurs at the intersection of Upper Holland Road and Bustleton Pike and surrounding areas, the township should ensure that any proposed trails are incorporated into future land development plans.











# PRIORITY 6 - MIDDLE HOLLAND ROAD/BUSTLETON PIKE

# Intersection of Second Street Pike and Bustleton Pike to Upper Holland Road to Holland Road - 0.38 miles

This is a very short segment that would consist of bike lanes on Middle Holland Road between Rock Way and Old Jordan Road. At the west end at Rock Way, the bike lanes would connect to the trail proposed along the north side of Middle Holland Road continuing to Holland Road, as well as the upgraded trail running along Rock Way up to Newtown Richboro Road. At the east end, the bike lanes would connect to the proposed bicycle sharrows on Old Jordan Road, as well as the trail proposed along the south side of Middle Holland Road between Old Jordan Road and St. Leonards Road.

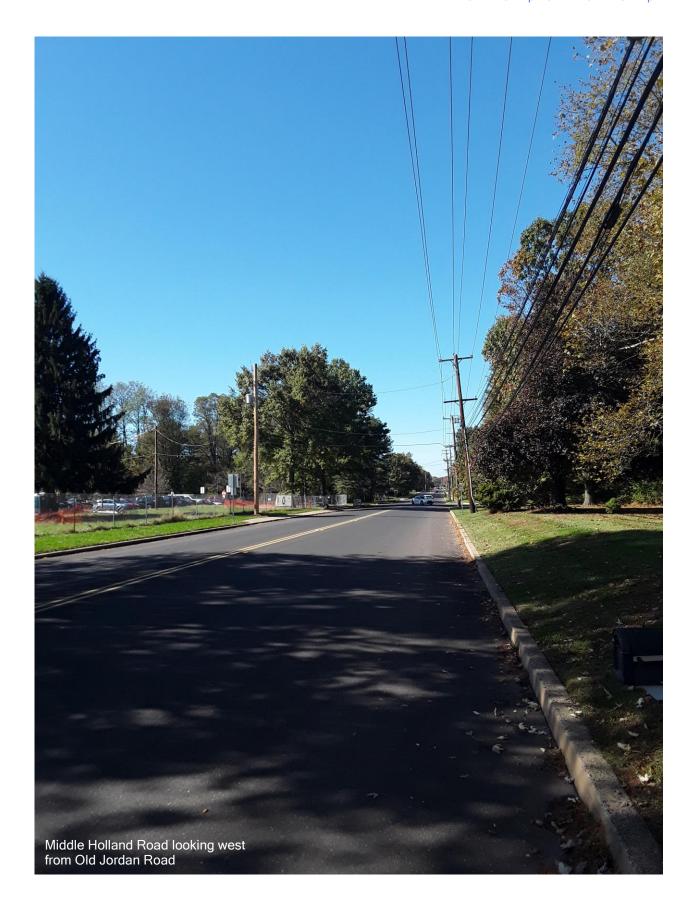
### Middle Holland Road Segments:

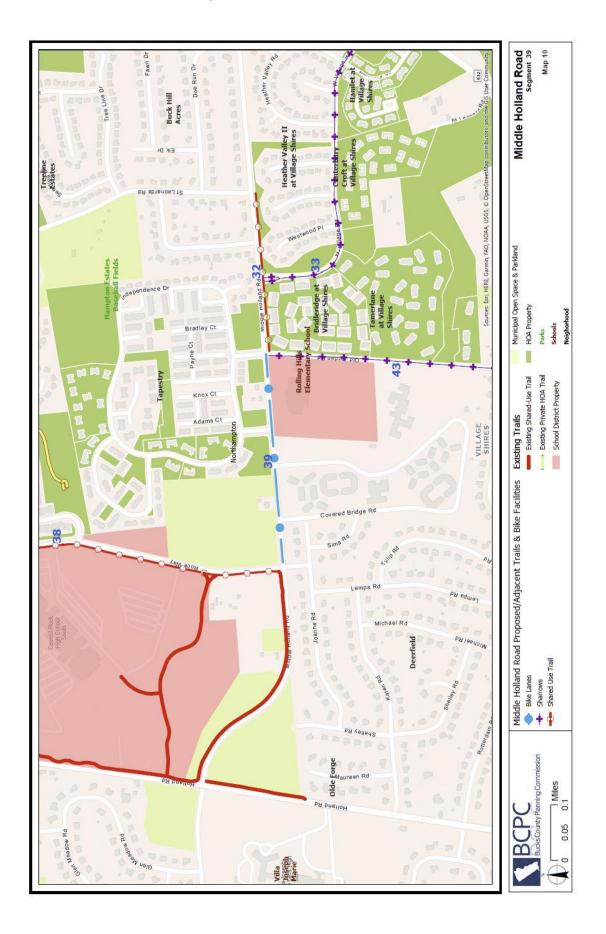
Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
3	39	Middle Holland Road	Rock Way to Old Jordan Road	Bike Lanes	0.38

## Middle Holland Road scoring evaluation:

Priority 6		
Middle Holland Road - 0.4 miles		
Segment - 39		
Bike Lanes - Existing Sidewalk	Points	Rationale
Cost to Northampton Township	3.00	As this is a PennDOT road, the cost for installing the bicycle lanes would most likely be included in the next resurfacing of this road. However, PennDOT typically requires the municipality to maintain the bike lanes. However, this is a relatively small cost resulting in a favorable score for this trail.
ROW Ownership	1.00	Middle Holland Road is a PennDOT owned and maintained road meaning that the installation of bike lanes will be subject to their approval and dependent upon their resurfacing schedule
Presence of Natural Resource and Manmade Constraints	3.00	Other than potential constraints associated with terminating the bike lanes at the begin and end points, there are few constraints to be addressed
Connectivity to Neighborhoods	2.00	This trail, although less than one-half mile in length, would provide connections to nearly 1,000 housing units located in the Tapestry and Deerfield neighborhoods
Connectivity to Schools	1.00	Would provide a connection to Rolling Hills Elementary School
Connectivity to Commercial	0.00	Does not provide any connectivity to commercial areas
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	1.00	Would connect to the existing trail located along the north side of Middle Holland Road between Holland Road and Rock Way
Potential Future Connectivity	2.00	Will connect to three other trail segments in the network
User Safety	2.00	Although bike lanes are an upgrade in safety from bike sharrows, they are less safe than shared use trails, resulting in the lower score.
Total Score (27 Points Maximum)	15.00	

- The Middle Holland Road bike lanes ranked sixth in the ranking of trails and bicycle facilities due to:
  - Low cost since they would be done as part of a future resurfacing project by PennDOT since Middle Holland Road is a PennDOT road;
  - No constraints to be addressed:
  - Connectivity to over 1,000 housing units;
  - Connectivity to Rolling Hills Elementary School; and
  - Connectivity to the overall proposed Northampton Township Trails & Bike Facilities Network





# PRIORITY 7 - NEWTOWN RICHBORO ROAD

# West Pickering Road to St. Leonards Road - 2.27 miles (Excluding Segment 14 within the parks)

This trail and bicycle facility would extend from the Village of Richboro (West Pickering Bend) to St. Leonards Road. The initial segment of the trail will be in the form of dedicated bike lanes along both sides of Newtown Richboro Road extending from West Pickering Bend to Harmony Drive and would be supported by the existing sidewalks along the north side of this section of Newtown Richboro Road.

At Harmony Drive, the bike lanes would connect to a new shared use trail to be built along the north side of Newtown Richboro Road. The initial segment would span the frontage of the Northampton Township Recreation Complex, then continue along the frontage of Tyler Park Center for the Arts. Two additional projects associated with the development of the trail and bicycle facility in the vicinity of the Northampton Township Recreation Complex and Tyler State Park/Tyler Park Center for the Arts include:

- The addition of a crosswalk at the western entrance to the Northampton Township Recreation Complex to connect to the sidewalks along the south side of Newtown Richboro Road; and
- Upgrading the existing mown grass trail connecting the shared use trails in the Northampton Township Recreation Complex to the Number 1 Lane Trail in Tyler State Park (Segment 14).

Upon reaching the private driveway, located approximately 350 feet west of the intersection with Holland Road, the trail would run parallel to the driveway on Tyler State Park property, wrapping around the various properties in this location, before connecting to the existing Cooper Trail in Tyler State Park. As the existing Cooper Trail is not a paved trail, and is designated for equestrian use, cooperation will be required from Tyler State Park to upgrade the trail and allow for bicyclist use. As the Cooper Trail turns to the northeast to connect to the Stable Mill Trail within the park, a new shared use trail would be constructed headed southeast toward the intersection of Newtown Richboro Road and Rock Way/Spring Garden Mill Drive. At this intersection, the trail will cross Newtown Richboro Road to connect to the existing trail located on property owned by the Northampton Bucks County Municipal Authority at the southeast corner of the intersection. This trail currently continues to the east to connect to a privately-owned trail as part of the Regency at Northampton neighborhood. As this is a private trail, the Newtown Richboro Road trail will need to continue within the PennDOT-owned right-of-way along Newtown Richboro Road to connect to the proposed trail and bike facilities along St. Leonards Road and new trail proposed connecting to the Langhorne Players Theater/Spring Garden Mill. This will also require excavating the hillside and other improvements at the intersection with St. Leonards Road to accommodate the proposed trail.

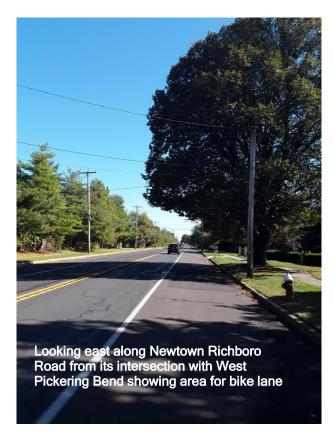
# Newtown Richboro Road segments:

Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
1	12	Newtown Richboro Road	West Pickering Bend to Harmony Drive	Bike Lanes	0.43
1	13	Newtown Richboro Road	Frontage of Northampton Township Recreation Complex	Shared Use Trail	0.42
1	14	Tyler State Park	Northampton Township Recreation Complex to No. 1 Lane Trail	Shared Use Trail	0.15
1	15	Newtown Richboro Road	Frontage of Tyler State Park	Shared Use Trail	0.60
1	16	Tyler State Park	Portion of Cooper Trail	Shared Use Trail	0.37
1	17	Tyler State Park	Copper Trail to Newtown Richboro Road	Shared Use Trail	0.07
1	18	Newtown Richboro Road	Cooper Trail Connecftion to Spring Garden Mill Road	Shared Use Trail	0.06
3	36	Newtown Richboro Road (PennDOT ROW	) Rock Way to St. Leonards Road	Shared Use Trail	0.33

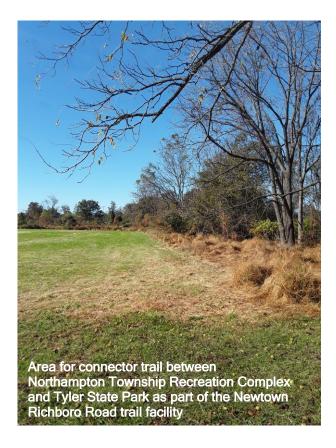
# Newtown Richboro Road scoring evaluation:

Priority 7				
Newtown Richboro Road - 2.3 miles				
Segments -12, 13, 14, 15, 16, 17, 18, 36				
Bike Lanes - Existing Sidewalks & Shared-Use Trail	Points	Rationale		
Cost to Northampton Township	1.00	This will be a fairly expensive trail to construct. Although some segments such as the bicycle lanes would be included as part of the next resurfacing of Newtown Richboro Road, other segments, primarily the shared use trails, will be expensive to both engineer and construct.		
	150	Similar to the Neshaminy Greenway Trail, the right-of-way for this proposed trail is owned by multiple entities including:		
		1 - PennDOT owns./inaintains the right-of-way along the entire length of Newtown Richboro Road. This means that the installation of the bike lanes proposed between W. Pickering Bend and Harmony Drive will be dependent upon their approval and repaving schedule. Similarly, PennDOT owns the right-of-way between Rock Way and St. Leonards Road where a shared use trail is proposed.		
ROW Ownership		2 - PA Department of Conservation and Natural Resources (PA DCNR) owns the land within Tyler State Park where new trails, and upgrades to existing trails, are proposed.		
		3 - As part of the Northampton Township Recreation Complex, the township owns the land between Harmony Drive and Tyler State Park		
		Although all of these are public entities, the bike lanes on, and shared use trail within the right-of-way along Newtown Richboro Road will require a significant level of cooperation and negotiation with PennDOT which resulted in the lower score		
Presence of Natural Resource and Manmade Constraints	1.50	Although most of the proposed alignment for the bike lanes and trail along Newtown Richboro Road is in areas without any major constraints to be addressed, the easterly end from Rock Way to St. Leonards Road presents significant constraints associated primarily with the steep slopes along the south side of the right-of-way approaching St. Leonards Road. Although there is an existing trail at the top of the embankment, this trail is private and posted as such. Construction of the trail within the right-of-way is the only feasible alignment but will require engineering associated with the steep slopes. The presence of these steep slopes is the driving factor behind the lower score.		
Connectivity to Neighborhoods	2.00	Over 900 households in the Wilow Bend, Willows, Highland Farms, Long Lane Farms, Deerfield North, Spring Garden Mill and Regency at Northampton would have access to this trail		
Connectivity to Schools	1.00	Provides a connection to Council Rock South High School		
Connectivity to Commercial	0.00	Does not provide any connectivity to commercial areas		
Connectivity to Parks /Existing Trails /Libraries / Senior Centers	3.00	This trail would provide significant connectivity to several recreational facilities including Tyler State Park, the trails within Tyler State Park, the existing trail along the south side of Newtown Richboro Road at Rock Way, and the Northampton Township Recreation Complex		
Potential Future Connectivity	2.00	Will connect to three other trail segments including the Tyler State Park trails, and the Neshaminy Greenway Trail		
User Safety	2.81	Although the majority of this trail facility is in the form of a shared use trail which offers the highest level of user safety, the less than perfect score is due to the small segment with bicycle lanes and sidewalks. Although the bike lanes are an upgrade in safety from bike sharrows, they are less safe than shared use trails, resulting in the lower score.		
Total Score (27 Points Maximum)	14.81			

- The Newtown Richboro Road trail and bicycle facility is the seventh highest priority trail due to:
  - Connectivity to recreational facilities such as the Northampton Township Recreation Complex and Tyler State Park;
  - Connectivity to the overall proposed Northampton Township Trail and Bicycle network;
  - High level of user safety given that the majority of the trail will be an off-road shared use trail. The segment that isn't a shared use trail is dedicated bicycle lanes accompanied by existing sidewalks;
  - o Right-of-way required for trail being held by either the township, PA DCNR, and PennDOT;
  - o Connectivity to Council Rock South High School; and
  - Connectivity to over 900 housing units.
- Although providing significant connectivity, this will be an expensive trail and bicycle facility to develop given its overall length, it being a paved shared use trail, and engineering challenges, particularly at the intersection of Newtown Richboro Road and St. Leonards Road.



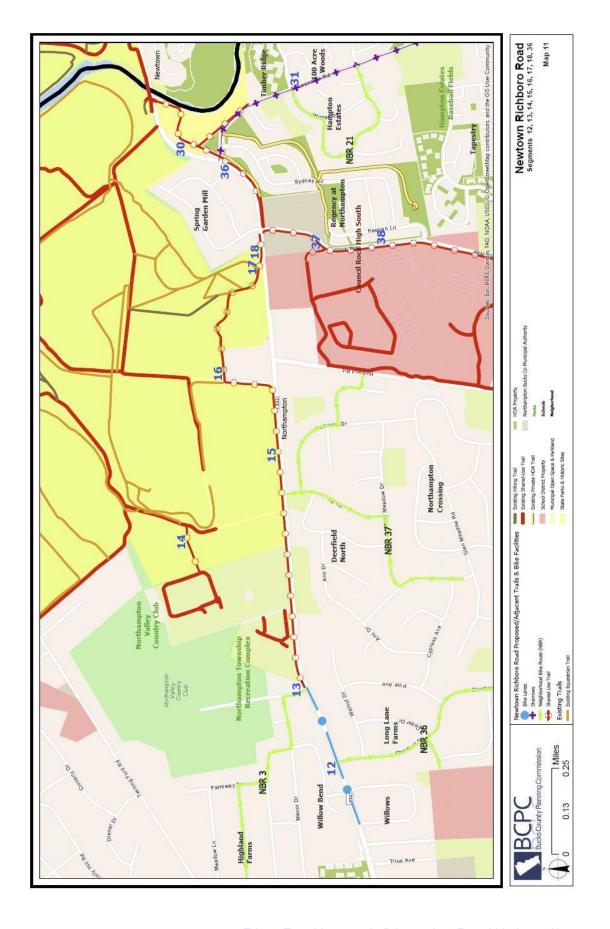












# **PRIORITY 8 - TEMPERANCE LANE**

# Intersection of Second Street Pike and Bustleton Pike to Upper Holland Road to Holland Road - 1.8 miles

On road bicycle sharrows are proposed for the two segments of Temperance Lane. The first segment extends from Spencer Road to Hatboro Road and the second segment from Hatboro Road to Almshouse Road.

## Temperance Lane segments:

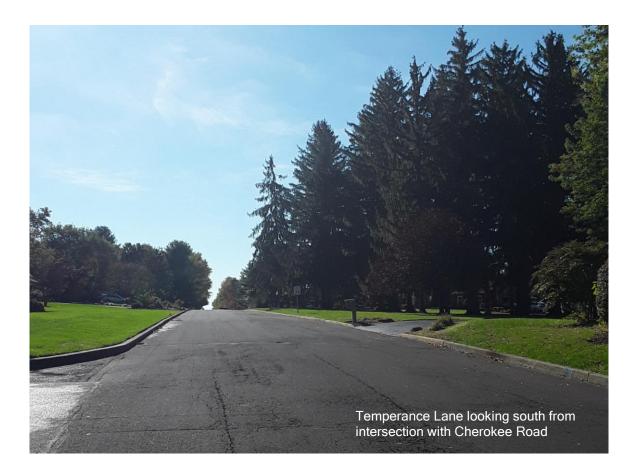
nning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
1	6	Temperance Lane	Spencer Rd to Hatboro Rd	Bike Route/Sharrows	0.89
1	7	Temperance Lane	Hatboro Rd to Almshouse Rd	Bike Route/Sharrows	0.91

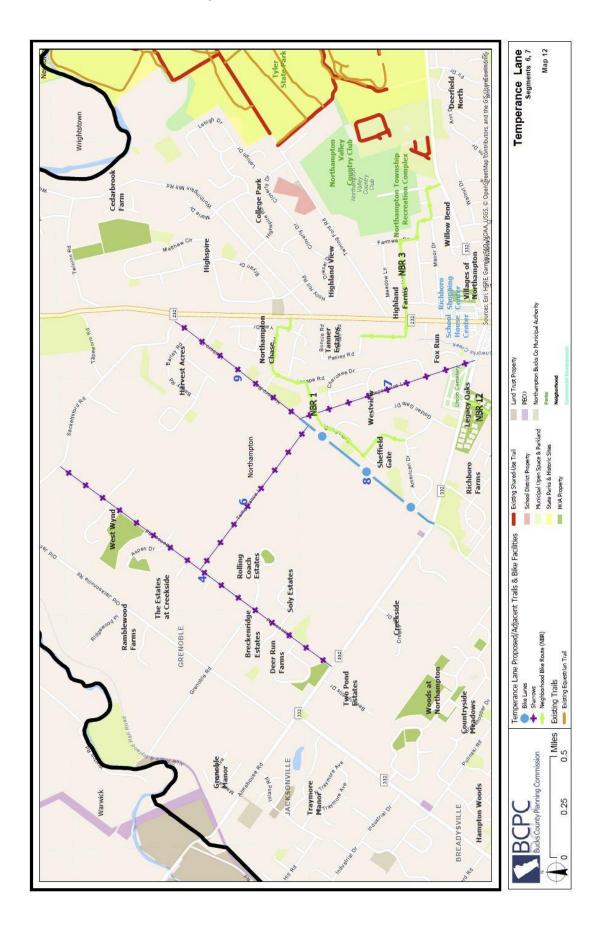
## Temperance Lane scoring evaluation:

Priority 8			
Temperance Lane - 1.8 miles			
Segments - 6, 7			
Bike Sharrows - No Sidewalks	Points	Rationale	
Cost to Northampton Township	3.00	The installation of bicycle sharrows is low cost due to it only involving paint and the stencil/template. Because of this, this trail receives a favorable score relative to the cost to the township.	
ROW Ownership	3.00	Temperance Lane is a township owned / maintained road meaning that it can install the sharrows at any time without having to gain cooperation or depend upon the PennDOT resurfacing schedule	
Presence of Natural Resource and Manmade Constraints	3.00	No resources constraints or obstacles to be addressed since bicycle sharrows get incorporated into existing roadways	
Connectivity to Neighborhoods	1.00	This trail would serve over 400 households in the Northampton Chase, Sheffield Gate, Fox Run and Westview neighborhoods	
Connectivity to Schools	0.00	Does not provide any connectivity to any schools	
Connectivity to Commercial	2.00	Would provide connectivity to School House Center and the Village of Richboro	
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	0.00	Does not connect to any existing recreational facilities	
Potential Future Connectivity	2.00	Will connect to three other trail segments in the network	
User Safety	0.50	Low score against this criteria is based upon the lack of sidewalks for non-cyclists and the use of bicycle sharrows offering no separation between cyclists and vehicles.	
Total Score (27 Points Maximum)	14.50		

- The Temperance Road bicycle sharrows evaluated relatively high due to:
  - Minimal cost to the township given that bicycle sharrows are the least expensive type of trail/bike facility to implement;
  - No right-of-way or other constraints to have to be addressed since these are on road facilities;
  - o Connectivity to commercial areas; and
  - Connectivity to over 400 housing units.
- Although existing paved cartway widths are fairly wide in the segment between Hatboro Road and Almshouse Road, the width is not wide enough to accommodate dedicated bicycle lanes. However, to

improve user safety in the future, the township may wish to consider widening the cartway to the width needed to allow for the installation of bicycle lanes along this segment.





# PRIORITY 9A - BUCK ROAD

# Intersection of Holland Road and Buck Road to intersection of Buck Road and Briarwood Drive - 1.47 miles

This 1.5 mile facility would be an entirely off-road shared use trail along Buck Road extending from the intersection of Buck Road and Holland Road at its southern end, to the intersection of Briarwood Drive and Buck Road at its northern end where it would connect to the existing trail located on the grounds of Holland Middle School and Hillcrest Elementary School. The only segment which would not be a shared use trail would be a 250-foot segment just north of Rocksville Road where natural resource constraints limit the facility to the existing sidewalks.

The trail would begin at the intersection of Holland Road and Buck Road and head northeast along the southeast side of Buck Road on property owned by Heritage Conservancy. The primarily challenge for this initial segment are some steep slopes along the right-of-way that will need to be addressed. The trail would then continue onto property as part of the Pheasant Valley Center before reaching Rocksville Road (Segment 70). At Rocksville Road, the trail crosses Buck Road to the northwest side of the road. The initial 250 feet of the trail to the northeast of Rocksville Road will be a sidewalk but will become a shared use trail the rest of the way leading up to Mallard Road (Segment 82). An easement will be required from the property at the southwest corner of Buck Road and Mallard Road (Segment 81).

Upon reaching Mallard Road, the trail will cross to the southwest side of Buck Road and continue to the intersection of Buck Road and East Heron Road (Segment 71). The portion of the trail just prior to East Heron Road will require an easement from the Northampton Presbyterian Church (Segment 72). At the intersection of Buck Road and East Heron Road, the trail will cross to the northwest side of Buck Road, crossing over Pine Run on a new bridge installed just for the trail, before reaching Woodlake Drive (Segment 84). Two easements will be needed from the two property owners on the northwest side of Buck Road located to the northeast of the East Heron Road intersection (TMP# 31-031-045 and 31-031-046). After crossing Woodlake Drive, the trail will once again cross Buck Road back to the southeast side and continue in the right-of-way of Buck Road before reaching Kings Way Drive (Segment 73). At the intersection of Kings Way Drive, the trail will cross over Buck Road again to the northwest side. An easement will be required from TMP# 31-026-031-001. The trail will then continue in the right-of-way along the northwest side of Buck Road to Forrest Drive, cross Forrest Drive to connect to the existing pathway located on the grounds of Holland Middle School and Hillcrest Elementary School (Segments 79 & 80). The various road crossings of Buck Road are required due to the presence of older homes located adjacent to the road, as well as natural resource constraints.

#### **Buck Road segments:**

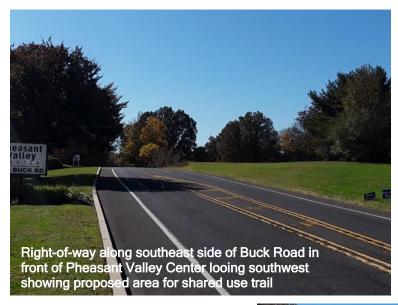
Planning Area	Segment Number	Name	Begin and End Points	Туре	Length (Miles)
4	70	Buck Road	Holland Road to Rocksville Road	Shared Use Trail	0.24
4	82	Buck Road	Rocksville Road to TMP 31-031-001	Shared Use Trail	0.13
4	81	Buck Road	TMP 31-031-001 to Mallard Road	Shared Use Trail	0.03
4	71	Buck Road	Mallard Road to Northampton Presbyterian Church	Shared Use Trail	0.42
4	72	Buck Road	Northampton Presbyterian Church Frontage to E Heron Road	Shared Use Trail	0.04
4	84	Buck Road	E Heron Road to Woodlake Drive	Shared Use Trail & Bridge	0.10
4	73	Buck Road	Pine Run Creek Bridge/Woodlake Drive to Kings Way Drive	Shared Use Trail	0.36
4	79	Buck Road	Kings Way Drive to start of sidewalk south of Forrest Drive	Shared Use Trail	0.01
4	80	Buck Road	Pine Run Frontage at Forrest Drive	Shared Use Trail	0.12

## Buck Road scoring evaluation:

Priority 9A		
Buck Road - 1.47 miles		
Segments - 70, 71, 72, 73, 79, 80, 81, 82, 84		
Shared Use Trail	Points	Rationale
Cost to Northampton Township	0.00	The Buck Road Trail receives a very low score as this will be an expensive trail to design and engineer, as well as construct. In addition to the cost of the trail itself, completion of this trail will also require a bridge over Pine Run which will also add to the cost. To make the cost more manageable, the township may wish to consider phasing the various segments over time.
ROW Ownership	0.00	Buck Road is a PennDOT road. However, there are areas of the proposed trail which will require a total of 7 easements including four private homeowners, a church, a land conservancy, and a shopping center owner. As these can sometimes be very difficult, or require several years to obtain, this particular trail received a low score for right-of-way ownership.
Presence of Natural Resource and Manmade Constraints	1.00	Ass the proposed trail would cross Buck Road twice, as part of trying to minimize the need for private easements, this will receive additional scrutiny from PennDOT. Additionally, a separate trail bridge will need to be constructed across Pine Run. Finally, in the segment between Holland Road and the Pheasant Valley Center, there are steep slopes that will need to be addressed.
Connectivity to Neighborhoods	3.00	This trail would have connectivity to over 1,100 households located in the Northampton Preserve, Holland Farms, Hillcrest Farms, Lakeview Drive, The Meadows, Hillcrestshire, Wood Lake, and Pine Run neighborhoods
Connectivity to Schools	2.00	Would connect to Holland Middle School and Hillcrest Elementary School. This was one of the primary objectives for this trail
Connectivity to Commercial	1.00	Would provide a connection to Pheasant Valley Center
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	1.00	Connects to the existing trail / pathway located on the grounds of Holland Middle School and Hillcrest Elementary School
Potential Future Connectivity	3.00	This trail provides connectivity to 13 trail and bike facility segments resulting in its high score for this evaluation criteria
User Safety	3.00	As this is a proposed shared use trail completely separated from vehicular traffic, it offers the highest level of safety for all trail users.
Total Score (27 Points Maximum)	14.00	

## **Key Points**

- The Buck Road shared use trail is the seventh highest priority trail due to a combination of:
  - o High degree of user safety since this is an off-road shared use trail separated from vehicular traffic;
  - o Extensive connectivity within the overall Northampton Township Trail & Bike Network;
  - o Connectivity to commercial areas and schools; and
  - Connectivity to over 1,100 housing units.
- This trail would have potentially rated higher. However, its overall score was brought down primarily
  driven by right-of-way issues associated with the need for various easements, and high costs
  associated with the need for a separate bridge over Pine Run, as well as the need to address steep
  slopes between Pheasant Valley Center and Holland Road.





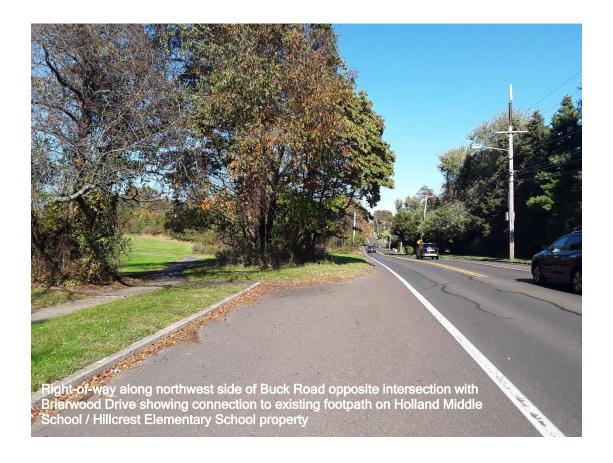


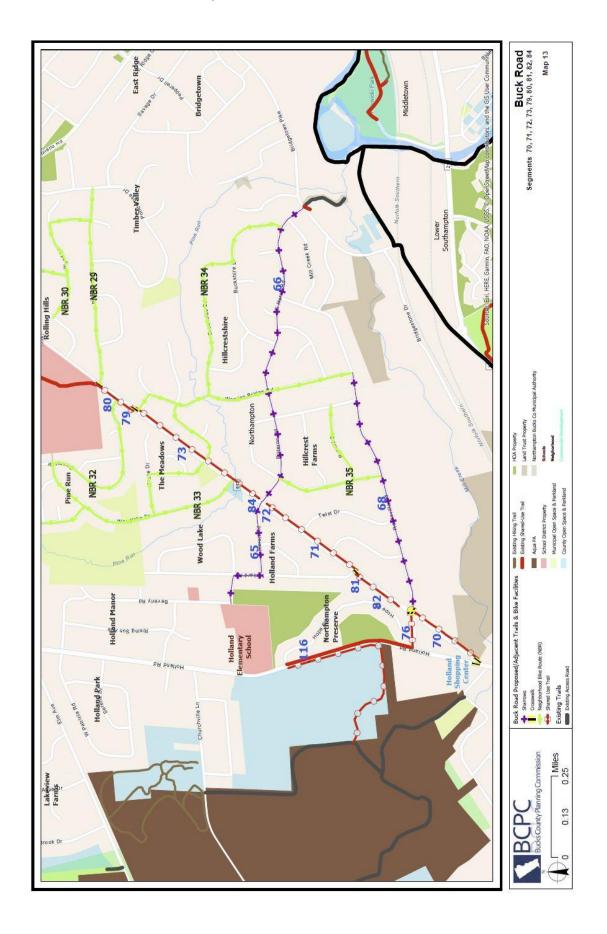












# PRIORITY 9B - STONEYFORD ROAD

# Big Meadow Park to East Holland Road - 0.82 miles

Bicycle sharrows are proposed along this portion of Stoneyford Road to connect Big Meadow Park and the Neshaminy Greenway Trail to neighborhoods located to the south including East Ridge, Bridgetown, Hidden Pines, Hidden Creek and Holland Acres.

# Stoneyford Road segments:

	ning Segn ea Num		Name	Begin and End Points	Туре	Length (Miles)
:	3 46	6 S	Stoneyford Road	Big Meadow Park to East Holland Road	Bike Route/Sharrows	0.82

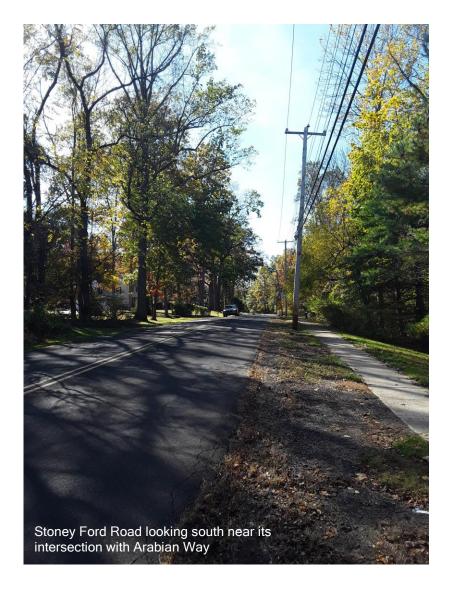
## Stoneyford Road scoring evaluation:

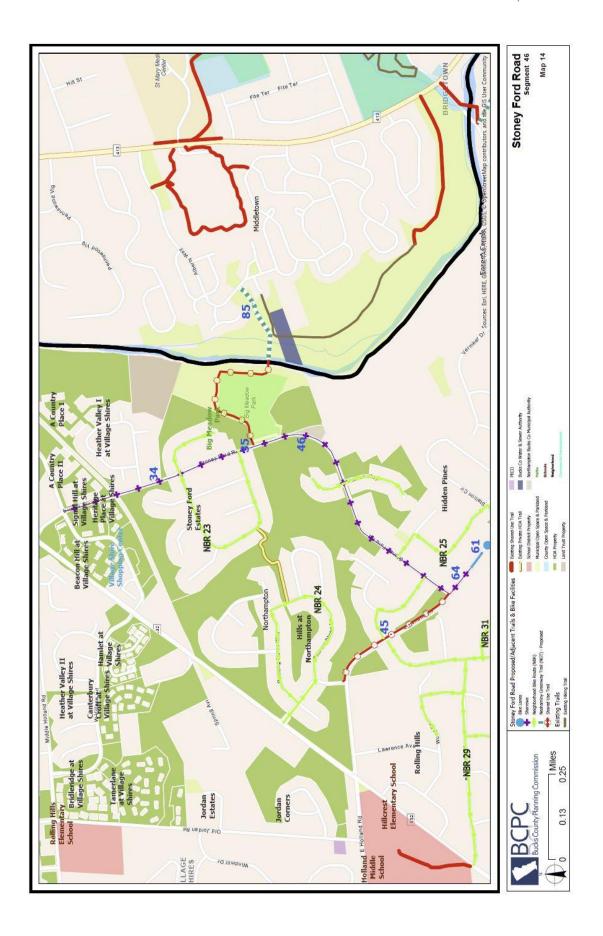
Priority 9B		
Stoneyford Road		
Segment - 46		
Bike Sharrows - Existing Sidewalks	Points	Rationale
Cost to Northampton Township	3.00	The installation of bicycle sharrows is low cost due to it only involving paint and the stencil/template. Because of this, this trail receives a favorable score relative to the cost to the township.
ROW Ownership	3.00	Stoneyford Road is a township owned / maintained road meaning that it can install the sharrows at any time without having to gain cooperation or depend upon the PennDOT resurfacing schedule
Presence of Natural Resource and Manmade Constraints	3.00	No resources constraints or obstacles to be addressed since bicycle sharrows get incorporated into existing roadways
Connectivity to Neighborhoods	1.00	Provides connection to over 450 homes located in Stoney Ford Estates, East Ridge, Bridgetown, Hidden Pines, Hidden Creek and Holland Acres
Connectivity to Schools	0.00	Does not provide any connectivity to any schools
Connectivity to Commercial	0.00	Does not provide any connectivity to commercial areas
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	1.00	Would serve as a connection to Big Meadow Park
Potential Future Connectivity	2.00	This trail will connect to three trail and bike facility segments in the network
User Safety	1.00	Low score against this criteria is based upon bicycle sharrows offering no separation between cyclists and vehicles.
Total Score (27 Points Maximum)	14.00	

## **Key Points**

- The inclusion of the proposed bicycle sharrows on Stoneyford Road between Big Meadow Park and East Holland Road in the Top 10 priority trails and bicycle facilities for the township was based on:
  - Low cost of implementation and no resource constraints to be addressed;
  - Connectivity to Big Meadow Park;
  - Connectivity to over 450 housing units; and
  - o Connection to three other trail and bicycle facilities proposed as part of the township-wide network.
- As with several other proposed bicycle sharrow facilities as part of the township network, current paved cartway/road widths do not provide enough width to allow for both vehicular traffic and dedicated bicycle lanes. However, as recommended previously, the township could upgrade many of these bicycle sharrows to safer bicycle lanes by widening the road/cartway during future resurfacing projects.







# PRIORITY 9C - TANYARD ROAD

## Hatboro Road to Bustleton Pike - 1.42 miles

Bicycle sharrows are proposed along Tanyard Road extending from Hatboro Road to Bustleton Pike and will serve as an east-west alternative to Almshouse Road for pedestrians and bicyclists.

## Tanyard Road segments:

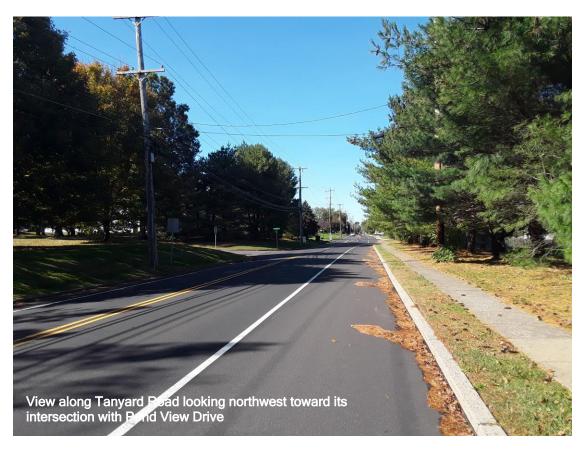
Planning Area	Segment Number	Name	Begin and End Points Type	Length (Miles)
2	24	Tanyard Road	Hatboro Road to Second Street Pike Bike Route/Sharrows	1.08
5	86	Tanyard Road	Second Street Pike to Bustleton Pike Bike Route/Sharrows	0.34

## Tanyard Road scoring evaluation:

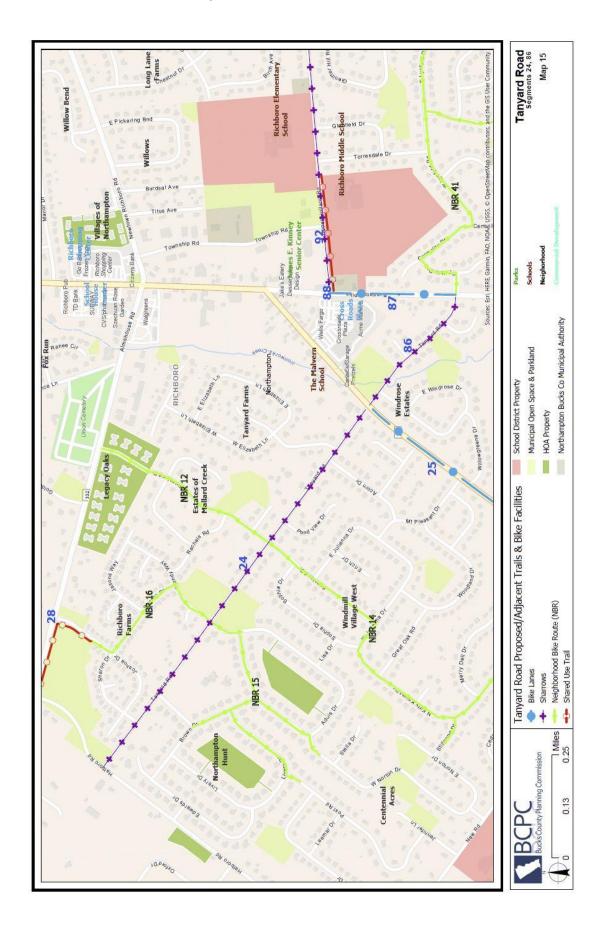
Priority 9C Tanyard Road - 1.4 miles		
Segments - 24, 86		
Bike Sharrows - Existing Sidewalks	Points	Rationale
Cost to Northampton Township	3.00	The installation of bicycle sharrows is low cost due to it only involving paint and the stencil/template. Because of this, this trail receives a favorable score relative to the cost to the township.
ROW Ownership	3.00	Tanyard Road is a township owned / maintained road meaning that it can install the sharrows at any time without having to gain cooperation or depend upon the PennDOT resurfacing schedule
Presence of Natural Resource and Manmade Constraints	3.00	No resources constraints or obstacles to be addressed since bicycle sharrows get incorporated into existing roadways
Connectivity to Neighborhoods	2.00	Connects to almost 1,000 homes located in Richboro Farms, Estates of Mallard Creek, Tanyard Farms, Northampton Hunt, Windmill Village West, Windrose Estates, and Spring Valley Farm
Connectivity to Schools	0.00	Does not provide any connectivity to any schools
Connectivity to Commercial	1.00	Would provide a connection to Cross Roads Plaza
Connectivity to Parks / Existing Trails / Libraries / Senior Centers	0.00	Does not connect to any existing recreational facilities
Potential Future Connectivity	1.00	Although connecting to two other trail segments, the connectivity offered by this trail facility is lower relative to other facilities
User Safety	1.00	Low score against this criteria is based upon bicycle sharrows offering no separation between cyclists and vehicles.
Total Score (27 Points Maximum)	14.00	

## **Key Points**

- The Tanyard Road bicycle sharrows ranked in the top ten trail and bike facilities based on:
  - Very low costs and few barriers/constraints associated with the development of bicycle sharrows;
  - o Connectivity to Cross Roads Plaza; and
- Connectivity to almost 1,000 housing units







# **PLANNING AREA 1**

This planning area, located in the northwest corner of the township, is bounded by Almshouse-Richboro Road (Route 332) to the south, the Neshaminy Creek to the north and east, and the Little Neshaminy Creek and the township boundary with Warwick Township to the west. The area borders Warwick Township to the west, and Wrightstown and Newtown townships to the north. The features of this area are described below:

#### Land Use

Land use in this planning area is a diverse mix of:

- Single Family Residential, including rural residential, which represents the largest land use in this
  planning area;
- Agricultural in the area bounded by Almshouse Road, Hatboro Road, Sackettsford Road, and Old Jacksonville Road;
- Parks and Open Space found along Almshouse Road associated with the Northampton Township Recreation Complex and Tyler State Park;
- · Commercial (Village of Richboro); and
- · Intermittent utilities uses.

## **Natural Features**

## **Topography**

• Similar to the majority of the township which can be described as gently rolling hills. A noticeable change in topography occurs along the steep slopes along the Neshaminy Creek, and along the border of Northampton and Warwick townships.

#### Water resources

 The area is part of the Neshaminy Creek watershed with the primary secondary watershed in this area being the Little Neshaminy Creek watershed, with a small portion, primarily around the Village of Richboro, draining to the Iron Works Creek watershed.

#### Woodlands and Natural Areas

 The primary wooded areas in this area include the riparian corridors along the Neshaminy and Little Neshaminy creeks; areas within Tyler State Park; a wooded area along the south side of Twining Road, between Second Street Pike to the west and Worthington Mill Road to the east.

### Man-Made Features

#### **Commercial Areas**

- Richboro Plaza
- School House Plaza

## Parks and Recreation Areas

- Northampton Township Recreation Complex
- Tyler State Park
- Northampton County Club

## **Historic Resources**

- · Richboro Schoolhouse
- · John Thompson House
- · Twining Ford Covered Bridge
- Hampton Hill

# Principal Arterial Roadways

• Almshouse Road (Route 332) from Jacksonville Road to Newtown Township

# Major Collector Roadways

- Sackettsford Road
- · Worthington Mill Road
- Hatboro Road
- Almshouse Road (Route 332) from Warwick Township to Jacksonville Road

# **Existing Trails**

Area	Existing Trail	Type of Trail	Mileage
1	Tyler State Park Equestrian Trails	Equestrian	12.57
1	Northampton Recreation Center Site	Shared Use	0.78
1	Tyler Park Nature Trail	Hiking Trail	1.14
1	Cooper Trail/Mill Trail Cut Off	Hiking Trail	0.28
1	Fisherman's Parking Lot Trail	Hiking Trail	0.05
1	Stable Mill Trail	Shared Use	1.24
1	Red Oak Trail	Shared Use	0.63
1	Mill Dairy Trail	Shared Use	0.95
1	Wood Field Trail	Shared Use	0.53
1	Number 1 Lane Trail	Shared Use	1.22
1	College Park Trail	Shared Use	0.48
1	Dairy Hill Trail	Shared Use	1.90
1	White Pine Trail	Shared Use	0.52
1	Bridge Trail	Shared Use	0.37
		Total Area 1	22.66

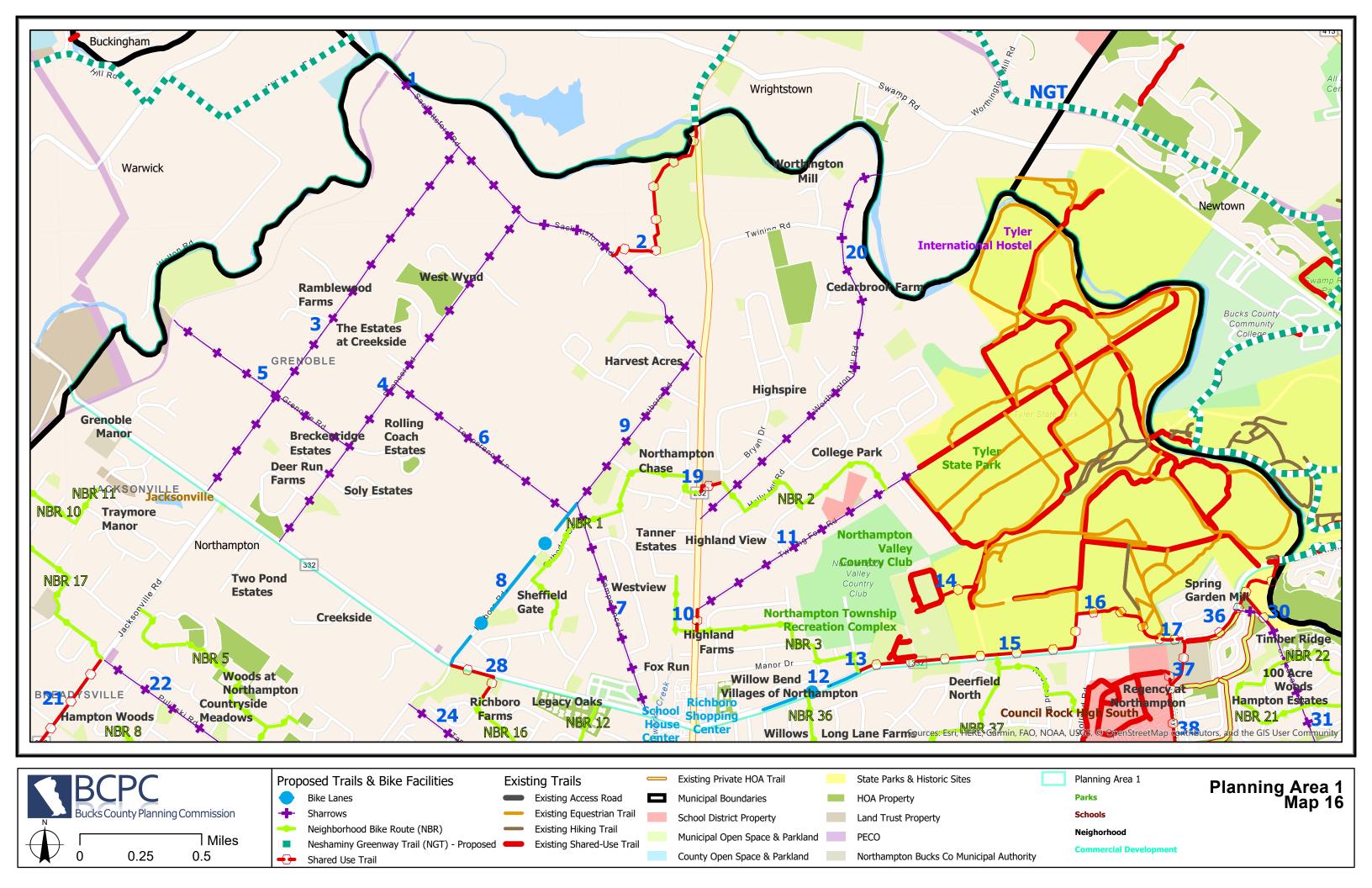


TABLE 19 – PROPOSED TRAILS & BICYCLE FACILITIES – PLANNING AREA 1

Segment	Dedicated Bike Lane Segments	Segment End Points	Length (Miles)
8	Hatboro Road	Almshouse Rd to Temperance Lane	0.84
12	Newtown Richboro Road	West Pickering Bend to Harmony Drive	0.43
		Total Proposed Bicycle Lanes	1.27

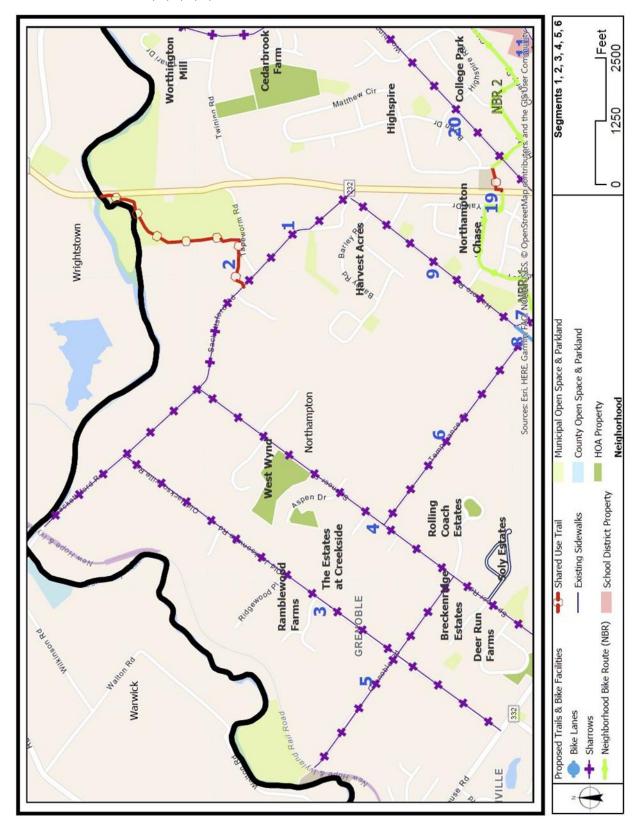
Segment	Sharrows	Segment End Points	Length (Miles)
1	Sackettsford Road (Neshaminy Greenway Trail)	New Hope Ivyland RR to Second Street Pike	1.21
3	Old Jacksonville Road	Almshouse Road to Sackettsford Road	1.75
4	Spencer Road	Almshouse Road to Sackettsford Road	1.66
5	Grenoble Road	New Hope Ivyland RR to Spencer Road	0.89
6	Temperance Lane	Spencer Rd to Hatboro Rd	0.89
7	Temperance Lane	Hatboro Rd to Almshouse Rd	0.91
9	Hatboro Road	Temperance Lane to Sackettsford Road	0.78
11	Twining Ford Road	Second Street Pike to Tyler State Park	1.16
20	Worthington Road	Second Street Pike to Neshaminy Creek	1.79
		Total Proposed Sharrows	11.04

Segment	Shared Use Trails	Segment End Points	Length (Miles)
2	Bryan's Farm (Neshaminy Greenway Trail)	Sackettsford Road to Neshaminy Creek	0.81
10	Second Street Pike	Highland Drive to Twining Ford Road	0.09
13	Newtown Richboro Road	Frontage of Northampton Township Recreation Complex	0.42
14	Tyler State Park	Northampton Township Recreation Complex to No. 1 Lane Trail	0.15
15	Newtown Richboro Road	Frontage of Tyler State Park	0.60
16	Tyler State Park	Portion of Cooper Trail	0.37
17	Tyler State Park	Copper Trail to Newtown Richboro Road	0.07
18	Newtown Richboro Road	Cooper Trail Connecftion to Spring Garden Mill Road	0.06
19	Advent Lutheran Church/Northampton Bucks County Municipal Authority	Second Street Pike to Anselm Drive	0.11
		Total Proposed Shared Use Trails	2.67

Segment	Neighborhood Bike Route (NBR)	Segment End Points	Length (Miles)
NBR 1	Neighborhood Bike Route	Sheffield Gate, Westview, Northampton Chase	1.26
NBR 2	Neighborhood Bike Route	Highland View, College Park	0.95
NBR 3	Neighborhood Bike Route	Tanner Estates, Highland Farms	1.15
		Total Proposed Neighborhood Bike Routes	3.36

Total Proposed Mileage	18.34
Total i Toposca Milicage	10.57

FIGURE 1 – SEGMENTS 1, 2, 3, 4, 5, 6



# 1 - Sackettsford Road (Neshaminy Greenway Trail) New Hope Ivyland Railroad to Second Street Pike

1 - Sackettsford Road (Neshaminy Greenway Trail) New Hope Ivyland Railroad to Second Street Pike

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.21 miles

#### Summary:

- Part of the County's expansive Neshaminy Greenway trail, which would parallel the Neshaminy Creek from Chalfont all the way to Croydon.
- Would connect to four additional proposed trail and bicycle facilities including:
  - 2 Bryan's Farm (Neshaminy Greenway Trail) Shared Use Trail
  - 3 Old Jacksonville Road Bicycle Sharrows
  - 4 Spencer Road Bicycle Sharrows
  - 9 Hatboro Road Bicycle Sharrows

## 2 - Bryan's Farm (Neshaminy Greenway Trail) - Sackettsford Road to Neshaminy Creek

2 - Bryan's Farm (Neshaminy Greenway Trail) - Sackettsford Road to the Neshaminy Creek

#### Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.81 miles

#### Summary:

- Provides a direct and dedicated shared use trail from Sackettsford Road to the Neshaminy Creek
- Contributes to the completion of the Neshaminy Creek Greenway Trail.
- Would require easements to pass through privately owned property. Additionally, although Bryan's Farm is located on property owned by Northampton Township, alignment of the trail on Bryan's Farm will require coordination with the owners.
- Would connect to 1 Sackettsford Road Bicycle Sharrows.

#### 3 - Old Jacksonville Road - Almshouse Road to Sackettsford Road

3 - Old Jacksonville Road- Almshouse Road to Sackettsford Road

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.75 miles

- Connects Almshouse Road to 1 Sackettsford Road Bicycle Sharrows, providing an alternative North-South route to proposed bicycle facilities 4 - Spencer Road Bicycle Sharrows, 8 - Hatboro Road Bicycle Lanes and 9 - Hatboro Road Bicycle Sharrows.
- Would also connect to 5 Grenoble Road Bicycle Sharrows.

## 4 - Spencer Road - Almshouse Road to Sackettsford Road

### 4 - Spencer Road - Almshouse Road to Sackettsford Road

### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.66 miles

#### Summary:

- Connects Almshouse Road to Sackettsford Road, providing an alternative North-South connection to bicycle facilities 3 - Old Jacksonville Road Bicycle Sharrows, 8 - Hatboro Road Bicycle Lanes and 9 -Hatboro Road Bicycle Sharrows.
- In addition to connecting to 1 Sackettsford Road Bicycle Sharrows, this would also connect to 5 Grenoble Road Bicycle Sharrows.

## 5 - Grenoble Road - New Hope Ivyland Railroad to Spencer Road

#### 5 - Grenoble Road - New Hope Ivyland Railroad to Spencer Road

# Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.89 miles

#### Summary:

- In combination with 6 Temperance Lane Bicycle Sharrows, provides an alternative East-West connection to traveling along 1 -Sackettsford Road Bicycle Sharrows.
- Would connect to 3 Old Jacksonville Road Bicycle Sharrows and 4 Spencer Road Bicycle Sharrows.

## 6 - Temperance Lane - Spencer Road to Hatboro Road

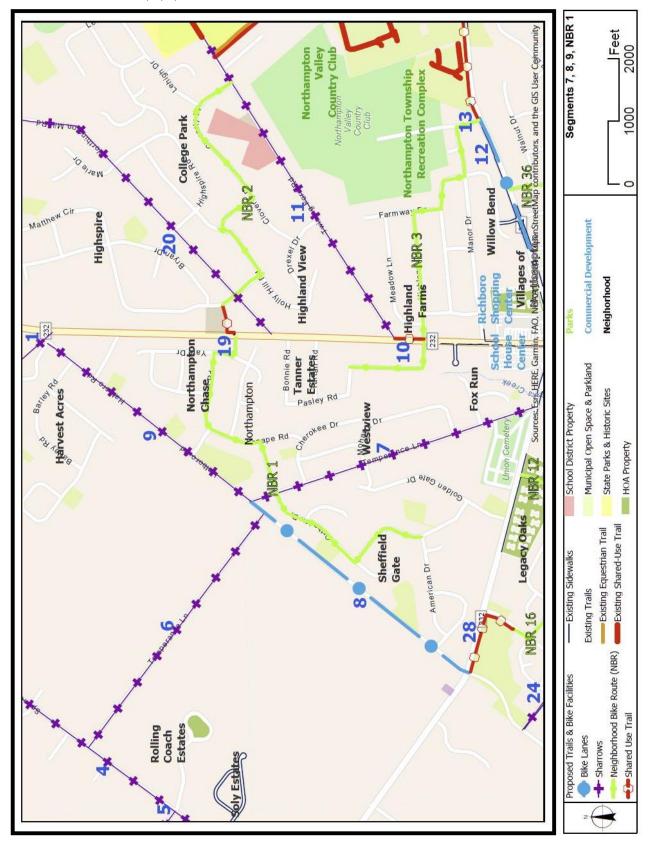
#### 6 - Temperance Lane - Spencer Road to Hatboro Road

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.89 miles

- In combination with 5 Grenoble Road, provides an alternative East-West connection to traveling along 1 -Sackettsford Road.
- Would connect to four additional proposed trail and bicycle facilities including:
  - 4 Spencer Road Bicycle Sharrows
  - 7- Temperance Lane Bicycle Sharrows (Hatboro Road to Almshouse Road)
  - 8 Hatboro Road Bicycle Lanes (Almshouse Road to Temperance Lane)
  - 9 Hatboro Road Bicycle Sharrows.

FIGURE 2 - SEGMENTS 7, 8, 9, NBR1



## 7 - Temperance Lane -Hatboro Road to Almshouse Road

## 7 - Temperance Lane - Hatboro Road to Almshouse Road

### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.91 miles

#### Summary:

- Serves as the primary link between the northwestern portion of the township and Richboro.
- When combined with 5 Grenoble Road Bicycle Sharrows and 6 Temperance Lane Bicycle Sharrows
  serves as a route running roughly parallel to Almshouse Road which was unsuitable for any trails of
  bicycle facilities.

## 8 - Hatboro Road - Almshouse Road to Temperance Lane

#### 8 - Hatboro Road - Almshouse Road to Temperance Lane

#### Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.84 miles

#### Summary:

- Would provide a dedicated bicycle lane between Almshouse Road and Temperance Lane
- Along with bicycle sharrows proposed for 9 Hatboro Road Bicycle Sharrows between Temperance
  Land and Sackettsford Road/Second Street Pike, would facilitate a connection to the Neshaminy
  Greenway Trail (1 Sackettsford Road) and to Wrightstown Township when combined with the trail
  proposed for 2 Bryan's Farm Shared Use Trail.
- · Connects to Tanner Brothers Dairy.
- Will require a slight widening of the pavement to accommodate the proposed 5' wide bicycle lanes.
- Would connect to bicycle sharrows as part of 6 & 7 Temperance Lane Bicycle Sharrows and 9 Hatboro Road Bicycle Sharrows (Temperance Lane to Sackettsford Road/Second Street Pike).

#### 9 - Hatboro Road - Temperance Lane to Sackettsford Road/Second Street Pike

## 9 - Hatboro Road - Temperance Lane to Sackettsford Road/Second Street Pike

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.78 miles

- Would connect Richboro to the Neshaminy Greenway Trail by connecting to 1 Sackettsford Road Bicycle Sharrows and 2 Bryan's Farm Shared Use Trail.
- Will require lowering the speed limit from 45 to 35 mph.
- Would connect to bicycle sharrows as part of 6 & 7 Temperance Lane Bicycle Sharrows and to 8 -Hatboro Road Bicycle Lanes (Almshouse Road to Temperance Lane).

FIGURE 3 – SEGMENTS 10, 11, 19, 20, NBR 2, NBR 3 Segments 10, 11, 19, 20 NBR 2, NBR 3 Newtown X Feet Spring 30 Garden Mill 2500 1250 0 State Parks & Historic Sites Park Neighorhood HOA Property Wrightstown Municipal Open Space & Parkland Northampton Gountery Club Northampton Township Recreation Complex ⇒Existing Private HOA Trail Existing Shared-Use Trail School District Property College Park Northampton NBR 3 NBR 2 Worthington Highspire Highland View 11 Existing Equestrian Trail Existing Access Road Existing Hiking Trail Existing Sidewalks Farms Highland Northampton **Existing Trails** Tanner Estates Harvest Acres Westview Neighborhood Bike Route (NBR)

Sheffield Gate

Proposed Trails & Bike Facilities

Bike Lanes - Sharrows Shared Use Trail

## 10 - Second Street Pike - Highland Drive to Twining Ford Road

## 10 - Second Street Pike - Highland Drive to Twining Ford Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.09 miles

#### Summary:

- Serves as a key connection between the Tanner Estates neighborhood and the recreational facilities
  of Tyler State Park and Northampton Township Recreation Complex by providing a sidepath trail
  between Glasgow. Road/Highland Drive and the bicycle sharrows proposed as part of 11 Twining
  Ford Road Bicycle Sharrows.
- The trail would be located along the east side of Second Street Pike and within the 70' wide PennDOT right-of-way in this area.

## 11 - Twining Ford Road - Second Street Pike into Tyler State Park

11 - Twining Ford Road - Second Street Pike into Tyler State Park

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.16 miles

#### Summary:

- Provides a direct route into Tyler State Park, providing access to the entirety of the park's existing trail system and Bucks County Community College
- Connects to Tyler State park via Twining Ford Road through to Dairy Hill Trail.
- Posted speed limit is 25 mph so no modifications are required.

# 19 - Advent Lutheran Church/Northampton Bucks County Municipal Authority - Second Street Pike to Anselm Drive

19 - Advent Lutheran Church/Northampton Bucks County Municipal Authority - Second Street Pike to Anselm Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.11 miles

- Provides a connection to 20 Worthington Mill Road Bicycle Sharrows for neighborhoods to the west of Second Street Pike including Sheffield Gate and Northampton Chase.
- Will requirement an easement agreement with Advent Lutheran Church or Bucks County Municipal Authority.

## 20 - Worthington Mill Road- Second Street Pike to Neshaminy Creek

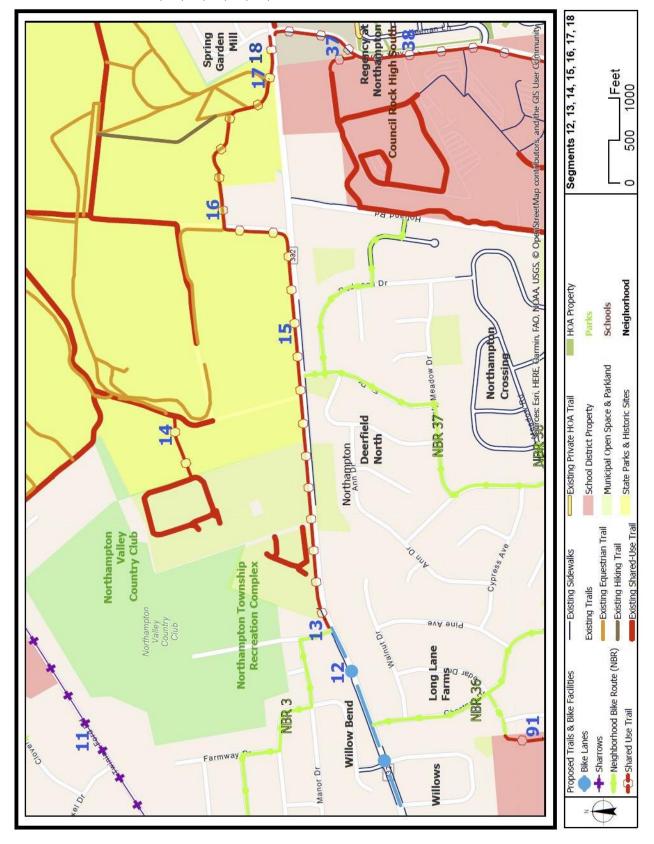
## 20 - Worthington Mill Road - Second Street Pike to Neshaminy Creek

### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.79 miles

- Provides a direct connection to the Neshaminy Creek, with potential to connect to the Neshaminy Greenway Trail.
- Will require speed limit to be lowered to 35 mph from the current posted speed of 40 mph.
- As Worthington Mill Road is a PennDOT maintained road, the installation of bicycle sharrows will be dependent on the repaving schedule for Worthington Mill Road and the township's willingness to maintain the proposed sharrows.
- Provides connectivity to the rest of the proposed township trail and bicycle facilities network to residents of the Cedarbrook Farm and Highspire neighborhoods.

FIGURE 4 – SEGMENTS 12, 13, 14, 15, 16, 17, 18



## 12 - Newtown Richboro Road - West Pickering Bend to Harmony Drive

## 12 - Newtown Richboro Road - West Pickering Bend to Harmony Drive

Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.43 miles

#### Summary:

- Provides a dedicated bicycle lane that would serve bicycle traffic between the commercial center of Richboro and Northampton Township Recreation Complex.
- Is a part of an overall trail along Newtown-Richboro Road extending from Richboro to Tyler State Park.
- Connects to Neighborhood Bike Routes 3 Highland Farms/Willow Bend and 36 Long Lane Farms.

## 13 - Newtown Richboro Road - Frontage of Northampton Township Recreation Complex

## 13 - Newtown Richboro Road - Frontage of Northampton Township Recreation Complex

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.42 miles

#### Summary:

- Connects the Northampton Township Recreation Complex and Tyler State Park with a shared use trail.
- Completes the final segment to provide multi-modal access to the Northampton Township Recreation Complex from the Richboro commercial center.
- Via Neighborhood Bike Routes 36 Long Lane Farms and 37 Deerfield North, provides access to Tyler State Park for residents in those neighborhoods.

## 14 - Tyler State Park - Northampton Township Recreation Complex to No. 1 Lane Trail

## 14 - Tyler State Park - Northampton Township Recreation Complex to No. 1 Lane Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.15 miles

- Connects the interior section of the Northampton Township Recreation Complex to interior trails of Tyler State Park with a shared use trail.
- An easement would be required from the Pennsylvania Department of Conservation and Natural Resources since the trail would be located on their property.

## 15 - Newtown Richboro Road - Frontage of Northampton Township Recreation Complex

### 15 - Newtown Richboro Road - Frontage of Tyler State Park

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.60 miles

#### Summary:

- Connects the Northampton Township Recreation Complex and Tyler State Park with a shared use trail along the frontage of Newtown-Richboro Road
- Provides access to Tyler State Park to residents living in Deerfield North via a connection to Neighborhood Bike Route 37 Deerfield North.
- Extends to Stable Mill Trail and into the existing trails in Tyler State Park.
- An easement would be required from the Pennsylvania Department of Conservation and Natural Resources (PA DCNR) since the trail would be located on their property.

## 16 - Tyler State Park - Portion of Cooper Trail

### 16 - Tyler State Park - Portion of Cooper Trail

#### Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.37 miles

#### Summary:

- Will transform an existing dirt pathway into a paved shared use trail.
- In conjunction with 17 Tyler State Park Shared Use Trail, assists in connecting the Spring Garden Mill community to the Tyler State Park trail network.
- As bicycles are currently not permitted on this pathway, representatives from PA DCNR/Tyler State Park would have to change this designation.

#### 17 - Tyler State Park - Cooper Trail to Newtown Richboro Road

#### 17 - Tyler State Park - Cooper Trail to Newtown Richboro Road

#### Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.07 miles

- In conjunction with 18 Newtown Richboro Road Shared Use Trail, assists in connecting the Spring Garden Mill community to the Tyler State Park Trail network.
- Would require an easement from Tyler State Park/PA DCNR.

## 18- Newtown Richboro Road - Cooper Trail Connection to Spring Garden Mill Road

## 18 - Newtown Richboro Road - Cooper Trail Connection to Spring Garden Mill Road

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.06 miles

#### Summary:

- In conjunction with 17 Tyler State Park Shared Use Trail, assists in connecting the Spring Garden Mill community to the Tyler State Park Trail network.
- Will require coordination with PennDOT since the trail would be located in the right of way along the north side of Newtown Richboro Road, a PennDOT maintained road.
- Council Rock High School South would be accessible via a crosswalk at the end of this trail at the signalized intersection of Newtown Richboro Road and Rock Way.
- This trail would also connect to the existing trail along the south side of Newtown Richboro Road
  beginning at the southeast corner of Newtown Richboro Road and Rock Way. This exiting trail, in
  conjunction with 38 Newtown Richboro Road Shared Use Trail extending to St. Leonards Road, will
  provide access to Tyler State Park for residents in neighborhoods along St. Leonards Road, while also
  providing access to Tyler State Park for neighborhoods to the west of Rock Way.

## Neighborhood Bike Routes (NBR) - 1, 2 and 3

#### Neighborhood Bike Routes - 1, 2 and 3

## Trail/Bicycle Facility Type and Length:

NBR 1- Neighborhood Bike Route Signage1.26 milesNBR 2- Neighborhood Bike Route Signage0.95 milesNBR 3- Neighborhood Bike Route Signage1.16 miles

- NBR 1 Sheffield Gate, Westview, Northampton Chase
   Would provide connections to 6 & 7 Temperance Lane Bicycle Sharrows and Anselm Drive
- NBR 2 Highland View, College Park
   Provides a connection from Worthington Mill Road to Twining Ford to Tyler State Park
- NBR 3 Tanner Estates, Highland Farms
   Provides access to the Northampton Township Recreation Complex and Tyler State Park via Twining Ford Road

# **PLANNING AREA 2**

This planning area is bounded by Almshouse road to the north, Bristol Road to the south, Second Street Pike (Route 232) to the East, and the municipal boundary with Warwick Township to the west

#### Land Use

Land use in this planning area is a diverse mix of:

- Primarily Single Family & Residential Rural Residential with some multifamily residential locations;
- Industrial Uses at the Northampton Township Business and Technology Center between Jacksonville Road and the municipal boundary with Warwick Township
- Commercial found at the far eastern edge along PA Route 232 at Addisville Commons and the Village of Richboro; and
- Institutional in the form of Maureen Welch Elementary School

## **Natural Features**

## **Topography**

 Primarily gently rolling hills with some steep slopes along the Little Neshaminy Creek, Spring Mill and Ironworks Creek stream valleys.

#### Water resources

 There are two primary watersheds in this planning area. The section east of Hatboro Road drains into the Ironworks Creek watershed while the portion west of Hatboro Road drains into the Little Neshaminy Creek Watershed. Both of these secondary watersheds eventually drain into the Neshaminy creek and into the Delaware River.

## **Natural Areas**

 Wetlands can be found running north from Bobbie Road to Jacksonville Road traversing the Two Pond Estates, Countryside Meadows, Woods at Northampton and Brookwood Estates neighborhoods.

#### **Woodlands and Natural Areas**

 Primarily located along stream valleys with the greatest expanse of woodlands being located on the border between the Woods at Northampton and Creekside neighborhoods and Traymore Manor neighborhoods.

#### Man-Made Features

#### **Commercial Areas**

- Village of Richboro
- Addisville Commons

## Schools

Maureen Welch Elementary

# Parks and Recreation Areas

- Northampton Municipal Park Complex
- Spring Mill Golf Course

## **Historic Resources**

Spread Eagle Inn

# **Principal Arterial Roadways**

- Almshouse Road
- Second Street Pike (Route 232)
- Jacksonville Road

# Major Collector Roadways

Hatboro Road

# **Existing Trails**

Area	Existing Trail	Type of Trail	Mileage
2	Northampton Municipal Park Complex	Shared Use	3.30
2	Ivy Greene Run	Shared Use	0.23
		Total Area 2	3.53

TABLE 20 – PROPOSED TRAILS & BICYCLE FACILITIES – PLANNING AREA 2

Segment	Dedicated Bike Lane Segments	Segment End Points	Length (Miles)
25	Second Street Pike	Windsor Drive to Tanyard Road	0.92
		Total Proposed Bicycle Lanes	0.92

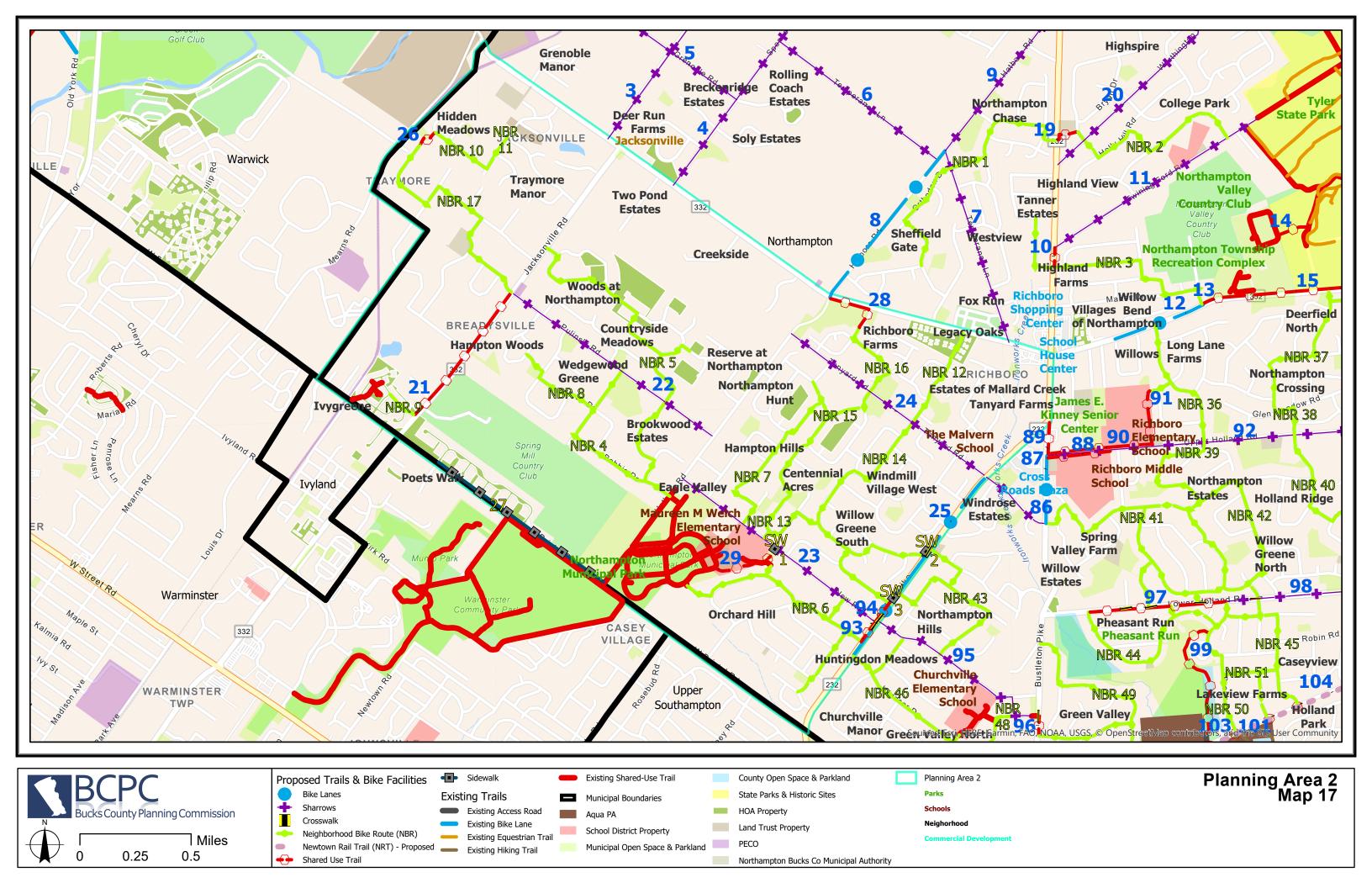
Segment	Sharrows	Segment End Points	Length (Miles)
22	Pulinski Road	Jacksonville Road to Hatboro Road	1.10
23	New Road	Hatboro Road to Second Street Pike	1.09
24	Tanyard Road	Hatboro Road to Second Street Pike	1.08
		Total Proposed Sharrows	3.26

Segment	Shared Use Trails	Segment End Points	Length (Miles)
21	Jacksonville Road	Ashley Drive to Pulinski Road	0.69
26	Hidden Meadows Connector	Hill Road to Steam Whistle Drive	0.10
28	Richboro Farms Connector	Joshua Drive to intersection of Hatboro Road and Almshouse Road	0.27
29	New Road Trailhead & Maureen Welsh Elementary School Trail (In Design)	New Road to Northampton Municipal Park	0.24
		Total Proposed Shared Use Trails	1.30

Segment	Sidewalk	Segment End Points	Length (Miles)
27	Bristol Road	Wordsworth Drive to Hatboro Road	0.92
SW 1	New Road (In Design)	Township property adjacent to and southeast of Maureen Welsh School	0.03
SW 2	Second Street Pike	Merry Dell Drive to W Buttonwood Drive	0.05
SW 3	Second Street Pike	Heather Road to Locust Road	0.06
		Total Proposed Sidewalks	1.05

Segment	Neighborhood Bike Route (NBR)	Segment End Points	Length (Miles)
NBR 4	Neighborhood Bike Route	Brookwood Estates	1.32
NBR 5	Neighborhood Bike Route	Woods at Northampton, Reserve at Northampton	1.31
NBR 6	Neighborhood Bike Route	Orchard Hill	1.47
NBR 7	Neighborhood Bike Route	Eagle Valley	0.79
NBR 8	Neighborhood Bike Route	Hampton Woods, Wedgewood Greene	0.43
NBR 9	Neighborhood Bike Route	Ivy Greene	0.14
NBR 10	Neighborhood Bike Route	Hidden Meadows	0.48
NBR 11	Neighborhood Bike Route	Traymore Manor	0.10
NBR 12	Neighborhood Bike Route	Estates of Mallard Creek, Legacy Oaks	1.50
NBR 13	Neighborhood Bike Route	Centennial Acres	0.70
NBR 14	Neighborhood Bike Route	Willow Greene South, Windmill Village	1.50
NBR 15	Neighborhood Bike Route	Northampton Hunt	0.90
NBR 16	Neighborhood Bike Route	Estates of Mallard Creek, Richboro Farms	0.36
NBR 17	Neighborhood Bike Route	Northampton Township Business & Technology Center	1.14
		Total Proposed Neighborhood Bike Routes	12.14

Total Proposed Mileage 18.67
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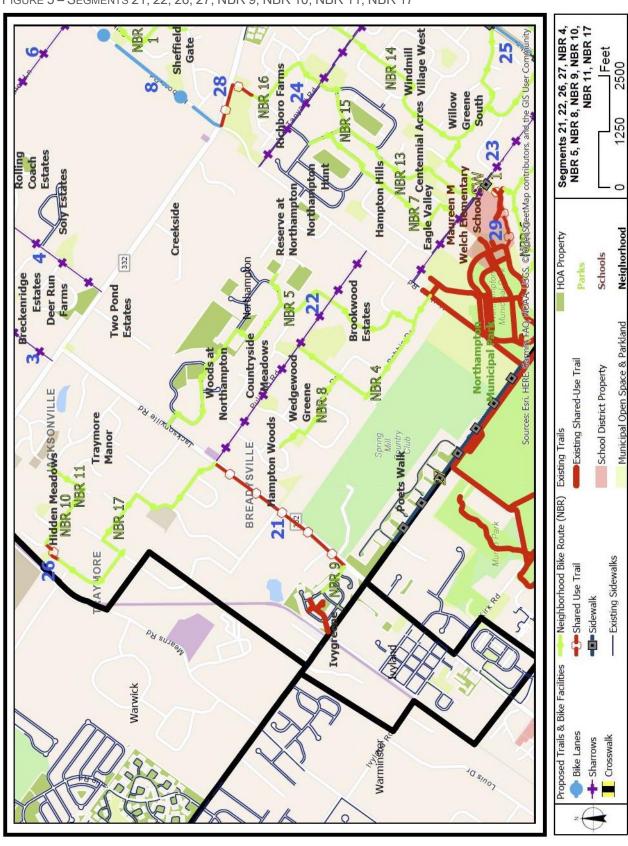


FIGURE 5 - SEGMENTS 21, 22, 26, 27, NBR 9, NBR 10, NBR 11, NBR 17

# 21 - Jacksonville Road - Ashley Drive to Pulinski Road

# 21 - Jacksonville Road - Ashley Drive to Pulinski Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.69 miles

## Summary:

- Provides a connection between Ivygreene Community and Northampton Township Business and Technology Center.
- Although the right-of-way along Jacksonville Road in this area averages 60' wide, easements may be required in some areas. Coordination with PennDOT will be required since this is a PennDOT road.
- Connects with 22 Pulinski Road Bicycle Sharrows.

## 22 - Pulinski Road - Jacksonville Road to Hatboro Road

## 22 - Pulinski Road - Jacksonville Road to Hatboro Road

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.10 miles

#### Summary:

- Provides Hampton Hills, Reserve at Northampton, Countryside Meadows, Hampton Woods and Woods at Northampton communities with connection to **21 Jacksonville Road Trail.**
- Township maintained road so should be easy to implement given that no PennDOT coordination is required.

#### 26 - Hidden Meadows Connector - Hill Road to Steam Whistle Drive

#### 26 - Hidden Meadows Connector - Hill Road to Steam Whistle Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.10 miles

#### Summary:

- Provides connection between Hidden Meadows and Traymore neighborhoods and Northampton Township Business and Technology Center.
- Via on-road connections through the Business and Technology Center, facilitates connectivity to the trails and bicycle facilities network.

## 27 - Bristol Road - Wordsworth Drive to Hatboro Road

## 27 - Bristol Road - Wordsworth Drive to Hatboro Road

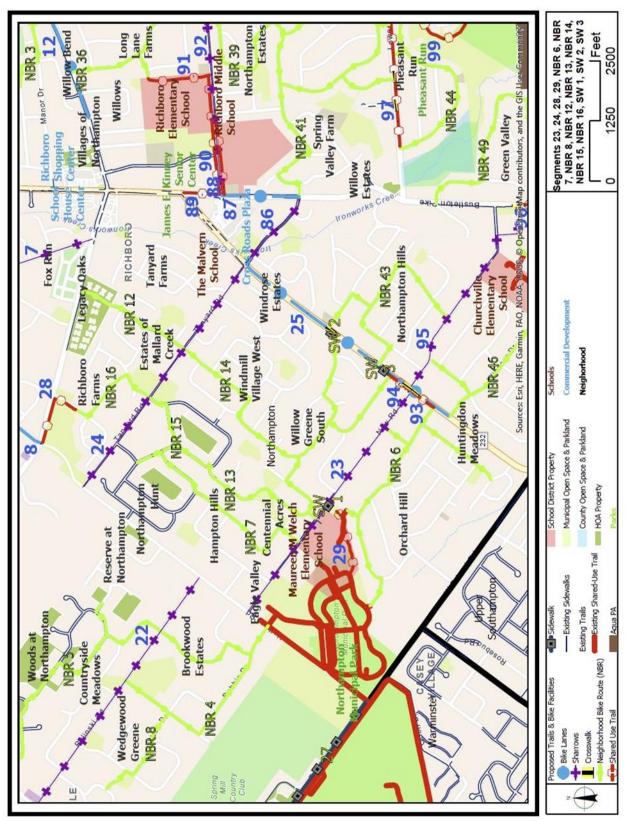
Trail/Bicycle Facility Type and Length:

Sidewalk: 0.92 miles

## Summary:

• Provides connection between the Poets Walk neighborhood and Northampton Municipal Park, Maureen Welch Elementary School, as well as to Warminster Township Community Park.

FIGURE 6 – SEGMENTS 23, 24, 28, 29, NBR 6, NBR 7, NBR 8, NBR 12, NBR 13, NBR 14, NBR 15, NBR 16, SW 1, SW 2, SW3



## 23 - New Road - Hatboro Road to Second Street Pike

### 23 - New Road

## Hatboro Road to Second Street Pike

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.09 miles

### Summary:

- Provides Eagle Valley, Centennial Acres, Willow Greene South and Huntingdon Meadows communities with connection to Maureen M. Welch Elementary School and ultimately Northampton Municipal Park.
- Connects to 25 Second Street Pike Bicycle Lanes, 93 & 94 Second Street Pike Shared Use Trails and 95 New Road Bicycle Sharrows.

# 29 - New Road Trailhead & Maureen Welsh Elementary School Trail (In Design) - New Road to Northampton Municipal Park

# 29 - New Road Trailhead & Maureen Welsh Elementary School Trail (In Design) New Road to Northampton Municipal Park

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.24 miles

#### Summary:

- Provides connection between Maureen Welsh Elementary School and Northampton Municipal Park.
- Will provide a connection between 27 Bristol Road Sidewalk and 23 New Road Bicycle Sharrows.

## 24 - Tanyard Road - Hatboro Road to Second Street Pike

## 24 - Tanyard Road

Hatboro Road to Second Street Pike

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.09 miles

- Provides Richboro Farms, Estates of Mallard Creek, Tanyard Farms, Northampton Hunt, and Windmill Village West neighborhoods, via connecting trails, access to the Village of Richboro, Northampton Township Library, and the senior center at the eastern end, and to Tanner Brothers at the western end.
- Connects to 25 Second Street Pike Bicycle Lanes, 28 Richboro Farms Connector Shared Use Trail, and 86 - Tanyard Road Bicycle Sharrows.

## 25 - Second Street Pike - Windsor Drive to Tanyard Road

#### 25 - Second Street Pike

## Windsor Drive to Tanyard Road

## Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.92 miles

### Summary:

- Provides Huntington Meadows, Northampton Hills, Willow Greene South and Windrose Estate communities with a connection to commercial areas of Richboro.
- Might be possible to extend to Bristol Road with some slight pavement widening. However, as all
  neighborhoods along Second Street Pike in this vicinity still have access to the bicycle lanes, it may
  not be needed.
- As this is a PennDOT road, installation of the sharrows will be subject to their review and will be part of their resurfacing schedule.
- Connects to 23 & 95 New Road Bicycle Sharrows and 24 & 86 Tanyard Road Bicycle Sharrows.

# 28 - Richboro Farms Connector - Joshua Drive to intersection of Hatboro Road and Almshouse Road

#### 28 - Richboro Farms Connector

Joshua Drive to intersection of Hatboro Road and Almshouse Road

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.27 miles

## Summary:

- Provides connection between Richboro Farms and Tanner's Dairy Farm and 8 Hatboro Road Bicycle Lanes.
- Via NBR 16 Richboro Farms, provides connectivity to 24 Tanyard Road Bicycle Sharrows.

# Sidewalks (SW) 1, 2 and 3

## Sidewalks - 1, 2 and 3

## Trail/Bicycle Facility Type and Length:

SW 1Sidewalk0.03 milesSW 2Sidewalk0.05 milesSW 3Sidewalk0.06 miles

## Summary:

 SW 1 - New Road (In Design) - Township Property Adjacent to and southeast of Maureen Welsh School

Extends existing sidewalk on School Property along Township Park Property

- SW 2 Second Street Pike Merry Dell Drive to W. Buttonwood Drive
   Provides connection for Willow Greene South to allow crossing of Second Street Pike at
   Buttonwood Drive
- SW 3 Second Street Pike Heather Road to Locust Road
   Provides connection for Willow Greene South to cross Second Street Pike at Locust Road.

## Neighborhood Bike Routes (NBR) 4 through 17

## Neighborhood Bike Routes (NBR) 4 through 17

#### Trail/Bicycle Facility Type and Length:

NBR 4	Neighborhood Bike Route	1.32 miles
NBR 5	Neighborhood Bike Route	1.31 miles
NBR 6	Neighborhood Bike Route	1.47 miles
NBR 7	Neighborhood Bike Route	0.79 miles
NBR 8	Neighborhood Bike Route	0.43 miles
NBR 9	Neighborhood Bike Route	0.14 miles
<b>NBR 10</b>	Neighborhood Bike Route	0.48 miles
<b>NBR 11</b>	Neighborhood Bike Route	0.10 miles
<b>NBR 12</b>	Neighborhood Bike Route	1.50 miles
<b>NBR 13</b>	Neighborhood Bike Route	0.70 miles
<b>NBR 14</b>	Neighborhood Bike Route	1.50 miles
NBR 15	Neighborhood Bike Route	0.90 miles
NBR 16	Neighborhood Bike Route	0.36 miles
<b>NBR 17</b>	Neighborhood Bike Route	1.14 miles

#### Summary:

#### NBR 4 - Brookwood Estates

Provides connection to **22 - Pulinski Road Bicycle Sharrows**, Wedgewood Greene and Northampton Municipal Park

• NBR 5 - Woods at Northampton, Reserve at Northampton

Provides connection to **22 - Pulinski Road Bicycle Sharrows**, Woods at Northampton and Countryside Meadows

NBR 6 - Orchard Hill

Provides connection to **25 - Second Street Bicycle Lanes**, **23 - New Road Bicycle Sharrows** and Huntingdon Meadows

• NBR 7 - Eagle Valley

Provides connection to 23 - New Road Bicycle Sharrows, Eagle Valley and Northampton Hunt

NBR 8 - Hampton Woods, Wedgewood Greene

Provides connection to 22 - Pulinski Road Bicycle Sharrows, Wedgewood Greene and Hampton Woods

NBR 9 - Ivy Greene

Provides connection to 21 - Jacksonville Road Shared Use Trail and Ivy Greene

NBR 10 - Hidden Meadows

Provides connection to 26 - Hidden Meadows Connector Shared Use Trail and Hidden Meadows

NBR 11 - Traymore Manor

Provides connection between Traymore Manor and Hidden Meadows

NBR 12 - Estates of Mallard Creek, Legacy Oaks

Provides connection between Estates at Mallard Creek and Legacy Oaks

NBR 13 - Centennial Acres

Provides connection to 23 - New Road Bicycle Sharrows, Centennial Acres, Willow Greene South and Northampton Hunt

NBR 14 - Willow Greene South, Windmill Village West

Provides connection between Willow Greene South, Windmill Village West and Centennial Acres

• NBR 15 - Northampton Hunt

Provides connection between Northampton Hunt and Centennial Acres

• NBR 16 - Estates of Mallard Creek, Richboro Farms

Provides connection to **28** - **Richboro Farms Connector Shared Use Trail**, Richboro Farms and **24** - **Tanyard Road Bicycle Sharrows** 

NBR 17 - Northampton Township Business & Technology Center

Provides connection to **26 - Hidden Meadows Connector,** Traymore, Northampton Township Business and Technology Center, **21 - Jacksonville Shared Use Trail** and **22 - Pulinski Road Bicycle Sharrows** 

# **PLANNING AREA 3**

This planning area is located south of Newtown-Richboro Road, north of East Holland and Stoney Ford Roads, east of Holland Road, and west of the Neshaminy Creek The features of this area are described below:

## Land Use

Land use in this planning area is a diverse mix of:

- Residential uses, including single family, rural, and high density multi-unit residential in the Village Shires and Tapestry neighborhoods.
- Institutional uses including the educational institutions of Council Rock High School South, Rolling Hills Elementary School and St. Bede the Venerable School as well as Twining Village, a senior living community;
- · Limited Commercial use associated primarily with the Village Shires Shopping Center; and
- Parks and open space owned by the township (Big Meadow Park and Hampton Estates Baseball Fields), the state (banks of Neshaminy Creek south of Newtown Richboro Road) and homeowners associations including Village Shires, Hills at Northampton, Jordan Corners and Legacy at Northampton among others.

## **Natural Features**

## **Topography**

Similar to the majority of the township which can be classified as gently rolling. Very steep slopes reside
along the Neshaminy Creek particularly along the boundary of Northampton and Newtown Townships
between Newtown Richboro Road and Buck Road.

## Water resources

 This Planning Area drains into the Neshaminy Creek Watershed including the Neshaminy and Pine Run subwatersheds.

## Woodlands and Natural Areas

- Multiple acres of wetlands exist along Neshaminy Creek in the area of Big Meadow Park.
- A mixed Woodland and Wetland area runs the length of a tertiary stream in the Neshaminy Creek watershed. The mix spans the distance between Buck Road and Stoney Ford Road.
- Woodlands can also be found along the banks of the Neshaminy Creek and along Newtown Richboro Road between Holland Road and Rock Way on properties owned by the Council Rock School District, the Northampton Bucks County Municipal Authority and a private owner.

## Man-Made Features

#### **Commercial Areas**

Village Shires Shopping Center

## Parks and Recreation Areas

- Big Meadow Park
- Hampton Estates Baseball Fields

## Master Trail and Bicycle Plan

# Schools

- · Council Rock High School South
- Rolling Hills Elementary School
- Saint Catherine Drexel Regional Catholic School

## **Historic Resources**

Spring Garden Mills

# **Principal Arterial Roadways**

- Newtown Richboro Road (Route 332)
- Buck Road (Route 532)

# Major Collector Roadways

- Holland Road
- Middle Holland Road
- · East Holland Road

# **Existing Trails**

Area	Existing Trail	Type of Trail	Mileage
3	Council Rock South Complex	Shared Use	2.49
3	Rock Way Towards Newtown	Shared Use	0.08
		Total Area 3	2.57

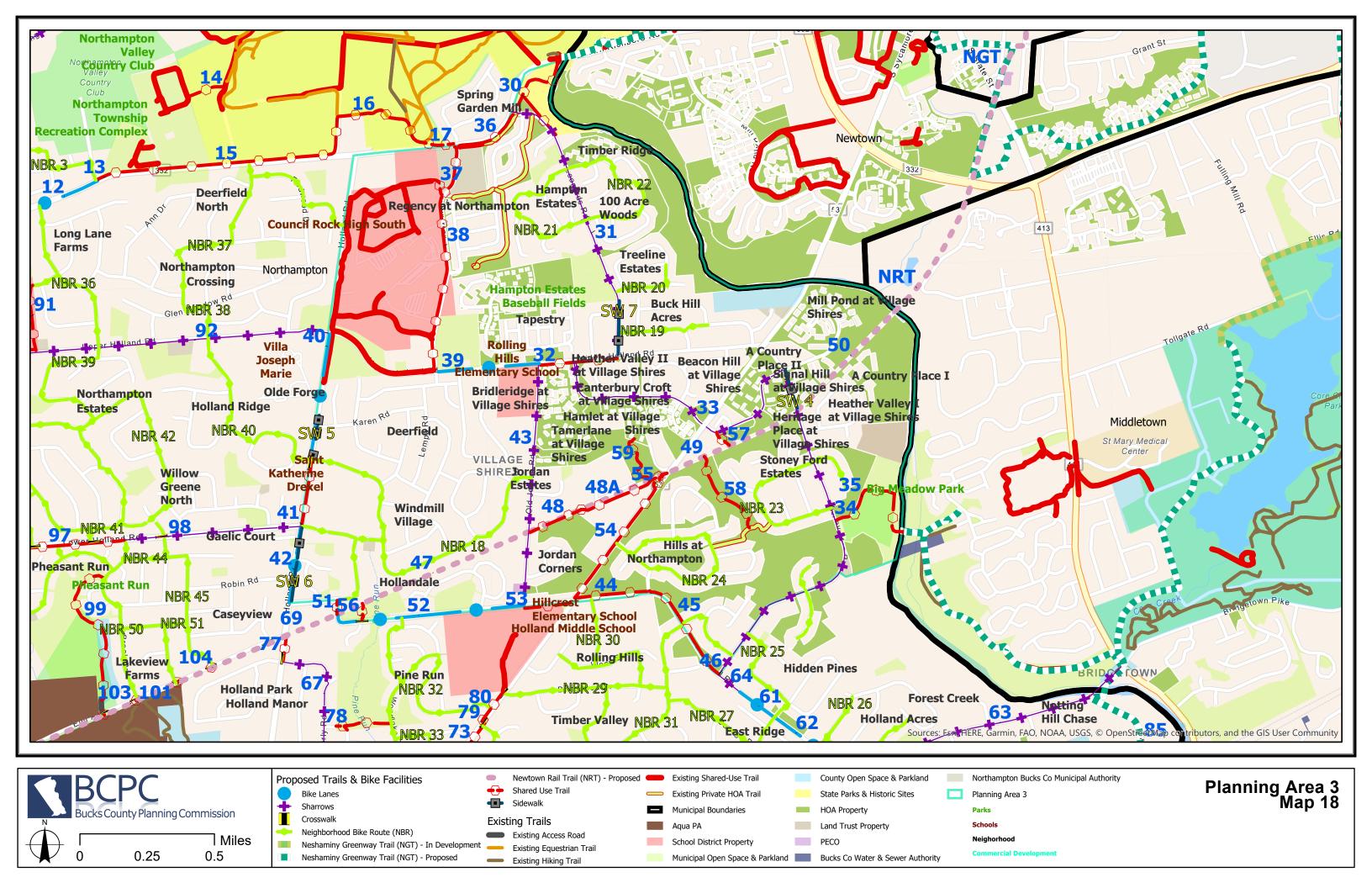


TABLE 21 – PROPOSED TRAILS & BICYCLE FACILITIES – PLANNING AREA 3

Segment	Dedicated Bike Lane	Segment End Points	Length (Miles)
39	Middle Holland Road	Rock Way to Old Jordan Road	0.38
40	Holland Road	Rotterdam Road West To Middle Holland Road/Upper Holland Road	0.46
42	Holland Road	East Holland Road to Lower Holland Road/Vanderveer Avenue	0.28
52	East Holland Road	Bend near Pine Run to Old Jordan Road	0.72
		Total Proposed Bicycle Lanes	1.84

Segment	Sharrows	Segment End Points	Length (Miles)
31	Neshaminy Greenway Trail	Richboro Road to Middle Holland Road	1.06
33	Neshaminy Greenway Trail	Middle Holland Road to Stoneyford Road	0.65
34	Neshaminy Greenway Trail	East & West Village Road to Big Meadow Park	0.59
43	Old Jordan Road	Middle Holland Road to East Holland Road	0.89
46	Stoneyford Road	Big Meadow Park to East Holland Road	0.82
		Total Proposed Sharrows	4.01

Segment	Sha red Use Trails	Planning Area	Length (Miles)
30	Neshaminy Greenway Trail	Langhome Players Theater/Spring Garden Mill to St. Leonards Road	0.41
32	Neshaminy Greenway Trail	St. Leonards Road to Rolling Hills Elementary School	0.29
35	Neshaminy Greenway Trail	Big Meadow Park	0.58
36	Newtown Richboro Road (PennDOT ROW)	Rock Way to St. Leonards Road	0.33
37	Council Rock High School South		0.07
38	Rock Way	Richboro Road to Middle Holland Road	0.86
41	Holland Road	Vandeerver Avenue to Rotterdam Road West	0.24
44	East Holland Road	Buck Road to Belmont Way	0.26
45	East Holland Road	Belmont Way to Stoneyford Road	0.41
51	East Holland Road (West side ROW)	Amsterdam Avenue to Existing sidewalk at Pine Run	0.10
53	East Holland Road	Old Jordan Road to Buck Road	0.17
54	Buck Road	East Holland Road to Northampton Twsp Parcel (TMP #31-035-008- 001)	0.61
55	Northampton Township Property (TM P #31-035-008- 001) at Newtown Rail Trail	Buck Road to Newtown Rail Trail	0.08
56	Newtown Rail Trail Connector	East Holland Road to Newtown Rail Trail	0.06
57	Newtown Rail Trail Connector	East Village Road to Newtown Rail Trail	0.07
58	Newtown Rail Trail Connector - Hills of Northampton	Existing Trail to Newtown Rail Trail	0.34
59	Newtown Rail Trail Connector - Village Shires Neighborhood	Potters Place to Newtown Rail Trail	0.23
		Total Proposed Shared Use Trails	5.11

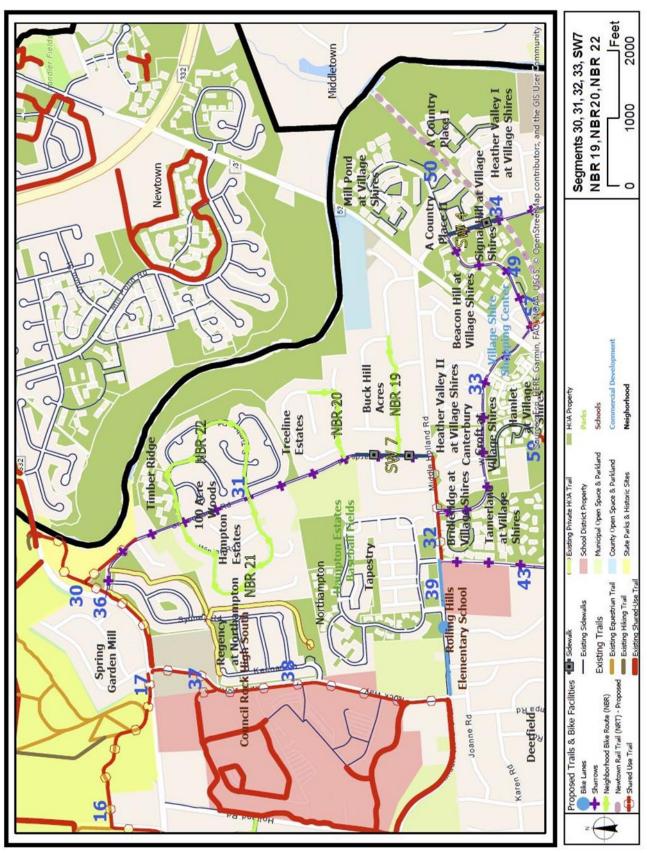
Segment	Newtown Rail Trail (Proposed)	Planning Area	Length (Miles)
47	East Holland Road to Old Jordan Road	East Holland Road to Old Jordan Road	0.77
48	Old Jordan Road to Buck Road	Old Jordan Road to Buck Road	0.56
48A	Newtown Rail Trail Alternate - Buck's County Roses'	Bucks County Roses	0.56
49	Buck Road to Stoneyford Road	Buck Road to Stoneyford Road	0.51
50	Stoneyford Road to Neshaminy Creek	Stoneyford Road to Neshaminy Creek	0.52
	'mileage not included in final amount since alternative	Total Proposed Newtown Rail Trail	2.35

Segment	Sidewalks	Segment End Points	Length (Miles)
SW 4	Stoneyford Road	East Village Road to bridge over Newtown Rail Line	0.15
SW 5	Holland Road	Rotterdam Road West to Karen Road	0.10
SW 6	Holland Road	East Holland Road to Vanderveer Road	0.20
SW 7	St. Leonards Road	Treeline Drive to Middle Holland Road	0.20
		Total Proposed Sidewalks	0.64

Segment	Neighborhood Bike Route (NBR)	Segment End Points	Length (Miles)
NBR 18	Neighborhood Bike Route	Windmill Village	1.93
NBR 19	Neighborhood Bike Route	Buck Hill Acres	0.34
NBR 20	Neighborhood Bike Route	Treeline E states	0.26
NBR 21	Neighborhood Bike Route	Hampton E states	0.61
NBR 22	Neighborhood Bike Route	100 Acre Woods	0.63
NBR 23	Neighborhood Bike Route	Stoney Ford Estates	0.82
NBR 24	Neighborhood Bike Route	Hills at Northampton	1.72
		Total Proposed Neighborhood Bike Routes	6.31

Total Proposed Mileage 20.26

FIGURE 7 - SEGMENTS 30. 31. 32. 33. SW 7. NBR 19. NBR 20. NBR 22



# 30 - Neshaminy Greenway Trail Langhorne Players Theater/Spring Garden Mill to St. Leonards Road

# 30 - Neshaminy Greenway Trail Langhorne Players Theater/Spring Garden Mill to St. Leonards Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.41 miles

#### Summary:

- Provides a shared use trail along Newtown Richboro Road.
- Provides a connection to Tyler State Park.
- Will make use of the former right-of-way of Newtown Richboro Road.
- Will require easements from PA DCNR and coordination with PennDOT.
- Would connect to 31 Neshaminy Greenway Trail Bicycle Sharrows and 36 Newtown Richboro Road Shared Use Trail.

# 31 - Neshaminy Greenway Trail - St. Leonards Road Richboro Road to Middle Holland Road

31 - Neshaminy Greenway Trail - St. Leonards Road

St. Leonards Road (Richboro Road to Middle Holland Road)

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.06 miles

#### Summary:

- · Provides bicycle sharrows along St. Leonards Road.
- Provides connection to Tyler State Park and Hampton Estates Baseball Fields.
- Would connect to 30 Neshaminy Greenway Shared Use Trail, 32 Neshaminy Greenway Shared
   Use Trail and 36 Newtown Richboro Road Shared Use Trail.

# 32 - Neshaminy Greenway Trail - Middle Holland RoadSt. Leonards Road to Rolling Hills Elementary School

32 - Neshaminy Greenway Trail - Middle Holland Road St. Leonards Road to Rolling Hills Elementary School

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.29 miles

- · Provides a shared use trail along Middle Holland Road.
- Provides a connection to Rolling Hills Elementary School.
- Easements would need to be obtained from Village Shires HOA.
- Would connect to 31 Neshaminy Greenway Trail Bicycle Sharrows, 33 Neshaminy Greenway Trail
   Bicycle Sharrows and 43 Old Jordan Road Bicycle Sharrows.

# 33 - Neshaminy Greenway Trail - West Village Road and East Village Road Middle Holland Road to Stoneyford Road

# 33 - Neshaminy Greenway Trail - West Village Road and East Village Road Middle Holland Road to Stoneyford Road

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows:

0.65 miles

- Provides bicycle sharrows along East and West Village Roads.
- Provides connection to Village Shires neighborhoods and Village Shire Shopping Center.
- Would connect to 32 Neshaminy Greenway Shared Use Trail and 34 Neshaminy Greenway Trail Bicycle Sharrows.

Segments 34, 35, 44, 45, 46, NBR 23, NBR 24 61 Sources. Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Communit JFeet 1000 Middletow 85 200 0 Commercial Development Heather Valley I at Village Shires Neighorhood Hidden Pines Place at Village Spires Municipal Open Space & Parkland Existing Private HOA Trail School District Property Herita Existing Hiking Trail **Existing Trails** NBR 23 **Stoney Ford** Estates NBR 25 Northampton ng Cente e Shir NBR 24 Hills at Northampton 58 Existing Sidewalks Shared Use Trail 132 Hamlet at Village Shires Sidewalk Neshaminy Greenway Trail (NGT) - Proposed **NBR 29** Canterbury Croft at Village Shiles Proposed Trails & Bike Facilities Neighborhood Bike Route (NBR) NBR 31 NBR 30 Rolling Hills 54 Bike Lanes Sharrows **Tamerlane** at Village 

FIGURE 8 - SEGMENTS 34, 35, 44, 45, 46, NBR 23, NBR 24

# 34 - Neshaminy Greenway Trail - Stoneyford Road East and West Village Road to Big Meadow Park

# 34 - Neshaminy Greenway Trail East & West Village Road to Big Meadow Park

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows:

0.59 miles

#### Summary:

- Provides bicycle sharrows along Stoneyford Road.
- Provides connection between Big Meadow Park and Newtown Rail Trail.
- Would connect to 33 Neshaminy Greenway Trail Bicycle Sharrows, 35 Big Meadow Park Shared
   Use Trail, 46 Stoneyford Road Bicycle Sharrows, and 49 Newtown Rail Shared Use Trail.

## 35 - Neshaminy Greenway Trail - Big Meadow Park

# 35 - Neshaminy Greenway Trail Big Meadow Park

Trail/Bicycle Facility Type and Length:

Shared Use Trail:

0.58 miles

#### Summary:

- Provides a shared use trail in Big Meadow Park.
- Provides a connection to Middletown Township and serves as a key link in the Neshaminy Greenway Trail.
- Would connect to 34 East Holland Road Bicycle Sharrows and 46 Stoneyford Road Bicycle Sharrows.

# 46 - Stoneyford Road - Big Meadow Park to East Holland Road

## 46 - Stoneyford Road

Big Meadow Park to East Holland Road

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows:

0.82 miles

- Provides bicycle sharrows along Stoneyford Road.
- Provides a connection to Big Meadow Park and the Neshaminy Greenway Trail.
- Would connect to 34 East Holland Road Bicycle Sharrows, 35 Big Meadow Park Shared Use Trail,
   45 East Holland Shared Use Trail, and 64 East Holland Road Bicycle Sharrows.

# 45 - East Holland Road - Belmont Way to Stoneyford Road

# 45 - East Holland Road Belmont Way to Stoneyford Road

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.41 miles

## Summary:

- Provides a shared use trail along East Holland Road.
- Provides connectivity to several neighborhoods.
- Right-of-way along this portion of East Holland Road is 80' wide meaning that the trail can be built without the need for easements, just cooperation from PennDOT since this is a state road.
- Would connect to 44 East Holland Road Shared Use Trail and 46 Stoneyford Road Bicycle Sharrows.

# 44 - East Holland Road - Buck Road to Belmont Way

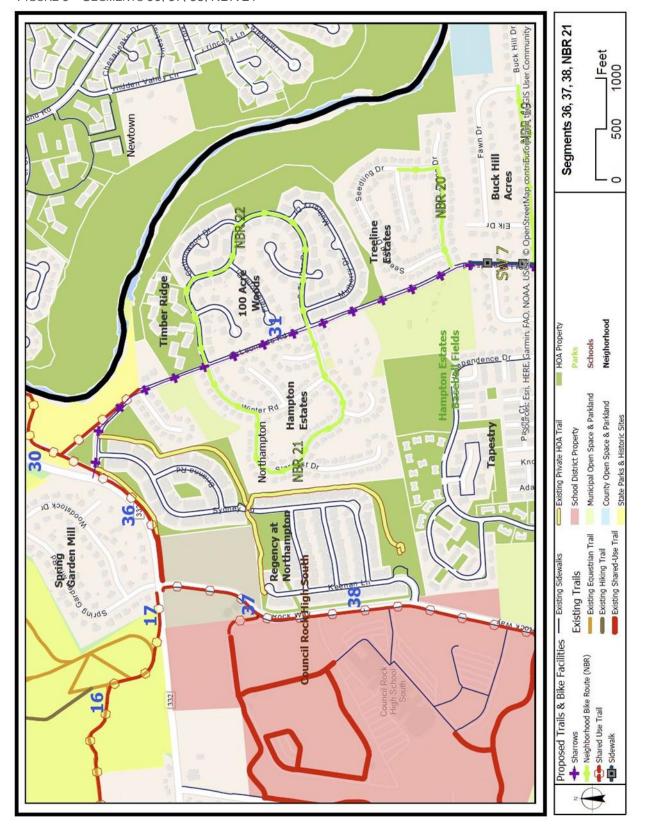
# 44 - East Holland Road Buck Road to Belmont Way

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.26 miles

- Provides a shared use trail along East Holland Road.
- Provides a connection to Hillcrest Elementary School and Holland Middle School.
- Will require an easement from the Hills at Northampton HOA.
- Would connect to 45 East Holland Road Shared Use Trail, 53 East Holland Road Shared Use Trail and 54 Buck Road Shared Use Trail.

FIGURE 9 - SEGMENTS 36, 37, 38, NBR 21



# 36 - Newtown Richboro Road (PennDOT ROW) - Rock Way to St. Leonards Road

# 36 - Newtown Richboro Road (PennDOT ROW) Rock Way to St. Leonards Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.33 miles

## Summary:

- Provides a shared use trail along Newtown Richboro Road.
- · Provides connection to Council Rock High School South.
- Will require significant engineering to address steep slope issues along this segment.
- Would connect to 30 Neshaminy Greenway Shared Use Trail, 31 Neshaminy Greenway Trail
   Bicycle Sharrows and 37 Council Rock High School South Shared Use Trail.

# 37 - Council Rock High School South

## 37 - Council Rock High School South

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.07 miles

### Summary:

- Provides a shared use trail at Council Rock High School South and completes a loop sidewalk/trail network on the campus.
- Provides a connection to existing sidewalk along Rock Way.
- Would connect to **38 Neshaminy Greenway Shared Use Trail** as well as existing sidewalks and planned upgrade to trail for current sidewalks along Rock Way.

## 38 - Rock Way - Richboro Road to Middle Holland Road

#### 38 - Rock Way

Richboro Road to Middle Holland Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.89 miles

- Provides a shared use trail along Rock Way by upgrading the existing sidewalk.
- Provides a connection to Council Rock High School South.
- Would connect to 37 Council Rock High School South Shared Use Trail, 39 Middle Holland Road
   Bicycle Lanes, proposed Newtown Richboro Road Shared Use Trail.

Segments 39, 40, 41, 42, 43 NBR 18, SW5, SW6 Village " Nammet at Heather Valley II at Village Shires MBR 24 Per Map conkillence and the GIS User Comm Feet Tamerlane Canterbury Croft 1000 at Village Shires 500 at Village 0 Village Shire Municipal Open Space & Parklar Jordan 43 Estates Jordan Rolling Hills Elemen Neighorhood HOA Property VILLAGE Sources: Esri, HERE, Garming FAC Existing Shared-Use Trail School District Property Existing Sidewalk Northampton **Existing Trails** Hollandale Windmffton Dr. гешья ва Newtown Rail Trail (NRT) - Proposed Deerfield Місьве! Ра Neighborhood Bike Route (NBR) 0 0 Karen Rd pine Run Shared Use Trail Sidewalk 56 Shelley Rd Olde Forge Saint Katherine Drexel 511 M Proposed Trails & Bike Facilities 40 Villa Joseph Marie Gaelic Bike Lanes Sharrows Robin Rd Bourne Dr 86

FIGURE 10 - SEGMENTS 39, 40, 41, 42, 43, NBR 18, SW 5, SW 6

## 39 - Middle Holland Road - Rock Way to Old Jordan Road

# 39 - Middle Holland Road Rock Way to Old Jordan Road

## Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.38 miles

## Summary:

- · Provides dedicated bicycle lanes along Middle Holland Road.
- Serves as a critical connection between 38 Rock Way Shared Use Trail and 33 Neshaminy Greenway Shared Use Trail (Middle Holland Road) and 34 - Neshaminy Greenway Bicycle Sharrows along West Village and East Village Roads.
- Provides connection to Council Rock High School South, Hampton Estates and Rolling Hills Elementary School.
- Will require cooperation from PennDOT and be dependent on their resurfacing schedule since Middle Holland Road is a PennDOT maintained road.
- Would connect to 38 Rock Way Shared Use Trail, 32 Neshaminy Greenway Trail, 33 Neshaminy Greenway Trail, and 43 Old Jordan Road.

## 43 - Old Jordan Road - Middle Holland Road to East Holland Road

### 43 - Old Jordan Road

Middle Holland Road to East Holland Road

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.89 miles

- Provides bicycle sharrows along Old Jordan Road.
- Provides connection to Rolling Hills Elementary School, Newtown Rail Trail and Holland Middle School.
- Would connect to 32 Neshaminy Greenway Shared Use Trail, 47 Newtown Rail Shared Use Trail, 48 - Newtown Rail Shared Use Trail, 52 - East Holland Road Bicycle Sharrows and 53 - East Holland Road Shared Use Trail.
- Narrow pavement width and 50' right-of-way width limit the potential for bicycle lanes and/or a shared
  use trail within the right-of-way. However, via easements from Council Rock School District, Twining
  Village, and several private property owners along Old Jordan Road, it might be possible in the future
  to establish a shared use trail along the east side to provide safer bicycle connectivity in this area.

# 40 - Holland Road - Rotterdam Road West to Middle Holland Road/Upper Holland Road

#### 40 - Holland Road

## Rotterdam Road West to Middle Holland Road/Upper Holland Road

## Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.46 miles

## Summary:

- Provides dedicated bicycle lanes along Holland Road.
- Will require cooperation from PennDOT and be dependent on their resurfacing schedule since Holland Road is a PennDOT maintained road.
- Provides connection to Council Rock High School South and Villa Joseph Marie High School.
- Would connect to 41 Holland Road Shared Use Trail and 92 Upper Holland Road.

## 41 - Holland Road - Vanderveer Avenue to Rotterdam Road West

#### 41 - Holland Road

Vanderveer Avenue to Rotterdam Road West

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.24 miles

## Summary:

- Provides a shared use trail along Holland Road.
- Provides connection to Katherine Drexel Regional Catholic School.
- Will require three easements including one from the Archdiocese of Philadelphia.
- Would connect to 40 & 42 Holland Road Bicycle Lanes.

#### 42 - Holland Road - East Holland Road to Lower Holland Road/Vanderveer Avenue

#### 42 - Holland Road

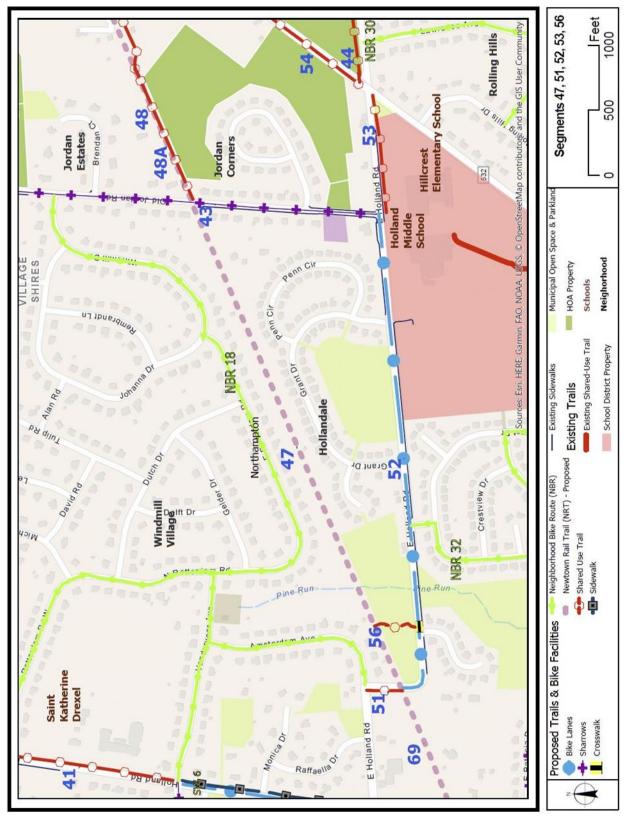
East Holland Road to Lower Holland Road/Vanderveer Avenue

## Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.28 miles

- · Provides dedicated bicycle lanes along Holland Road.
- Provides connection to Katherine Drexel Regional Catholic School.
- Via a combination of Monica Drive, Raffaella Drive, and East Holland Road, provides a connection to the **Newtown Rail Trail**.
- Would connect to 41 Holland Road Shared Use Trail.

FIGURE 11 - SEGMENTS 47, 51, 52, 53, 56



## 47 - Newtown Rail Trail - East Holland Road to Old Jordan Road

#### 47 - Newtown Rail Trail

East Holland Road to Old Jordan Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.77 miles

#### Summary:

- Provides connection to 43 Old Jordan Road Bicycle Sharrows, 51 East Holland Road Shared Use
   Trail, and 56 Newtown Rail Trail Shared Use Trail Connector.
- Provides the safest route between East Holland Road and Old Jordan Road for users of all abilities.
- Landscape buffering, fencing and signage would be provided to minimize any potential impacts to adjacent property owners.

# 51 - East Holland Road (West side ROW) Amsterdam Avenue to existing sidewalk at Pine Run

## 51 - East Holland Road (West side ROW)

Amsterdam Avenue to Existing sidewalk at Pine Run

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.05 miles

#### Summary:

- Provides a shared use trail along East Holland Road.
- Provides connection to Newtown Rail Trail for neighborhoods north of the Newtown Rail Trail and east of Holland Road.
- Would connect to 52 East Holland Road Bicycle Lanes and 56 Newtown Rail Shared Use Trail.

## 52 - East Holland Road - Bend near Pine Run to Buck Road

#### 52 - East Holland Road

Bend near Pine Run to Buck Road

Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.72 miles

- Provides dedicated bicycle lanes along East Holland Road.
- Provides connection between Holland Middle School and 47 Newtown Rail Shared Use Trail.
- Would connect to 43 Old Jordan Road, 47 Newtown Rail Shared Use Trail, 51 East Holland Road (West Side ROW), and 53 East Holland Road Trail.
- Although a dedicated bicycle lane versus bicycle sharrows, this route would primarily be used by experienced bicyclists as it is not as safe for inexperienced and younger bicyclists.

## 53 - East Holland Road - Old Jordan Road to Buck Road

# 53 - East Holland Road Old Jordan Road to Buck Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.17 miles

## Summary:

- Provides a shared use trail along the south side of East Holland Road.
- Provides connection to Holland Middle School and Hillcrest Elementary School.
- Will require an easement from Council Rock School District.
- Will require some engineering to address slope issues along the frontage of the school properties.
- Would connect to 43 Old Jordan Road Bicycle Sharrows, 44 East Holland Road Shared Use Trail,
   52 East Holland Road Bicycle Lanes and 54 Buck Road Shared Use Trail.

## 56 - Newtown Rail Trail Connector - East Holland Road to Newtown Rail Trail

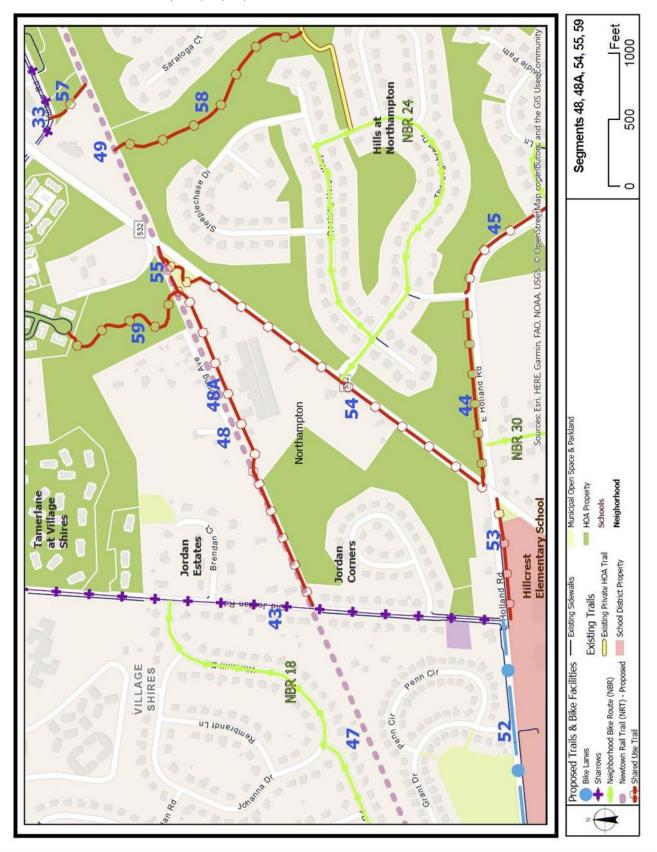
56 - Newtown Rail Trail Connector
East Holland Road to Newtown Rail Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.07 miles

- Provides a shared use connector trail between Larch Circle and Pine Run neighborhoods to the Newtown Rail Trail.
- Would connect to 47 Newtown Rail Shared Use Trail and 52 East Holland Road Bicycle Lanes.

FIGURE 12 - SEGMENTS 48, 48A, 54, 55, 59



## 48 - Newtown Rail Trail - Old Jordan Road to Buck Road

# 48 - Newtown Rail Trail Old Jordan Road to Buck Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.56 miles

## Summary:

- Provides the safest route between Old Jordan Road and Buck Road via a shared use trail within the SEPTA right-of-way.
- Few environmental and engineering constraints since the trail would be located within the relatively level railroad corridor.
- Landscape buffering, fencing and signage would be provided to minimize any potential impacts to adjacent property owners.
- Provides connection to 43 Old Jordan Road Bicycle Sharrows, 55 Buck Road to Newtown Rail Shared Use Trail, and 59 - Newtown Rail Shared Use Trail Connector - Village Shires Neighborhood.

# 48A - Newtown Rail Trail Alternate - Bucks County Roses

# 48A - Newtown Rail Trail Alternate Bucks County Roses

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.29 miles

- Provides a shared use trail along Bucks County Roses Property as an alternative to remaining within the SEPTA railroad corridor.
- Provides trail separation from nearby homes on Spring Avenue.
- Would connect to 48 Newtown Rail Shared Use Trail, 59 Newtown Rail Shared Use Trail Connector
   Village Shires Neighborhood.

## 54 - Buck Road - East Holland Road to Northampton Twsp Parcel (TMP #31-035-008-001)

#### 54 - Buck Road

East Holland Road to Northampton Twsp Parcel (TMP #31-035-008-001)

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.61 miles

## Summary:

- Provides a shared use trail along Buck Road.
- Would require significant coordination and approval from PennDOT given that Buck Road is a PennDOT maintained road.
- Extensive engineering and a traffic impact study would be required due to realignment of traffic lanes.
- Would connect to 44 East Holland Road Shared Use Trail, 53 East Holland Road Shared Use
  Trail, and via 55 Buck Road/Newtown Rail Trail Shared Use Trail Connector, and the Newtown Rail
  Trail.

# 55 - Northampton Township Property (TMP #31-035-008-001) at Newtown Rail Trail Buck Road to Newtown Rail Trail

55 - Northampton Township Property (TMP #31-035-008-001) at Newtown Rail Trail Buck Road to Newtown Rail Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.08 miles

- · Provides a shared use trail on Township Property.
- · Provides connection to Newtown Rail Trail.
- Would connect to 54 Buck Road Shared Use Trail and 48 Newtown Rail Shared Use Trail.
- Given the slope conditions on this site, the trail would require a fair amount of engineering and the
  use of a switchback trail with retaining walls to traverse the slope between the Newtown Rail Trail
  and 54 Buck Road Shared Use Trail.

# 59 - Newtown Rail Trail Connector - Village Shires Neighborhood Potters Place to Newtown Rail Trail

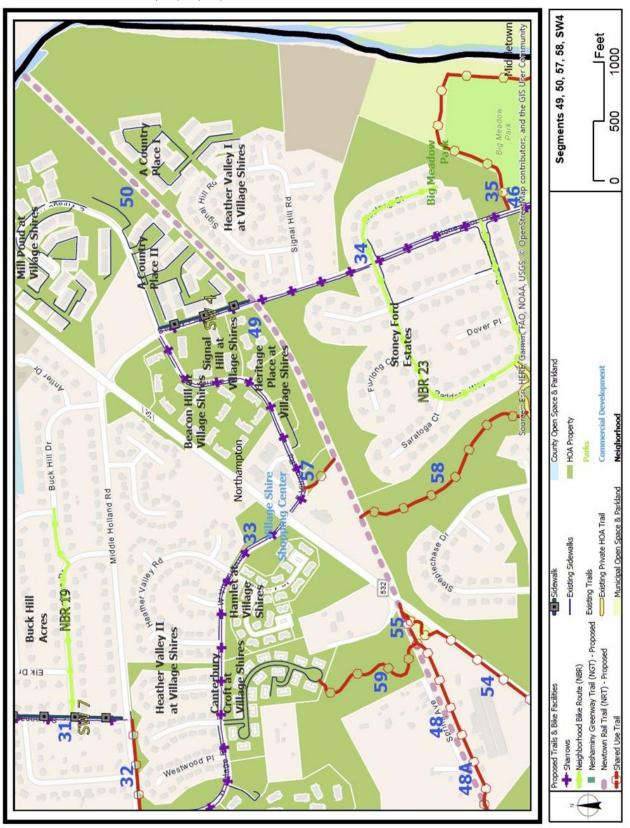
# 59 - Newtown Rail Trail Connector - Village Shires Neighborhood Potters Place to Newtown Rail Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.23 miles

- Provides a shared use trail between several Village Shires neighborhoods and the Newtown Rail Trail.
- Will require an easement from the Village Shires HOA since the trail would be located on their property.
- Design and development of the trail would require some engineering due to the presence of steep slopes along the proposed alignment.
- Would connect to 48 Newtown Rail Shared Use Trail.

FIGURE 13 – SEGMENTS 49, 50, 57, 58, SW 4



# 49 - Newtown Rail Trail - Buck Road to Stoneyford Road

### 49 - Newtown Rail Trail

**Buck Road to Stoneyford Road** 

Trail/Bicycle Facility Type and Length:

49 - Shared Use Trail: 0.51 miles

#### Summary:

• 49 - Buck Road to Stoneyford Road

Provides connection to 34 - Neshaminy Greenway Trail Bicycle Sharrows, 55 - Buck Road to Newtown Rail Shared Use Trail, 57 - Newtown Rail Shared Use Trail. 60 - Newtown Rail Shared Use Trail.

 Serves as the primary access points to the Newtown Rail Trail for the Village Shires neighborhoods located south of Buck Road and west of Stoneyford Road, as well as Hills at Northampton and Stoney Ford Estates.

# 50 - Newtown Rail Trail - Stoneyford Road to Neshaminy Creek

### 50 - Newtown Rail Trail

Stoneyford Road to Neshaminy Creek

Trail/Bicycle Facility Type and Length:

50 - Shared Use Trail: 0.52 miles

## Summary:

• 50 - Stoneyford Road to Neshaminy Creek

Provides connection to **34 - Stoneyford Road Bicycle Sharrows** and 49 **- Newtown Rail Shared Use Trail** to Middletown Township.

• Facilitates continuation of the **Newtown Rail Trail** over the Neshaminy Creek and into Middletown and Newtown Townships and Newtown Borough.

## 57 - Newtown Rail Trail Connector - East Village Road to Newtown Rail Trail

# 57 - Newtown Rail Trail Connector East Village Road to Newtown Rail Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.06 miles

- Provides a shared use trail connection to Newtown Rail Trail and Village Shires Shopping Center.
- Would require an easement from Village Shires HOA, or potential acquisition of this parcel which
  was originally the proposed location for a station in Village Shires for the former train line.
  Regardless, the site serves as an ideal trailhead location given its proximity to several residential
  neighborhoods within walking distance, while also providing parking spaces for those traveling to
  the trail.
- Would connect to 33 Neshaminy Greenway Trail Bicycle Sharrows and 49 Newtown Rail Shared
  Use Trail.

## 58 - Newtown Rail Trail Connector - Hills of Northampton - Existing Trail to Newtown Rail Trail

# 58 - Newtown Rail Trail Connector - Hills of Northampton Existing Trail to Newtown Rail Trail

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.34 miles

## Summary:

- Provides a shared use trail from the existing trail running between Hills at Northampton and Stoney Ford Estates connecting to the **Newtown Rail Trail**.
- Provides connection to several neighborhoods and enhance access to the Village Shires Shopping Center for those living in the Hills at Northampton and Stoney Ford Estates neighborhoods who would be able to walk.
- Would connect to 49 Newtown Rail Shared Use Trail.

# Sidewalks - Segments SW 4 through SW 7

#### Sidewalks

## Trail/Bicycle Facility Type and Length:

SW 4Sidewalk0.15 milesSW 5Sidewalk0.10 milesSW 6Sidewalk0.26 milesSW 7Sidewalk0.20 miles

- SW 4 Stoneyford Road East Village Road to bridge over Newtown Rail Trail
   Provides pedestrian connection along East Village Road
- SW 5 Holland Road Rotterdam Road West to Karen Road Continues existing sidewalk along East Holland Road
- SW 6 Holland Road East Holland Road to Vanderveer Avenue Provides pedestrian connection along Holland Road
- SW 7 St. Leonards Road Treeline Drive to Middle Holland Road
   Continues existing sidewalk along St Leonards Road to Middle Holland Road

## Neighborhood Bike Routes (NBR) 18 through 24

## Neighborhood Bike Routes (NBR) 18 through 24

## Trail/Bicycle Facility Type and Length:

<b>NBR 18</b>	Neighborhood Bike Route	1.93 miles
<b>NBR 19</b>	Neighborhood Bike Route	0.34 miles
<b>NBR 20</b>	Neighborhood Bike Route	0.26 miles
<b>NBR 21</b>	Neighborhood Bike Route	0.61 miles
<b>NBR 22</b>	Neighborhood Bike Route	0.63 miles
<b>NBR 23</b>	Neighborhood Bike Route	0.82 miles
<b>NBR 24</b>	Neighborhood Bike Route	1.72 miles

#### Summary

NBR 18 - Windmill Village

Provides connection to 40 - Holland Road Bicycle Lanes, 41 - Holland Road Shared Use Trail, 42 - Holland Road Bicycle Lanes, 43 - Old Jordan Road Bicycle Sharrows, 51 - East Holland Road (West Side ROW) Shared Use Trail, and Katherine Drexel Regional Catholic School

- NBR 19 Buck Hill Acres
  - Provides connection to 31 Neshaminy Greenway Trail Bicycle Sharrows
- NBR 20 Treeline Estates
  - Provides connection to 31 Neshaminy Greenway Trail Bicycle Sharrows
- NBR 21 Hampton Estates
  - Provides connection to 31 Neshaminy Greenway Trail Bicycle Sharrows
- NBR 22 100 Acre Woods
  - Provides connection to 31 Neshaminy Greenway Trail Bicycle Sharrows
- NBR 23 Stoney Ford Estates
  - Provides connection to **31 Neshaminy Greenway Trail Bicycle Sharrows** and Hills at Northampton
- NBR 24 Hills at Northampton
  - Provides connection to 31 Neshaminy Greenway Trail Bicycle Sharrows, 45 East Holland Road Shared Use Trail and Stoney Ford Estates.

# PLANNING AREA 4

This planning area, located in the southeast corner of the township, is bounded by East Holland and Stoneyford Roads to the north, the Neshaminy Creek to the east, Bridgetown Pike (Route 213) and the Neshaminy Creek to the south, and the Lower Southampton Township municipal boundary, and Holland Road to the west. The features of this area are described below:

## Land Use

Land use in this planning area is comprised of:

- Single Family Residential, which represents the largest land use in this planning area, and Rural Residential:
- Educational/Institutional uses in the form of Holland Elementary School, Holland Middle School and Hillcrest Elementary School;
- Parks and Open Space including county-owned property along the Neshaminy Creek, Langhorne Rod
   & Gun Club, and Pine Run Creek open space area; and
- Commercial (Village of Holland).

# **Natural Features**

# **Topography**

Marked changes in topography occur along the Mill Creek corridor, running south of Rocksville Road
and north of Bridgetown Pike, from the intersection of Buck and Holland roads to the intersection of E.
Heron Road and Bridgetown Pike. Additional areas with steep slopes include the open space areas
located between Bridgetown Pike to the north and the Neshaminy Creek to the south behind the Hidden
Creek, Creekwood and Nottinghill Chase neighborhoods; along the western slopes of the Neshaminy
Creek valley between the Langhorne Rod & Gun club to Bridgetown Pike; and along the Pine Run creek
corridor particularly in the Timber Valley and Hillcrestshire neighborhoods.

## Water resources

 The area is part of the Neshaminy Creek watershed with the primary secondary watersheds in this area being the Ironworks Creek, Mill Creek, Core Creek and Pine Run watersheds.

## Wetlands

 The two largest wetland areas in this planning area include the Pine Run riparian corridor particularly in the Pine Run, Holland Manor, Wood Lake and The Meadows neighborhoods and behind the Hidden Creek and Creekwood neighborhoods off of Bridgetown Pike.

#### **Woodlands and Natural Areas**

 The primary wooded areas in this area include the riparian corridors along the Neshaminy, Pine Run and Mill Creek.

## Man-Made Features

#### **Commercial Areas**

- · Village of Holland
- Pheasant Valley Center
- Holland Shopping Center

# Parks and Recreation Areas

- Breezy Point Day Camp
- Lower Bucks Family YMCA Holland Outdoor Center

# **Schools**

- Holland Middle School
- Hillcrest Elementary School
- Holland Elementary School

# Principal Arterial Roadways

Buck Road (Route 532)

# Major Collector Roadways

- Holland Road
- Bridgetown Pike
- East Holland Road
- · Old Bristol Road

# **Existing Trails**

Area	Existing Trail	Type of Trail	Mileage
4	Rocksville Road to Hope Road	Shared Use	0.39
4	Bellwood Drive	Shared Use	0.13
4	Bridgetown Pike to the Neshaminy Creek	Hiking Trail	0.51
4	Holland Middle School Complex	Shared Use	0.22
		Total Area 4	1.25

TABLE 22 - PROPOSED TRAILS & BICYCLE FACILITIES - PLANNING AREA 4

Segment	Dedicated Bike Lane Segments	Segment End Points	Length (Miles)
60	Holland Village - Buck Road	Elaine Drive to Holland Commons & Holland Village SC	0.15
61	E Holland Road	850' Frontage of East Ridge & Hidden Pines up to Pepperell Dr/ Stallion Cir	0.16
62	E Holland Road	Pepperell Dr/Stallion Cir to Bridgetown Pike	0.35
		Total Proposed Bike Lanes	0.66

Segment	Sharrows Segments	Segment End Points	Length (Miles)
63	Bridgetown Pike	East Holland Road to Newtown-Langhorne Road	1.10
64	E Holland Road	Stoneyford Road to widening of road 850' northwest of Pepperell Drive	0.10
65	Crescent Drive, Mallard Road & Heron Road	Holland Elementary School to Buck Road	0.41
66	E Heron Road	Buck Road to Bridgetown Pike	0.97
67	E Patricia Road/Beverly Road	Holland Road to Crescent Drive	0.67
68	Rocksville Road	Buck Road to Wooden Bridge Road	0.77
		Total Proposed Sharrows	4.02

Segment	Shared Use Trails	Segment End Points	Length (Miles)
70	Buck Road	Crescent Drive to Holland Road	0.24
71	Buck Road	Mallard Road to Northampton Presbyterian Church	0.42
72	Buck Road	Northampton Presbyterian Church Frontage to E Heron Road	0.04
73	Buck Road	Pine Run Creek Bridge/Woodlake Drive to Kings Way Drive	0.36
74	Holland Road	Hope Road to Churchville Lane	0.28
75	Holland E.S./Lower Bucks Holland Outdoor Recreation	Crescent Drive to Holland Road	0.25
76	Rocksville Road	Holland Road to Buck Road	0.10
77	Holland Road	E Patricia Road to Newtown Rail Trail	0.09
78	Pine Run	Beverly Road/Mallard Road/Woodlake Drive	0.22
79	Buck Road	Kings Way Drive to start of sidewalk south of Forrest Drive	0.01
80	Buck Road	Pine Run Frontage at Forrest Drive	0.12
81	Buck Road	TMP 31-031-001 & 175 SW from Mallard Road	0.03
82	Buck Road	Rocksville Road to TMP 31-031-001	0.13
85	Neshaminy Greenway Trail (Proposed)	Bridgetown Pike to Playwicki Park	2.03
84	Buck Road	E Heron Road to Woodlake Drive	0.10
	·	Total Proposed Shared Use Trails	4.44

Segment	Newtown Rail Trail (Proposed)	Segment End Points	Length (Miles)
69	Newtown Rail Trail	Holland Road to East Holland Road	0.22
		Total Proposed Newtown Rail Trail	0.22

Segment	Sidewalks	Segment End Points	Length (Miles)
83	Holland Village - Buck Road	Elaine Drive to Holland Commons & Holland Village SC	0.27
SW 8	Bridgetown Pike	Bellwood Drive to Vernasa Drive/Playwicki Farm Connection	0.21
		Total Proposed Sidewalks	0.48

Segment	Neighborhood Bike Route (NBR)	Segment End Points	Length (Miles)
NBR 24	Neighborhood Bike Route	Hills at Northampton#	0.57
NBR 25	Neighborhood Bike Route	Hidden Pines	0.46
NBR 26	Neighborhood Bike Route	Holland Acres	0.71
NBR 27	Neighborhood Bike Route	East Ridge	0.61
NBR 28	Neighborhood Bike Route	Bridgetown	0.54
NBR 29	Neighborhood Bike Route	Briarwood Dr, Zelkova Dr, Wood Dr	0.87
NBR 30	Neighborhood Bike Route	Rolling Hills	0.44
NBR 31	Neighborhood Bike Route	Timber Valley	0.83
NBR 32	Neighborhood Bike Route	Pine Run	1.15
NBR 33	Neighborhood Bike Route	The Meadows	0.63
NBR 34	Neighborhood Bike Route	Hillcrestshire	1.65
NBR 35	Neighborhood Bike Route	Hillcrest Farms	0.58
		Total Proposed Neighborhood Bike Routes	9.03

Total Proposed Mileage 18.85

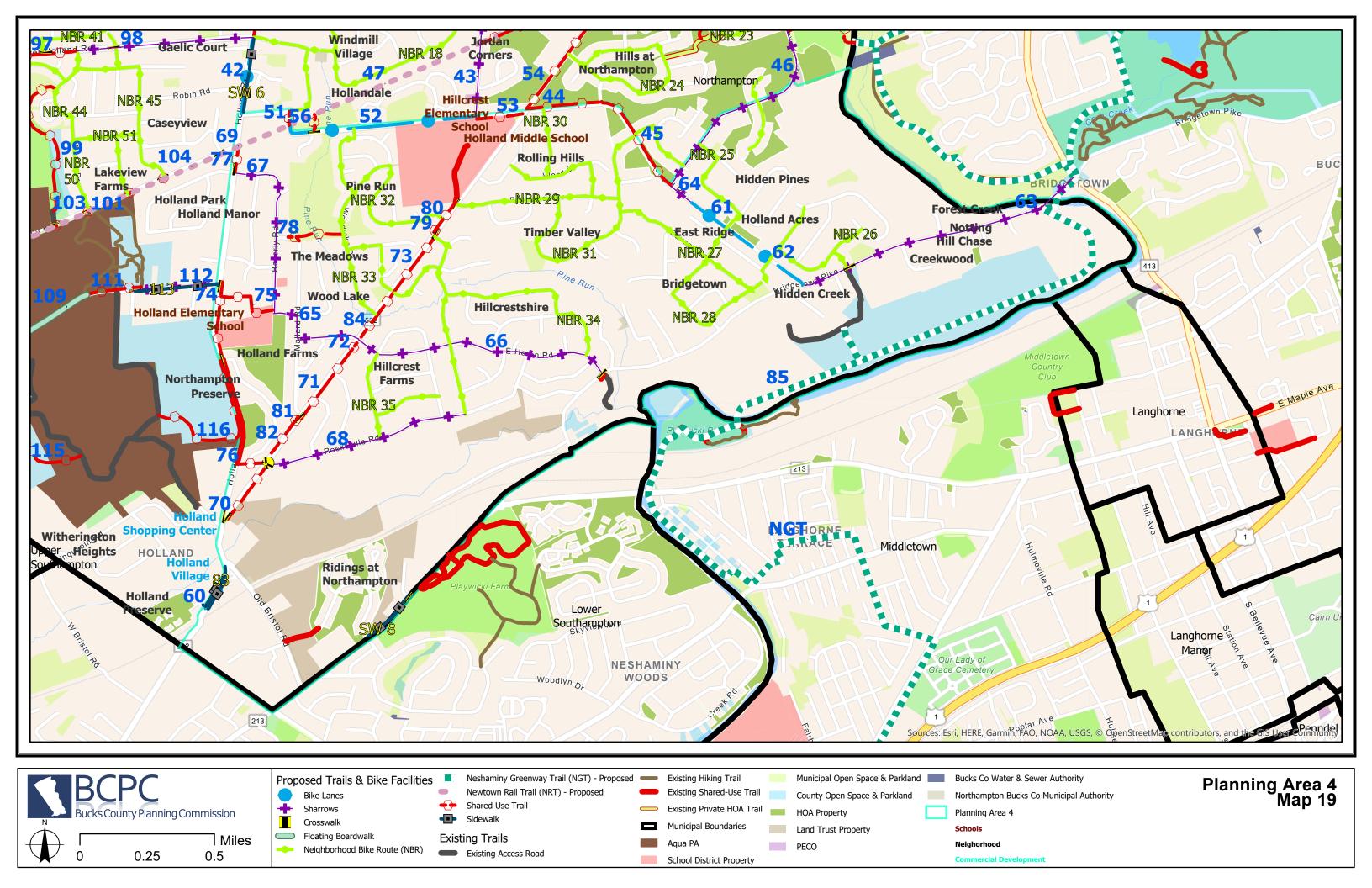
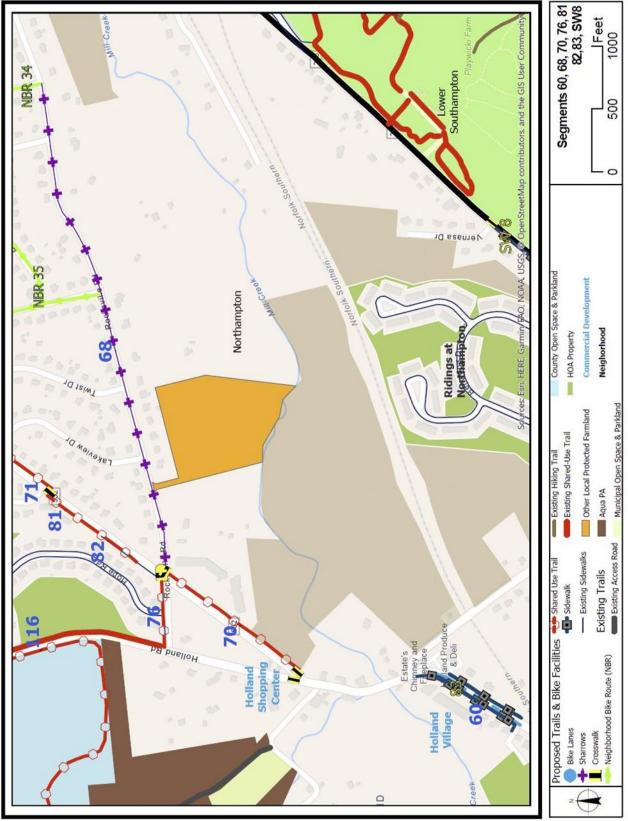


FIGURE 14 - SEGMENTS 60, 68, 70, 76, 81, 82, 83, SW 8



# 60 & 83- Holland Village - Buck Road - Elaine Drive to Holland Commons & Holland Village Shopping Center

## 60 & 83 - Holland Village - Buck Road

Elaine Drive to Holland Commons & Holland Village Shopping Center

Trail/Bicycle Facility Type and Length:

60 - Bicycle Lanes:
83 - Sidewalk:
0.15 miles
0.15 miles

#### Summary:

- Provides bicycle and sidewalk facilities for Holland Village.
- Buildings close to the road combined, with the narrowness of the existing bridge over Ironworks/Mill
  Creek, constrain the ability to extend the bicycle lanes north to connect to the Buck Road Shared Use
  Trail.
- Bicycle lanes would be supplemented by the installation of sidewalks within Holland Village to increase pedestrian friendliness and provide residents of Holland Preserve a safer way to access Holland Village.

## 68 - Rocksville Road - Buck Road to Wooden Bridge Road

## 68 - Rocksville Road

**Buck Road to Wooden Bridge Road** 

Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.77 miles

#### Summary:

- · Serves Hillcrestshire and Hillcrest Farms neighborhoods.
- Connects to 70 & 82- Buck Road Shared Use Trail and 76 Rocksville Road Shared Use Trail.
- Provides a bicycle facility as an alternative to a trail running along the Mill Creek corridor given the
  environmental and right-of-way ownership constraints associated with that corridor which prevent the
  establishment of a bicycle friendly trail adjacent to the creek.

## 76 - Rocksville Road - Holland Road to Buck Road

# 76 - Rocksville Road Holland Road to Buck Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.15 miles

- · Provides connection to Pheasant Valley Center.
- Connects to 70 & 82 Buck Road Shared Use Trail.
- Would also connect to the existing shared use trail on Holland Road providing access to Holland Elementary School and Holland Outdoor Recreation Center.

#### 70 - Buck Road - Crescent Drive to Holland Road

## 70 - Buck Road

#### Crescent Drive to Holland Road

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.24 miles

## Summary:

- Serves as a key connection between the Holland Village area and Pheasant Valley Shopping Center.
- Would be the southern leg of an overall trail along Buck Road extending from its intersection with Holland Road to the existing pathway on the grounds of Holland Middle School and Hillcrest Elementary School.
- Will require easements from Heritage Conservancy and the Pheasant Valley Center.
- · Sidewalks are proposed to cross both Buck Road and Holland Road at the split.
- Engineering will be required to address the steep slopes along the southeast side of Buck Road between Holland Road and Pheasant Valley Center.
- Connects to 68 Rocksville Road Bicycle Sharrows, 82 Buck Road Shared Use Trail and 76 -Rocksville Road Shared Use Trail.

## 82 - Buck Road - Rocksville Road to TMP 31-031-001

#### 82 - Buck Road

Rocksville Road to TMP 31-031-001

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.13 miles

- The initial 250' portion of this segment of the **Buck Road Shared Use Trail**, starting at the intersection of Rocksville Road, will be limited to the existing sidewalk along the northwest side of Buck Road. This is due to the right-of-way in Buck Road only being 50' resulting in insufficient room for a shared use trail.
- After the initial 250' the trail would be located in right-of-way along the northwest side of Buck Road
  as the right-of-way widens to 60' then 80' then narrows to 50' again as it approaches the intersection
  with Mallard Road.
- Upon reaching TMP 31-031-001, as the trail approaches Mallard Road, an easement will be required as part of segment 81 Buck Road Shared Use Trail.
- Connects to 70 & 81 Buck Road Shared Use Trail.

# 81 - Buck Road - TMP 31-031-001 (175' SW from Mallard Road)

## 81 - Buck Road

TMP 31-031-001 (175' SW from Mallard Road)

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.03 miles

- Connects to **71 Buck Road Shared Use Trail** and **82 Buck Road Shared Use Trail** as part of a shared use trail along the extent of Buck Road from Holland Road to Briarwood Drive.
- Will require an easement from the property owner of TMP 31-031-001 since the right-of-way along Buck Road narrows to 65' wide in this area.
- At the intersection of Mallard Road and Buck Road, the trail would cross to the southeast right-ofway of Buck Road to connect with segment **71 - Buck Road Shared Use Trail**.

Segments 65, 66, 71, 72, 73, 79, 80, 84, NBR 32, NBR 33, NBR 34, NBR 35 Bridgetown User Community East Ridge Middletown Bridgetown pike NBR 28 NBR 27 **NBR 24** Feet 1000 enStreetMap contributors, and the No Southampton 500 Timber Valley 0 NBR 31 Mill Creek Rd Rolling Hills NBR 30 Buckshire NBR 34 Sources: Esri, HERE, Garmin, FAGONDAA, USGS. Elementary NBR 29° Hillcrestshire Hillcrest School Neighorhood HOA Property Northampton Schools Holland Middle School Municipal Open Space & Parkland Hillcrest Farms School District Property NBR 32 10 .. 35 NBR NBR 33 The Meadows Pine Run Twist Dr Existing Access Road - Existing Sidewalks Wood Lake Holland Farms Sidewalk **Existing Trails** Newtown Rail Trail (NRT) - Proposed Neighborhood Bike Route (NBR) 69 School Holland Holland Rd Bike Lanes Sharrows Serene Dr Icia Rd

FIGURE 15 – SEGMENTS 65, 66, 71, 72, 73, 79, 80, 84, NBR 32, NBR 33, NBR 34, NBR 35

# 71 - Buck Road - Mallard Road to Northampton Presbyterian Church

### 71 - Buck Road

Mallard Road to Northampton Presbyterian Church

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.42 miles

## Summary:

- Continues the Buck Road Shared Use Trail in the right-of-way along the southeast side of Buck Road from Mallard Road to TMP 31-031-105 at Northampton Presbyterian Church where the right-of-way narrows from 75' down to 50'.
- Provides a connection between the Pheasant Valley Shopping Center and Northampton Presbyterian Church and residential developments off of Buck Road.
- Connects to 72 & 81/82 Buck Road Shared Use Trail.

# 72 - Buck Road - Northampton Presbyterian Church Frontage to East Heron Road

#### 72 - Buck Road

Northampton Presbyterian Church Frontage to East Heron Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.04 miles

#### Summary:

- Will require an easement from Northampton Presbyterian Church.
- Part of the overall Buck Road Shared Use Trail.
- Connects to 65 Crescent Drive, Mallard Road & Heron Road Bicycle Sharrows, 66 East Heron Road Bicycle Sharrows, 71 Buck Road Shared Use Trail and 84 Buck Road Shared Use Trail.
- Upon reaching East Heron Road, the trail will cross Buck Road to facilitate crossing Pine Run as part of segment **84 Buck Road Shared Use Trail**.

#### 84 - Buck Road - East Heron Road to Woodlake Drive

#### 84 - Buck Road

East Heron Road to Woodlake Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.10 miles

#### Summarv:

- Continues the Buck Road Shared Use Trail in the right-of-way along the northwest side of Buck Road.
- Will require a separate bridge running parallel and adjacent to Buck Road to cross Pine Run.
- Will require easements on TMP# 31-031-045 and 31-031-046.
- After crossing Woodlake Drive, the trail will cross Buck Road to the southeast side to connect with 73
   Buck Road Shared Use Trail.
- Connects to 65 Crescent Drive, Mallard Road & Heron Road Bicycle Sharrows, 72 Buck Road Shared Use Trail and 73 Buck Road Shared Use Trail.

## 73 - Buck Road - Woodlake Drive to Kings Way Drive

## 73 - Buck Road

Pine Run Creek Bridge/Woodlake Drive to Kings Way Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.36 miles

### Summary:

- Continues the **Buck Road Shared Use Trail** in the right-of-way along the southeast side of Buck Road from Woodlake Drive to Kings Way Drive.
- The right-of-way width for Buck Road in this stretch varies from 65' to 95' wide, with the majority being 95' so no easements from private property owners should be needed.
- Provides a connection for The Meadows and Hillcrestshire neighborhoods.

# 79 - Buck Road - Kings Way Drive to start of sidewalk south of Forrest Drive

#### 79 - Buck Road

Kings Way Drive to start of sidewalk south of Forrest Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.01 miles

### Summary:

- After crossing the Kings Way Drive entrance to the Hillcrestshire neighborhood, the trail will cross Buck Road onto the northwest side.
- This segment reflects the length of approximately 100 feet needed from the owner of TMP# 31-026-031-001 as the right-of-way in this area is only 60'.
- Connects to 73 Buck Road Shared Use Trail and 80 Buck Road Shared Use Trail.

# 80 - Buck Road - Pine Run Frontage at Forrest Drive

## 80 - Buck Road

Pine Run Frontage at Forrest Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.12 miles

- After TMP# 31-026-031-001, as the trail approaches the entrance to the Pine Run neighborhood at Forrest Drive, the right-of-way widens to 75' allowing room for the trail within the right-of-way.
- The end of this trail would connect into the existing pathway as part of the Holland Middle School / Hillcrest Elementary School campus.
- A sidewalk crossing is planned at the intersection of Buck Road and Briarwood Drive to provide safe passage to the trail from the neighborhoods south of East Holland Road and east of Buck Road including Briarwood Drive, Wood Drive, and Ponderosa Drive.
- Connects to 79 Buck Road Shared Use Trail.

# 66 - East Heron Road - Buck Road to Bridgetown Pike

# 66 - East Heron Road Buck Road to Bridgetown Pike

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.97 miles

#### Summary:

- These bicycle sharrows serve as an extension of the **Buck Road Shared Use Trail** and are intended to provide access to that trail for the Hillcrest Farms and Hillcrestshire neighborhoods.
- As the bicycle sharrows are proposed to continue across Buck Road in the form of 65 Crescent Drive,
   Mallard Road & Heron Road, this route will also provide connectivity to Churchville Nature Center and the Newtown Rail Trail.
- Connects to 71, 72, & 84 Buck Road Shared Use Trail and 65 Crescent Drive, Mallard Road, and Heron Road Bicycle Sharrows.

## 65 - Crescent Drive, Mallard Road & Heron Road - Holland Elementary School to Buck Road

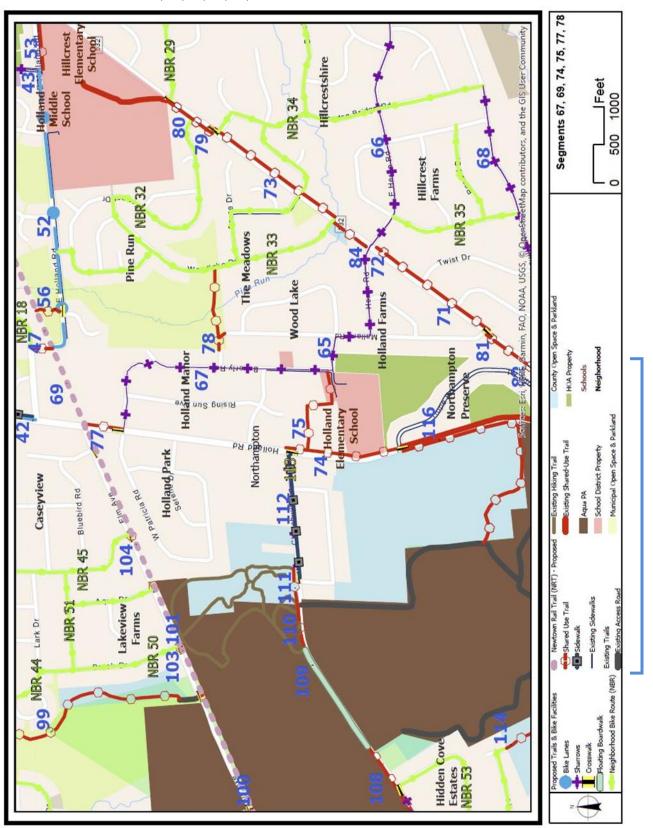
# 65 - Crescent Drive, Mallard Road & Heron Road Holland Elementary School to Buck Road

Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.41 miles

- Provides a connection between Holland Elementary School and neighborhoods to the east of Buck Road including Hillcrestshire and Hillcrest Farms.
- Also serves as part of the primary route between the **Buck Road Shared Use Trail**, the trail and bicycle facilities proposed along **Churchville Road**, and the **Newtown Rail Trail**.
- Connects to 72 Buck Road Shared Use Trail, 66 East Heron Road Bicycle Sharrows, 67 East
  Patricia/Beverly Road Bicycle Sharrows, 75 Holland E.S./Lower Bucks Holland Outdoor Recreation
  Shared Use Trail and 84 Buck Road Shared Use Trail.

FIGURE 16 - SEGMENTS 67, 69, 74, 75, 77, 78



### 75 - Holland E.S./Lower Bucks Holland Outdoor Recreation - Crescent Drive to Holland Road

# 75 - Holland E.S./Lower Bucks Holland Outdoor Recreation Crescent Drive to Holland Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.25 miles

## Summary:

- Provides a connection between Holland Road and Crescent Drive via the Holland Elementary School and Lower Bucks Holland Outdoor Recreation properties.
- Will require easements from both the YMCA and Council Rock School District.
- At its eastern end, this trail would connect to 65 Crescent Drive, Mallard Road, and Heron Road Bicycle Sharrows and 67 - East Patricia Road/Beverly Road Bicycle Sharrows, and 74 - Holland Road Shared Use Trail at its western end. The connection along East Patricia Road/Beverly Road serves as a primary linkage to the Newtown Rail Trail.

# 74 - Holland Road - Hope Road to Churchville Lane

#### 74 - Holland Road

Hope Road to Churchville Lane

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.28 miles

#### Summary:

- Extends the existing shared use trail along Holland Road (Between Hope Road and Rocksville Road), north to Churchville Lane.
- The extension of this trail along Holland Road will require a total of four easements. These include Northampton Preserve HOA, Council Rock School District/Holland Elementary School, the YMCA/Lower Bucks Holland Outdoor Recreation Center, and the owner of TMP# 31-028-177.
- Connects to 75 Holland E.S./Lower Bucks Holland Outdoor Recreation Shared Use Trail, 112 -Churchville Lane Bicycle Sharrows, 113 - Churchville Lane Sidewalks and 116 - Churchville Farm Shared Use Trail.

# 67 - East Patricia Road/Beverly Road - Holland Road to Crescent Drive

# 67 - East Patricia Road/Beverly Road Holland Road to Crescent Drive

Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.67 miles

- In conjunction with 77 Holland Road Shared Use Trail, provides access to the Newtown Rail Trail.
- Connects to 65 Crescent Drive, Mallard Road & Heron Road Bicycle Sharrows, 75 Holland E.S./Lower Bucks Holland Outdoor Recreation Shared Use Trail, 77 - Holland Road Shared Use Trail and 78 - Pine Run Shared Use Trail.

## 77 - Holland Road - East Patricia Road to Newtown Rail Trail

## 77 - Holland Road

#### East Patricia Road to Newtown Rail Trail

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.09 miles

#### Summary:

- Provides a connection to the Newtown Rail Trail.
- Connects to 67 East Patricia Road/Beverly Road Bicycle Sharrows and 69 Newtown Rail Shared
  Use Trail.
- Will require easements from two private property owners, TMPs# 31-015-150-001 and 31-015-151, for the frontage along Holland Road.

## 78 - Pine Run - Beverly Road/Mallard Road/Woodlake Drive

## 78 - Pine Run

Beverly Road/Mallard Road/Woodlake Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.22 miles

#### Summary:

- Provides connections between the Pine Run, Woodlake, The Meadows, and Holland Manor neighborhoods via the township-owned wooded area along the Pine Run stream corridor.
- There are wetlands that would need to be addressed as part of the design and construction of the trail.
- Connects to 67 East Patricia Road/Beverly Road Bicycle Sharrows.

## 69 - Newtown Rail Trail - Holland Road to East Holland Road

#### 69 - Newtown Rail Trail

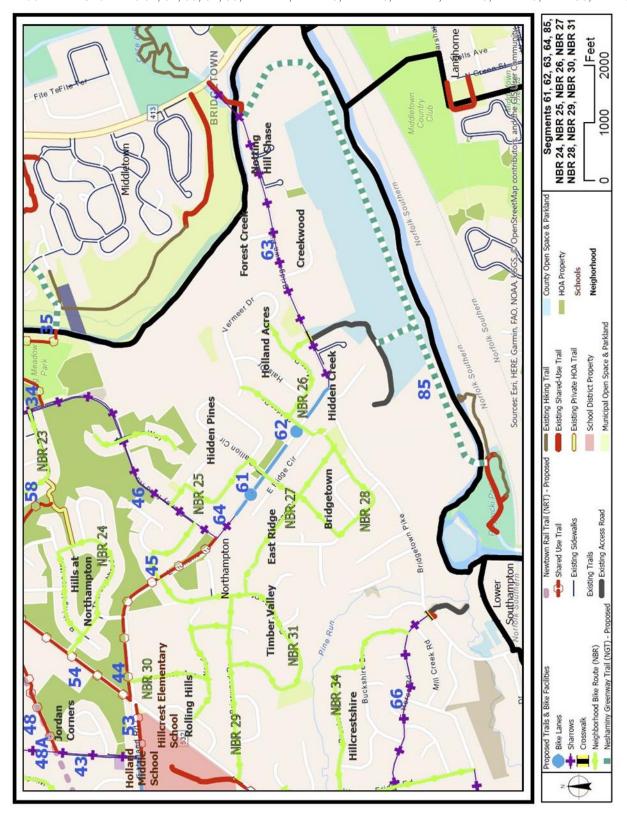
Holland Road to East Holland Road

#### Trail/Bicycle Facility Type and Length:

69 - Shared Use Trail: 0.22 miles

- Serves as a critical section of the Newtown Rail Trail running between Holland Road and East Holland Road.
- As the trail would run behind Sundance Kennels and adjacent to a couple of residential properties, landscaping and fencing would be provided as buffering.
- Provides connection to 51 East Holland Road Shared Use Trail, 47 &104 Newtown Rail Shared
   Use Trail, and 77 Holland Road Shared Use Trail.

FIGURE 17 - SEGMENTS 61, 62, 63, 64, 85, NBR 24, NBR 25, NBR 26, NBR 27, NBR 28, NBR 29, NBR 30, NBR 31



# 64 - East Holland Road - Stoneyford Road to d 850' northwest of Pepperell Drive

## 64 - East Holland Road

Stoneyford Road to widening of road 850' northwest of Pepperell Drive

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.10 miles

### Summary:

- Continues the proposed trail and bicycle facilities along East Holland Road.
- Due to the limited right-of-way in this area, associated with the presence of the farm house located close to the road, this segment will be bicycle sharrows.
- At its northwest end, provides a connection to 45 East Holland Road Shared Use Trail and 46 Stoneyford Road Bicycle Sharrows, while connecting to 61 East Holland Road Bicycle Lanes at its
  southeastern end.

# 61 - East Holland Road - 850' Frontage of East Ridge & Hidden Pines up to Pepperell Drive/Stallion Circle

#### 61 - East Holland Road

850' Frontage of East Ridge & Hidden Pines up to Pepperell Drive/Stallion Circle

## Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.16 miles

### Summary:

- This segment, in the form of dedicated bicycle lanes, extends 850' southeast along East Holland Road up to its intersection with Pepperell Drive and Stallion Circle.
- Provides access to Hidden Pines, Holland Acres and East Ridge neighborhoods.
- Connects to 62 East Holland Road Bicycle Lanes, and 64 East Holland Bicycle Sharrows.

## 62 - East Holland Road - Pepperell Drive/Stallion Circle to Bridgetown Pike

## 62 - East Holland Road

Pepperell Dr/Stallion Cir to Bridgetown Pike

## Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.35 miles

- Extends the proposed trail and bicycle facilities proposed along East Holland Road to Bridgetown Pike in the form of dedicated bicycle lanes.
- Provides access to Hidden Pines, Holland Acres, Bridgetown and East Ridge neighborhoods.
- Provides connection to 61 East Holland Road Bicycle Lanes and 63 Bridgetown Pike Bicycle Sharrows.

# 63 - Bridgetown Pike - East Holland Road to Newtown-Langhorne Road

## 63 - Bridgetown Pike

## East Holland Road to Newtown-Langhorne Road

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 1.10 miles

#### Summary:

- Connects East Holland Road to Middletown Township and Core Creek Park.
- Provides connection to 62 East Holland Road Bicycle Sharrows and 85 Neshaminy Greenway
   Trail.

# 85 - Neshaminy Greenway Trail - Bridgetown Pike to Playwicki Park

# 85 - Neshaminy Greenway Trail (Proposed) Bridgetown Pike to Playwicki Park

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 2.03 miles

### Summary:

- Provides shared use trail along Neshaminy Creek as part of the much larger Neshaminy Greenway
   Trail
- Connects to Breezy Point Day Camp, Middletown Township and Core Creek Park.
- Connects to **63 Bridgetown Pike Bicycle Sharrows** and existing shared use trail into Middletown Township.
- Although the majority of the land adjacent to the creek is owned by Bucks County, construction of the trail will require at least four easements from property owners.

## Sidewalks - Segments 83 and SW 8

#### Sidewalks

Trail/Bicycle Facility Type and Length:

83 SidewalkSW 8 Sidewalk0.27 miles0.35 miles

- 83 Holland Village Buck Road Elaine Drive to Holland Commons & Holland Village SC Provides pedestrian facility along Buck Road in Holland Village
- SW 8 Bridgetown Pike Bellwood Drive to Playwicki Farm
   Provides sidewalk along Playwicki Farm and Bridgetown Pike

## Neighborhood Bike Routes (NBR) 24 through 35

## Neighborhood Bike Routes - 24 through 35

## Trail/Bike Facility Type and Length:

NBR 24 - Neighborhood	Bike	Route	Signage	0.57	miles
NBR 25 - Neighborhood	Bike	Route	Signage	0.46	miles
NBR 26 - Neighborhood	Bike	Route	Signage	0.71	miles
NBR 27 - Neighborhood	Bike	Route	Signage	0.61	miles
NBR 28 - Neighborhood	Bike	Route	Signage	0.54	miles
NBR 29 - Neighborhood	Bike	Route	Signage	0.87	miles
NBR 30 - Neighborhood	Bike	Route	Signage	0.44	miles
NBR 31 - Neighborhood	Bike	Route	Signage	0.83	miles
NBR 32 - Neighborhood	Bike	Route	Signage	1.15	miles
NBR 33 - Neighborhood	Bike	Route	Signage	0.63	miles
NBR 34 - Neighborhood	Bike	Route	Signage	1.65	miles
NBR 35 - Neighborhood	Bike	Route	Signage	0.58	miles

#### Summary:

NBR 24 - Hills at Northampton

Provides connection to 64 - East Holland Road Bicycle Sharrows

NBR 25 - Hidden Pines

Provides connection to East Ridge neighborhood, **62 - East Holland Road Bicycle Lanes** and **64 - East Holland Road Bicycle Sharrows** 

NBR 26 - Holland Acres

Provides connection to Bridgetown neighborhood, 61 - East Holland Road Bicycle Lanes and 63 - Bridgetown Pike Bicycle Sharrows

NBR 27 - East Ridge

Provides connection to Bridgetown neighborhood, 61 - East Holland Road Bicycle Lanes and 62 - East Holland Road Bicycle Lanes

NBR 28 - Bridgetown

Provides connection East Ridge neighborhood and to 62 - East Holland Road Bicycle Lanes

• NBR 29 - Briarwood Dr., Zelkova Dr., Wood Dr.

Provides connection to Rolling Hills and Timber Valley neighborhoods

NBR 30 - Rolling Hills

Provide connections to Briarwood Dr., Zelkova Dr., Wood Dr. neighborhoods, **44 - East Holland Road Shared Use Trail** 

NBR 31 - Timber Valley

Provides connection to Briarwood Dr., Zelkova Dr., Wood Dr. and East Ridge neighborhoods

NBR 32 - Pine Run

Provides connection to Holland Middle School, The Meadows neighborhoods, **78 - Pine Run Shared Use Trail. 79 - Buck Road Shared Use Trail** and **80 - Buck Road Shared Use Trail** 

NBR 33 - The Meadows

Provides connection to 73 - Buck Road Shared Use Trail, 78 - Pine Run Shared Use Trail and 84 - Buck Road Shared Use Trail

• NBR 34 - Hillcrestshire

Provides connection to 66 - East Heron Road Bicycle Sharrows, 68 - Rocksville Road Bicycle Sharrows, 73 - Buck Road Shared Use Trail and 79 - Buck Road Shared Use Trail

• NBR 35 - Hillcrest Farms

Provides access to Northampton Presbyterian Church, 66 - East Heron Road Bicycle Sharrows and 68 - Rocksville Road Bicycle Sharrows.

# PLANNING AREA 5

This planning area, located in the south central portion of the township, is bounded by Newtown Richboro Road to the north, Holland Road to the east, Bristol Road to the south, and Second Street Pike to the west. The features of this area are described below:

## Land Use

Land use in this planning area is a diverse mix of:

- · Single Family Residential;
- Utilities in the form of the AQUA PA-owned Churchville Reservoir;
- Government and Institutional associated with the government facilities in the Village of Richboro;
- Parks and Open Space found along Almshouse Road associated with the Churchville Nature Center, Churchville Farm and Pheasant Run Park; and
- Commercial (Villages of Richboro and Holland).

## **Natural Features**

## **Topography**

• The majority of this planning area can be described as gently rolling hills, although areas with steep slopes can be found in several locations. Marked changes in topography occur in the Village of Holland and in the vicinity of Chinquapin Road and Witherington Heights neighborhood; along the Ironworks Creek stream valley in the neighborhoods of Northampton Estates, Spring Valley Farm, Willow Estates, Pheasant Run and Green Valley; and along a ridge running through the neighborhoods of Churchville Manor, Hillside, Green Valley, Green Valley North and Applegate.

## Water resources

 The area is part of the Neshaminy Creek watershed with the primary subwatersheds in this area being the Pine Run, Ironworks Creek and Mill Creek watersheds.

## Wetlands

 There are two principal wetland areas in this planning area. The first is along the Mill Creek corridor running between the Holland Preserve and Witherington Heights neighborhoods. The second and larger wetland area is along the Ironworks Creek corridor extending south from Tanyard Road to the confluence of Mill Creek and Ironworks Creek in the Village of Holland. Aside from the reservoir itself, there is a large expanse of wetlands on Bucks County property between the Pheasant Run and Green Valley neighborhoods associated with a small pond in that area.

## **Woodlands and Natural Areas**

 The primary wooded areas in this planning area include the riparian corridor along Ironworks Creek and the wooded areas surrounding Churchville Reservoir.

## Man-Made Features

## **Commercial Areas**

- Village of Holland/Holland Shopping Center
- Pheasant Valley Center
- Crossroads Plaza
- · Richboro Center

# Parks and Recreation Areas

- · Churchville Nature Center
- Churchville Reservoir
- Churchville Farm
- Pheasant Run Park
- James Michener Senior Center
- Free Library of Northampton Township

# **Schools**

- Richboro Elementary School
- Churchville Elementary School

## **Historic Resources**

- Twin Trees Farm
- Villa Joseph Marie School

## Principal Arterial Roadways

- Newtown Richboro Road (Route 332)
- Buck Road (Route 532)
- Second Street Pike (Route 232)

## Major Collector Roadways

- Holland Road
- Upper Holland Road
- Lower Holland Road
- Churchville Lane
- Bristol Road

## **Existing Trails**

Area	Existing Trail	Type of Trail	Mileage
5	Churchville Elementary Complex	Shared Use	0.30
5	Bustleton Pike to Hilltop Drive	Shared Use	0.02
5	Churchville Nature Center	Hiking Trail	1.70
		Total Area 5	2.02

TABLE 23 – PROPOSED TRAILS & BICYCLE FACILITIES – PLANNING AREA 5

Segment	Dedicated Bike Lane Segments	Segment End Points	Length (Miles)
87	Bustleton Pike	Tanyard Road/Anthony Drive to Upper Holland Road	0.30
		Total Proposed Bicycle Lanes	0.30

Segment	Sharrow	Segment End Points	Length (Miles)
86	Tanyard Road	Second Street Pike to Bustleton Pike	0.34
92	Upper Holland Road	Bustleton Pike to Holland Road	1.57
95	New Road	Second Street Pike, Mehler Drive, Hilltop Drive to Bustleton Pike	0.88
98	Lower Holland Road	Lark Drive to Holland Road	0.66
107	Churchville Lane	Bristol Road to Hidden Cove Drive	0.51
112	Churchville Lane	Lakeside Drive to Holland Road	0.32
	·	Total Proposed Sharrows	4.28

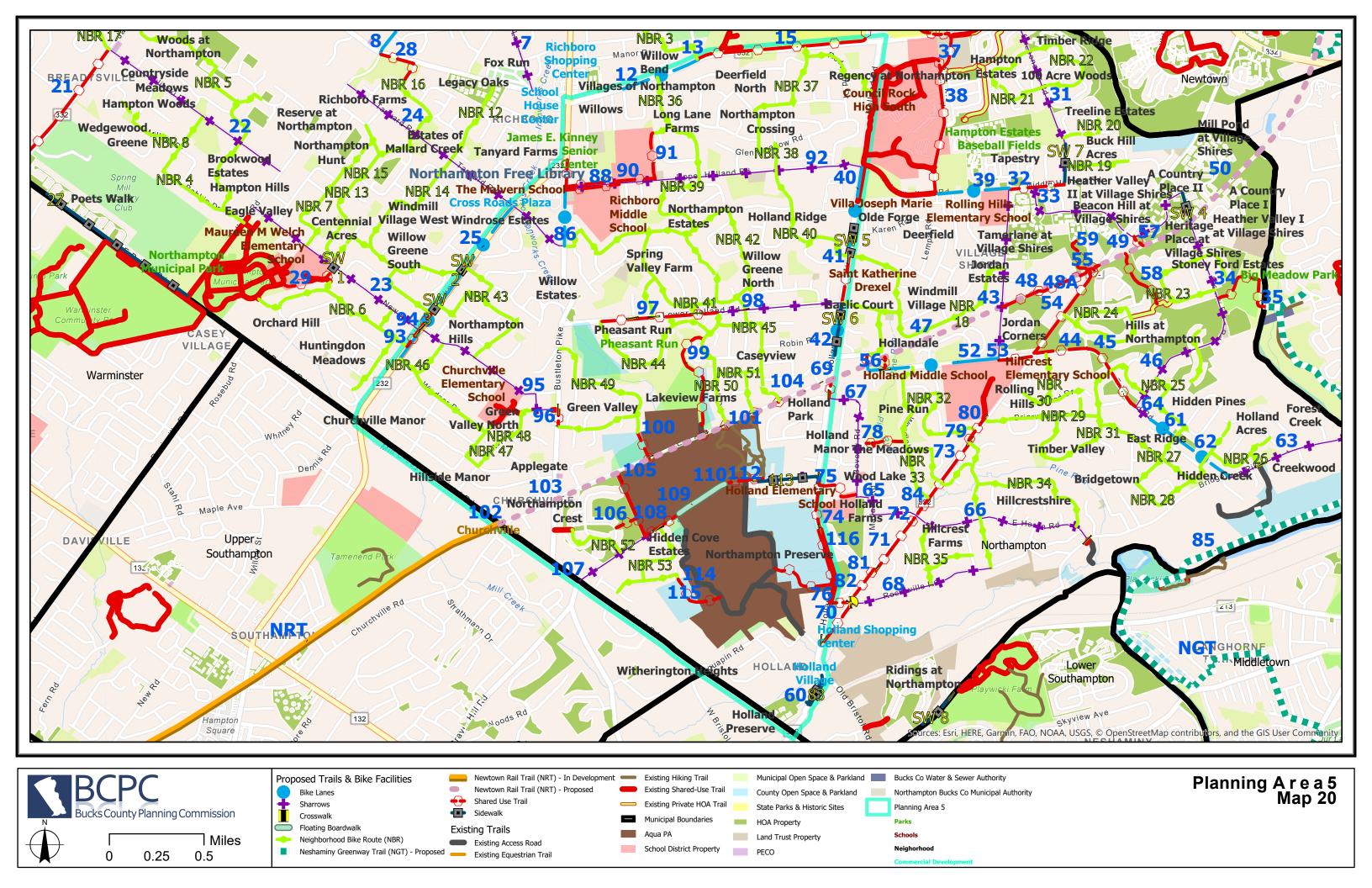
Segment	Shared Use Trails	Segment End Points	Length (Miles)
88	Upper Holland Road/Richboro Middle School	Bustleton Pike to just west of Torresdale Drive	0.28
89	Bustleton Pike & Upper Holland Road	Second Street Pike to Township Road	0.29
90	Upper Holland Road	Township Road to Richboro Elementary School Trail	0.32
91	Richboro Elemenary School	Cedar Drive to Upper Holland Road	0.25
93	Second Street Pike	Cherry Blossom Drive to New Road	0.10
94	Second Street Pike	New Road to Heather Road	0.10
96	Bustleton Pike	Hilltop Drive to Green Valley Drive	0.09
97	Lower Holland Road	Chapel Drive to Lark Drive	0.70
99	Newtown Rail Trail Connector Trail	Pheasant Run Park to Elm Avenue	0.60
100	Newtown Rail Trail Connector Trail	Schan Drive to Newtown Rail Trail	0.15
101	Newtown Rail Trail Connector Trail	Brook Drive, Aqua Drive & Cameron Drive	0.01
105	Newtown Rail Trail Connector Trail	Churchville Lane to Newtown Rail Trail	0.37
106	Northampton Crest Connector Trail	Radcliffe Drive to Aqua PA Trail	0.12
108	Churchville Lane	Northampton Crest to Churchville Reservoir	0.22
109	Churchville Lane	Floating Boardwalk on Churchville Reservior	0.29
110	Churchville Lane	Churchville Reservoir to Churchville Nature Center	0.11
111	Churchville Lane	Churchville Nature Center	0.09
114	Bucks County - Churchville Reservoir Connector	Lake Drive to AQUA PA property	0.18
115	Churchville Reservoir Connector Trail	Bucks County (Lake Drive) to Churchville Access Road	0.12
116	Churchville Farm	Churchville Reservoir to Holland Road	0.64
		Total Proposed Shared Use Trails	5.02

Segment	Shared Use Trails	Segment End Points	Length (Miles)
102	Newtown Rail Trail (Proposed)	Bristol Road to Bustleton Pike	0.32
103	Newtown Rail Trail (Proposed)	Bustleton Pike to Churchville Nature Center	1.00
104	Newtown Rail Trail (Proposed)	Churchville Nature Center to Holland Road	0.60
		Total Proposed Rail Trail	1.91

Segment	Sidewalks	Segment End Points	Length (Miles)
113	Churchville Lane	Lakeside Drive to Holland Road	0.31
	-	Total Proposed Sidewalks	0.31

Segment	Neighborhood Bike Route (NBR)	Segment End Points	Length (Miles)
NBR 36	Neighborhood Bike Route	Long Lane Farms	0.73
NBR 37	Neighborhood Bike Route	Deerfield North	1.20
<b>NBR 38</b>	Neighborhood Bike Route	Northampton Crossing	0.24
NBR 39	Neighborhood Bike Route	Northampton Estates	0.53
NBR 40	Neighborhood Bike Route	Holland Ridge	0.78
NBR 41	Neighborhood Bike Route	Spring Valley Farm	2.33
NBR 42	Neighborhood Bike Route	Willow Greene North	0.89
NBR 43	Neighborhood Bike Route	Northampton Hills	1.07
NBR 44	Neighborhood Bike Route	Pheasant Run	1.42
NBR 45	Neighborhood Bike Route	Caseyview/Estates at Holland	0.62
NBR 46	Neighborhood Bike Route	Churchville Manor	1.05
NBR 47	Neighborhood Bike Route	Hillside Manor	0.21
NBR 48	Neighborhood Bike Route	Green Valley North	0.29
NBR 49	Neighborhood Bike Route	Green Valley	1.21
NBR 50	Neighborhood Bike Route	Brook Drive	0.31
NBR 51	Neighborhood Bike Route	Lakeview Farms	0.47
NBR 52	Neighborhood Bike Route	Northampton Crest	0.36
NBR 53	Neighborhood Bike Route	Hidden Cove Estates	0.81
		Total Proposed Neighborhood Bike Routes	14.51

Total Proposed Mileage 26.33



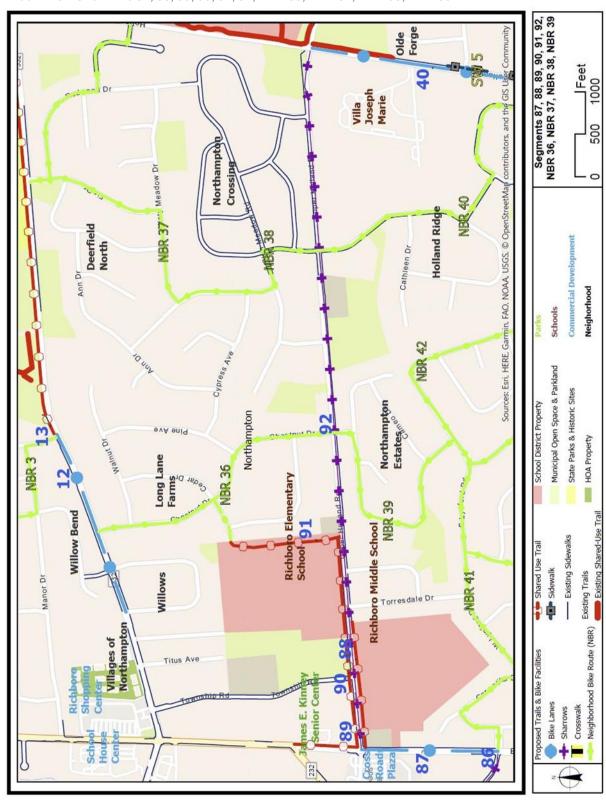


FIGURE 18 - SEGMENTS 87, 88, 89, 90, 91, 92, NBR 36, NBR 37, NBR 38, NBR 39

# 87 - Bustleton Pike - Tanyard Road/Anthony Drive to Upper Holland Road

## 87 - Bustleton Pike

Tanyard Road/Anthony Drive to Upper Holland Road

Trail/Bicycle Facility Type and Length:

Bicycle Lanes: 0.30 miles

#### Summary:

- Connects neighborhoods south of Tanyard Road and neighborhoods along Bustleton Pike to Richboro Middle School site and Free Library of Northampton.
- Provides connections to 86 Tanyard Bicycle Sharrows, 88 Upper Holland Road/Richboro Middle School site Shared Use Trail, 89 - Bustleton Pike & Upper Holland Road Shared Use Trail, and 92 -Upper Holland Road Bicycle Sharrows.
- Will require approval and coordination with PennDOT given that Bustleton Pike is a state road.

# 88 - Upper Holland Road/Richboro Middle School site - Bustleton Pike to just west of Torresdale Drive

# 88 - Upper Holland Road/Richboro Middle School site Bustleton Pike to just west of Torresdale Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.28 miles

## Summary:

- Connects Richboro Elementary School, Richboro Middle School site, James E. Kinney Senior Center and Free Library of Northampton while increasing overall walkability and bicycle friendliness in the Richboro area.
- Provides connections to 87 Bustleton Pike Bicycle Lanes, 89 Bustleton Pike & Upper Holland Road Shared Use Trail, 90 - Upper Holland Road Shared Use Trail and 92 - Upper Holland Road Bicycle Sharrows.

## 89 - Bustleton Pike & Second Street Pike to Upper Holland Road & Township Road

## 89 - Bustleton Pike & Second Street Pike to Upper Holland Road & Township Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.29 miles

- Connects to Richboro Center, Free Library of Northampton and Crossroads Plaza.
- Installation of this trail should be implemented as part of any future redevelopment plans in this area as this trail will potentially require easements.
- Provides connections to 87 Bustleton Pike Bicycle Lanes, 88 Upper Holland Road/ Richboro Middle School site Shared Use Trail, 90 - Upper Holland Road Shared Use Trail, and 92 - Upper Holland Road Bicycle Sharrows.

# 90 - Upper Holland Road - Township Road to Richboro Elementary School Trail

## 90 - Upper Holland Road

Township Road to Richboro Elementary School Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.32 miles

#### Summary:

- · Connects Richboro Elementary School, Free Library of Northampton, and James E. Kinney Senior Center.
- Will require an easement from Council Rock School District for frontage along Upper Holland Road.
- Provides connections to 88 Upper Holland Road/Richboro Middle School site Shared Use Trail, 91
  - Richboro Elementary Shared Use Trail and 92 Upper Holland Road Bicycle Sharrows.

# 91 - Richboro Elementary School - Cedar Drive to Upper Holland Road

# 91 - Richboro Elementary School Cedar Drive to Upper Holland Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.25 miles

#### Summary:

- Connects Richboro Elementary School to the Long Lane Farms, Deerfield North, and Northampton Crossing neighborhoods, and via 90 - Upper Holland Road Shared Use Trail, to Richboro.
- Provides connections to 90 Upper Holland Road Shared Use Trail and 92 Upper Holland Road Bicycle Sharrows.

# 92 - Upper Holland Road - Bustleton Pike to Holland Road

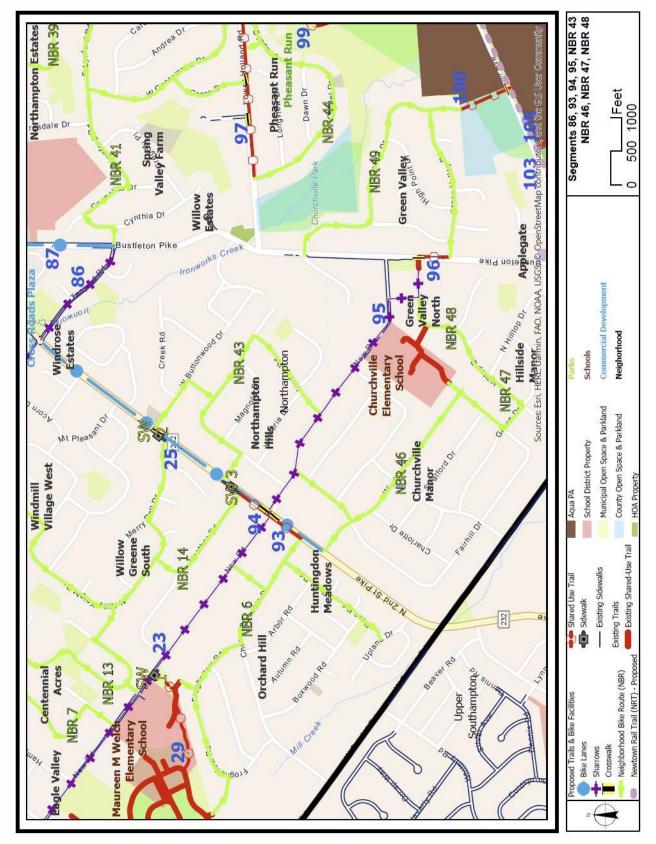
# 92 - Upper Holland Road **Bustleton Pike to Holland Road**

### Trail/Bicycle Facility Type and Length:

1.57 miles Bicycle Sharrows:

- Connects to Northampton Estates, Long Lane Farms, Holland Ridge and Northampton Crossing neighborhoods.
- Connects to Villa Joseph Marie, Richboro Elementary School, Richboro Middle School site, James E. Kinney Senior Center and Free Library of Northampton.
- Provides connections to 40 Holland Road Bicycle Lanes, 87 Bustleton Pike Bicycle Lanes, 88 -Upper Holland Road/Richboro Middle School site Shared Use Trail, 90 - Upper Holland Road Shared Use Trail and 91 - Richboro Elementary School Shared Use Trail.

FIGURE 19 – SEGMENTS 86, 93, 94, 95, NBR 46, NBR 47, NBR 48



## 86 - Tanyard Road - Second Street Pike to Bustleton Pike

# 86 - Tanyard Road

Second Street Pike to Bustleton Pike

Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.34 miles

#### Summary:

- Continues the 24 Tanyard Road Bicycle Sharrows to connect to Bustleton Pike.
- Connects to the Windrose neighborhood.
- Provides connections to 24 Tanyard Road Bicycle Sharrows, 25 Second Street Pike Bicycle Sharrows and 87 - Bustleton Pike Bicycle Lanes.

# 93 - Second Street Pike - Cherry Blossom Drive to New Road

#### 93 - Second Street Pike

Cherry Blossom Drive to New Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.10 miles

## Summary:

- Facilitates a safe connection for residents of Orchard Hill and Huntingdon Meadows to the 23 & 95 New Road Bicycle Sharrows via a shared use trail connecting Cherry Blossom Drive to New Road.
- Provides connections to 23 & 95 New Road Bicycle Sharrows, 25 Second Street Pike Bicycle Lanes, and 94 - Second Street Pike Shared Use Trail to Heather Road.

## 94 - Second Street Pike - New Road to Heather Road

#### 94 - Second Street Pike

New Road to Heather Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.10 miles

- Facilitates a safe connection for residents of Willow Greene South to the 23 & 95 New Road
   Bicycle Sharrows via a shared use trail connecting Heather Road to New Road.
- Provides connections to 23 & 95 New Road Bicycle Sharrows, 25 Second Street Pike Bicycle
  Lanes, 93 Second Street Pike Shared Use Trail to Cherry Blossom Drive.

## 95 - New Road - Second Street Pike, Mehler Drive, Hilltop Drive to Bustleton Pike

## 95 - New Road

Second Street Pike, Mehler Drive, Hilltop Drive to Bustleton Pike

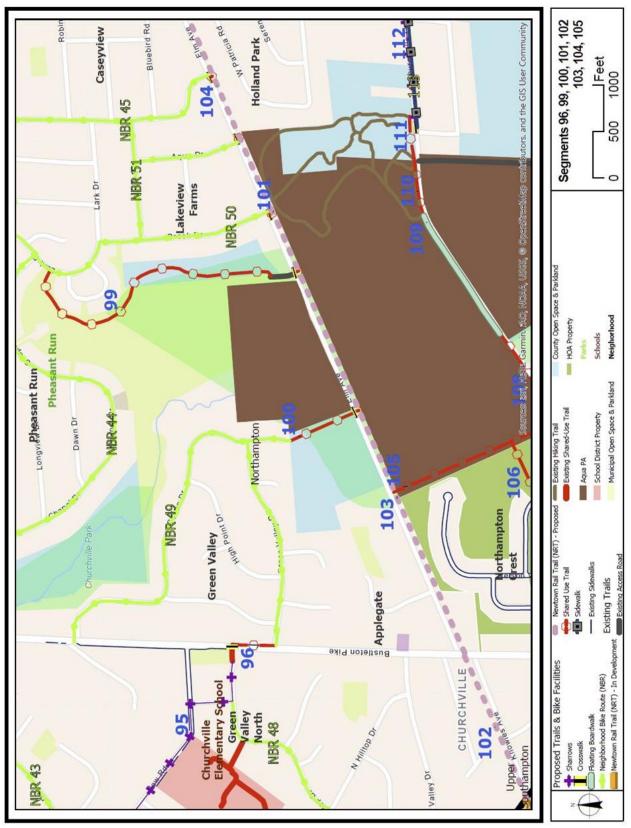
## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows:

0.88 miles

- Serves as a key east-west link to connect the neighborhoods along New Road to the Newtown Rail Trail.
- This segment follows New Road from Second Street Pike, turns right onto Mehler Drive, then left onto Hilltop Drive. At the end of the cul-de-sac on Hilltop Drive, the bicycle sharrows will connect to an upgraded version of the existing shared use trail leading out to Bustleton Pike.
- Connects Churchville Manor, Northampton Hills and Green Valley North neighborhoods with Churchville Elementary School.
- Provides connections to 23 New Road Bicycle Sharrows, 93 & 94 Second Street Pike Shared Use Trails, 25 Second Street Pike Bicycle Lanes, and 96 Bustleton Pike Shared Use Trail.

FIGURE 20 - SEGMENTS 96, 99, 100, 101, 102, 103, 104, 105



### 102 - Newtown Rail Trail - Bristol Road to Bustleton Pike

## 102 - Newtown Rail Trail Bristol Road to Bustleton Pike

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.32 miles

## Summary:

- This is the initial segment of the **Newtown Rail Trail** within Northampton Township.
- Connects Bristol Road to Bustleton Pike within the SEPTA-owned right-of-way.
- Connects to 103 Newtown Rail Shared UseTrail.
- Connection to Upper Southampton Township's portion of the rail trail, linking the trail to Montgomery County and points south.

## 103 - Newtown Rail Trail - Bustleton Pike to the Churchville Nature Center

#### 103 - Newtown Rail Trail

Bustleton Pike to the Churchville Nature Center

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 1.00 miles

#### Summary:

- Continues the Newtown Rail Trail within the SEPTA right-of-way running parallel and adjacent to Elm Avenue, to the Churchville Reservoir where the trail would connect to the existing pathways within Churchville Nature Center.
- Connects residents within Northampton Township, and Upper Southampton Township, to the Churchville Nature Center.
- Provides connections to 104 Newtown Rail Trail, 105 Newtown Rail Shared Use Trail Connector
  to Churchville Lane, and 100 Newtown Rail Shared Use Trail Connector to the Green Valley
  neighborhood.

## 104 - Newtown Rail Trail - Churchville Nature Center to Holland Road

## 104 - Newtown Rail Trail

Churchville Nature Center to Holland Road

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.60 miles

- Continues the Newtown Rail Trail to Holland Road.
- Connects the Churchville Nature Center to Holland Road.
- Provides connections to 69 & 103 Newtown Rail Shared Use Trail, 99 Newtown Rail Shared Use
  Trail Connector to the Pheasant Run neighborhood, 101 Newtown Rail Shared Use Trail Connector
  to Brook Drive, Aqua Drive, and Cameron Drive, and 77 Holland Road Shared Use Trail.

## 100 - Newtown Rail Trail Connector Trail - Schan Drive to Newtown Rail Trail

# 100 - Newtown Rail Trail Connector Trail Schan Drive to Newtown Rail Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.15 miles

## Summary:

- Connects the Green Valley neighborhood to Newtown Rail Trail.
- Trail would be located on property owned by Bucks County.
- Provides connections to 103 Newtown Rail Shared Use Trail.

# 101 - Newtown Rail Trail Connector Trail - Brook Drive, Aqua Drive & Cameron Drive

101 - Newtown Rail Trail Connector Trail Brook Drive, Aqua Drive & Cameron Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.01 miles

### Summary:

- Three crosswalk connections across Elm Avenue at Brook Drive, Aqua Drive and Cameron Drive to connect Pheasant Run, Lakeview Farms, and Caseyview to the **Newtown Rail Trail**.
- Provides connections to 104 Newtown Rail Shared Use Trail.

## 99 - Newtown Rail Trail Connector Trail - Pheasant Run Park to Elm Avenue

# 99 - Newtown Rail Trail Connector Trail Pheasant Run Park to Elm Avenue

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.60 miles

- Connects the Pheasant Run neighborhood with the Newtown Rail Trail.
- Trail would be located on properties owned by Northampton Township and Bucks County.
- Provides connections to 101 Newtown Rail Trail Connector Shared Use Trail.

## 105 - Newtown Rail Trail Connector Trail - Churchville Lane to Newtown Rail Trail

# 105 - Newtown Rail Trail Connector Trail Churchville Lane to Newtown Rail Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.37 miles

## Summary:

- Connects the Newtown Rail Trail to the Northampton Crest neighborhood and 107 & 108 -Churchville Lane.
- Will require an easement from AQUA PA who has been resistant in the past to allowing public access on their property.
- Also connects to 103 Newtown Rail Shared Use Trail and 106 Northampton Crest Connector Shared Use Trail.

# 96 - Bustleton Pike - Hilltop Drive to Green Valley Drive

96 - Bustleton Pike

Hilltop Drive to Green Valley Drive

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.09 miles

- Serves as a key connection to the Newtown Rail Trail for neighborhoods along the New Road corridor.
- The trail would easements from three private property owners between Hilltop Drive and Green Valley Drive as the right-of-way along Bustleton Pike in this area is only 40' wide.
- Provides connection to 95 New Road Bicycle Sharrows, and via NBR 49 Green Valley, a connection to 100 - Newtown Rail Shared Use Trail Connector.

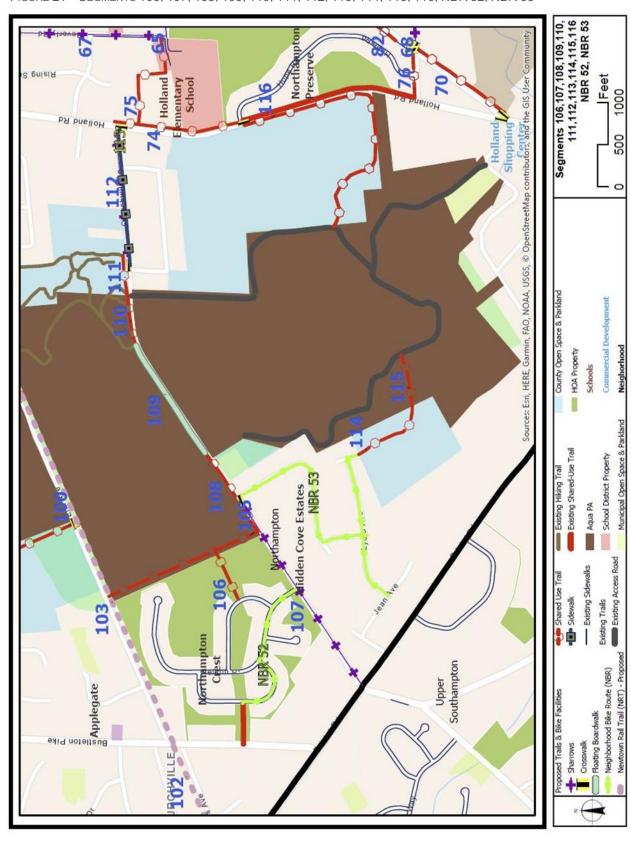


FIGURE 21 - SEGMENTS 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, NBR 52, NBR 53

# 106 - Northampton Crest Connector Trail - Radcliffe Drive to Aqua PA Trail

# 106 - Northampton Crest Connector Trail Radcliffe Drive to Aqua PA Trail

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.12 miles

### Summary:

- Connects the Northampton Crest neighborhood to the Newtown Rail Trail and to 107 & 108 -Churchville Lane.
- Will require an easement from the Northampton Crest HOA.
- Provides connections to 105 Newtown Rail Trail Connector Shared Use Trail.

## 107 - Churchville Lane - Bristol Road to Hidden Cove Drive

## 107 - Churchville Lane

**Bristol Road to Hidden Cove Drive** 

## Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.51 miles

#### Summary:

- Connects the Churchville Inn with neighborhoods located along Churchville Lane.
- Will require a reduction in the speed limit from 40 mph to 35 mph.
- Will also require the cooperation and approval of PennDOT since Churchville Lane is a state-owned road.
- Provides connections to 105 Newtown Rail Trail Connector Shared Use Trail and 108 Churchville Lane Shared Use Trail.

## 108 - Churchville Lane - Northampton Crest to Churchville Reservoir

#### 108 - Churchville Lane

Northampton Crest to Churchville Reservoir

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.22 miles

- Connects Northampton Crest and other neighborhoods along Churchville Lane to Churchville Reservoir.
- Will require an easement from AQUA PA as the trail would be located on their property due to the limited right-of-way width of Churchville Lane in this area.
- Provides connections to 105 Newtown Rail Trail Connector Shared Use Trail, 107 Churchville Lane Bicycle Sharrows and 109 - Churchville Lane Floating Boardwalk.
- Via NBR 53 through Hidden Cove Estates, also connects to 114 & 115 Churchville Reservoir Connector Trail.

# 109 - Churchville Lane - Floating Boardwalk on Churchville Reservoir

## 109 - Churchville Lane

Floating Boardwalk on Churchville Reservoir

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.29 miles

## Summary:

- Provides a unique shared use trail experience spanning the Churchville Reservoir.
- Will require an easement from AQUA PA.
- Facilitates connection to Churchville Nature Center.
- Provides connections to 108 & 110 Churchville Lane Shared Use Trails.

## 110 - Churchville Lane - Churchville Reservoir to Churchville Nature Center

## 110 - Churchville Lane

Churchville Reservoir to Churchville Nature Center

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.11 miles

### Summary:

- Connects Churchville Nature Center to Churchville Reservoir.
- Provides connections to 109 Churchville Lane Floating Boardwalk and 111 Churchville Lane Shared Use Trail.
- · Will require an easement from AQUA PA.

#### 111 - Churchville Lane - Churchville Nature Center

# 111 - Churchville Lane

**Churchville Nature Center** 

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.06 miles

- Connects Churchville Nature Center to Churchville Reservoir.
- Also connects neighborhoods to the east along Churchville Lane and beyond, to the Churchville Nature Center.
- Provides connections to 110 Churchville Lane Shared Use Trail and 112 & 113 Churchville Lane Bicycle Sharrows and Sidewalks.

## 112 & 113 - Churchville Lane - Lakeside Drive to Holland Road

# 112 & 113 - Churchville Lane Lakeside Drive to Holland Road

## Trail/Bicycle Facility Type and Length:

112 - Bicycle Sharrows:113 - Sidewalks:0.32 miles0.32 miles

### Summary:

- Connects Northampton Crest and Hidden Cove Estates neighborhoods with Churchville Reservoir.
- Will require that the speed limit along Churchville Lane be reduced from 40 mph down to 35 mph.
- Will also require the cooperation and approval of PennDOT since Churchville Lane is a state-owned road.
- Provides connections to 74 Holland E.S./Lower Bucks Holland Outdoor Recreation Shared Use
   Trail and 111 Churchville Lane Shared Use Trail.

## 114 - Bucks County - Churchville Reservoir Connector - Lake Drive to AQUA PA property

# 114 - Bucks County - Churchville Reservoir ConnectorLake Drive to AQUA PA property

Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.18 miles

## Summary:

- Connects the Hidden Cove Estates neighborhood to Churchville Reservoir.
- This trail would be located on property owned by Bucks County.
- Provides connection to 115 Churchville Reservoir Connector Shared Use Trail.

# 115 - Churchville Reservoir Connector Trail - Bucks County (Lake Drive) to Churchville Access Road

# 115 - Churchville Reservoir Connector Trail Bucks County (Lake Drive) to Churchville Access Road

## Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.12 miles

- In conjunction with 114 Bucks County Churchville Reservoir Connector Shared Use Trail, connects
  the Hidden Cove Estates neighborhood to the existing access roads and pathways as part of
  Churchville Reservoir.
- An easement would be required from AQUA PA for this trail. It should be noted that they have historically been reluctant to provide public access to the reservoir property.

#### 116 - Churchville Farm - Churchville Reservoir to Holland Road

## 116 - Churchville Farm Churchville Reservoir to Holland Road

#### Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.64 miles

#### Summary:

- Would help complete a trail system around the Churchville Reservoir while connecting out to Holland Road.
- The trail would be located on property owned by Bucks County but operated by a private entity as an equestrian facility known as Churchville Farm. Because of this, an agreement will need to be reached with the operators of the equestrian facility.
- At the intersection of Holland Road and Hope Road, the trail would connect to **74 Holland Road Shared Use Trail** and the existing shared use trail along Holland Road extending to Rocksville Road.
- These trails then connect to several other proposed trails and bicycle facilities to the east of Holland Road and also connect to the **Buck Road Shared Use Trail**.

Segments 97, 98, NBR 40, NBR 41, NBR 42 NBR 45, NBR 49, NBR 50, NBR 51 Windmillo Deerfield NBR 32 Pine Run 2 NBR 18 47 Karen Rd pine Run Olde Forge Feet 500 1000 Katherine Saint Drexel M 67, Holland Manor 40 Joseph Marie 0 Villa 69 0 Holland Park 98 mergaelic Court Bluebird Rd Robin Rd Caseyview Brae Bourne Dr W Patricia Rd Holland Ridge \$ Cathleen Dr NBR 45 Greene Willow NBR 50 Lakeview 42 Lark Dr NBR Northampton -HOA Prope Northampton Estates Schools 92 NBR 36. 66 Carol Ln Municipal Open Space & Parkland County Open Space & Parkland Sland Rd Pheasant Run School District Property 33 Pheasant Run MINNER 44 Dawn Dr Middle School orresdale Dr Speing Valley Farm Existing Access Road NBR-49 — Existing Sidewalks Kinne Center Green Valley Sidewalk Existing Trails Willow Cynthia Dr Ironworks Creek Neighborhood Bike Route (NBR) Bustleton Pike 89 96 sed Trails & Bike Valley The Malvern Churchville Green Bike Lanes **NBR 48** School Estates **NBR 43** School Creek Rd

FIGURE 22 - SEGMENTS 97, 98, NBR 40, NBR 41, NBR 42, NBR 45, NBR 49, NBR 50, NBR 51

### 97 - Lower Holland Road - Chapel Drive to Lark Drive

## 97 - Lower Holland Road Chapel Drive to Lark Drive

#### Trail/Bicycle Facility Type and Length:

Shared Use Trail: 0.62 miles

#### Summary:

- This is part of a 1.3 mile trail and bicycle facility extending from Chapel Drive to Holland Road.
- This initial segment would consist of a shared use trail along the south side of Lower Holland Road from Chapel Drive to Lark Drive. The right-of-way for most of this distance is 60'. However, the initial 650' spanning six properties, may require easements from the individual homeowners.
- Provides connection to 98 Lower Holland Road Bicycle Sharrows.

#### 98 - Lower Holland Road - Lark Drive to Holland Road

## 98 - Lower Holland Road Lark Drive to Holland Road

#### Trail/Bicycle Facility Type and Length:

Bicycle Sharrows: 0.66 miles

#### Summary:

- Continues the trail and bicycle facility along Lower Holland Road in the form of bicycle sharrows out to Holland Road.
- The transition from shared use trails to bicycle sharrows after Lark Drive is due to a narrowing of the right-of-way and a farmhouse sitting close to the road.
- In addition to 97 Lower Holland Road Shared Use Trail, this would also connect to 42 & 43 Holland Road Bicycle Lanes & Shared Use Trail. The bicycle lanes headed south along Holland Road from Lower Holland Road would provide a connection to the Newtown Rail Trail for experienced cyclists comfortable with riding in close proximity to vehicles.

### Neighborhood Bike Routes (NBR) 36 through 45

#### Neighborhood Bike Routes - 36 through 45

#### Trail/Bike Facility Type and Length:

NBR 36 - Neighborhood Bike Route Signage 0.73 miles NBR 37 - Neighborhood Bike Route Signage 1.20 miles NBR 38 - Neighborhood Bike Route Signage 0.24 miles NBR 39 - Neighborhood Bike Route Signage 0.53 miles NBR 40 - Neighborhood Bike Route Signage 0.78 miles NBR 41 - Neighborhood Bike Route Signage 2.33 miles NBR 42 - Neighborhood Bike Route Signage 0.89 miles NBR 43 - Neighborhood Bike Route Signage 1.07 miles NBR 44 - Neighborhood Bike Route Signage 1.42 miles NBR 45 - Neighborhood Bike Route Signage 0.62 miles

#### Summary:

#### NBR 36 - Long Lane Farms

Provides connection to Northampton Crossing neighborhood, Richboro Elementary School, 12 - Newtown Richboro Road Bicycle Lanes and 92 - Upper Holland Road Bicycle Sharrows

#### NBR 37 - Deerfield North

Provides connection to Northampton Crossing neighborhood, Council Rock High School South, 15 - Newtown Richboro Road Shared Use Trail and 92 - Upper Holland Road Bicycle Sharrows

#### NBR 38 - Northampton Crossing

Provides connection to Deerfield North neighborhood and **92 - Upper Holland Road Bicycle Lanes** 

#### NBR 39 - Northampton Estates

Provides connection to Holland Ridge and Spring Valley Farm neighborhoods and **92 - Upper Holland Road Bicycle Lanes** 

#### NBR 40 - Holland Ridge

Provides connection Northampton Estates, Spring Valley Farm and Willow Greene North neighborhoods

#### NBR 41 - Spring Valley Farm

Provides connection to Holland Ridge, Willow Greene North neighborhoods and 97 - Lower Holland Road Shared Use Trail

#### NBR 42 - Willow Greene North

Provide connections to Holland Ridge, Spring Valley Farm neighborhoods and **98 - Lower Holland Road Shared Use Trail** 

#### NBR 43 - Northampton Hills

Provides connection to 25 - Second Street Pike Bicycle Lanes and 95 - New Road Bicycle Sharrows

#### NBR 44 - Pheasant Run

Provides connection to Caseyview/Estates at Holland, Brook Drive, Lake View neighborhoods and **97 - Lower Holland Road Shared Use Trail** 

#### NBR 45 - Caseyview/Estates at Holland

Provides connection to Pheasant Run, Brook Drive, Lake View neighborhoods, **98 - Lower Holland Road Shared Use Trail, 101 - Newtown Rail Trail Connector Trail** and **104 - Newtown Rail Shared Use Trail.** 

#### Neighborhood Bike Routes (NBR) 46 through 53

#### Neighborhood Bike Routes - 46 through 53

#### Trail/Bicycle Facility Type and Length:

NBR 46 - Neighborhood Bike Route Signage 1.05 miles NBR 47 - Neighborhood Bike Route Signage 0.21 miles NBR 48 - Neighborhood Bike Route Signage 0.29 miles NBR 49 - Neighborhood Bike Route Signage 1.21 miles NBR 50 - Neighborhood Bike Route Signage 0.31 miles NBR 51 - Neighborhood Bike Route Signage 0.47 miles NBR 52 - Neighborhood Bike Route Signage 0.36 miles NBR 53 - Neighborhood Bike Route Signage 0.81 miles

#### Summary:

#### NBR 46 - Churchville Manor

Provides connection to Hillside Manor neighborhood, Churchville Elementary School, **25** - **Second Street Pike Bicycle Lanes** and **95** - **New Road Bicycle Sharrows** 

• NBR 47 - Hillside Manor

Provides connection to Churchville Manor and Green Valley North neighborhoods

• NBR 48 - Green Valley North

Provides connection to Hillside Manor neighborhood, Churchville Elementary School, and **95 - New Road Bicycle Sharrows** 

• NBR 49 - Green Valley

Provides connection to Churchville Reservoir, 96 - Bustleton Pike Shared Use Trail and 100 - Newtown Rail Trail Connector Shared Use Trail

NBR 50 - Brook Drive

Provides connection to Lakeview Farms, Caseyview/Estates at Holland neighborhoods, 101 - Newtown Rail Trail Connector Shared Use Trail, 104 - Newtown Rail Shared Use Trail

NBR 51 - Lakeview Farms

Provides connection to Brook Drive, Caseyview/Estates at Holland neighborhoods, 101 - Newtown Rail Trail Connector Shared Use Trail, 104 - Newtown Rail Shared Use Trail

• NBR 52 - Northampton Crest

Provides connection to Brook Drive, Caseyview/Estates at Holland neighborhoods, and 106 - Northampton Crest Connector Shared Use Trail

NBR 53 - Hidden Cove Estates

Provides connection to Brook Drive, Caseyview/Estates at Holland neighborhoods, 107 - Churchville Lane Bicycle Sharrows, 108 - Churchville Lane Shared Use Trail and 114 - Bucks County - Churchville Reservoir Connector.

## **CHAPTER 6 - IMPLEMENTATION AND COST**

This planning document represents a vision for how the trail network can provide recreation and transportation alternatives for the township. Development of the trails and bicycle facilities network will require capital expenditures, the need for acquisition of right-of-ways via easements and other mechanisms, the coordination of many agencies, and the dedication of township staff.

### IMPLEMENTATION PROCESS

Although there is no standard template for how trails and trail networks get developed, there are some actions that are fairly common. Some or all of the following actions may be necessary to implement this plan and to build the trail network. These include:

- Requiring trails as part of the development process
- Acquisition of right-of-way
- Securing funding
- Design and Engineering, Permitting and Construction

## Requiring Trails as Part of the Development Process

One of the easiest, most cost effective and timely methods for achieving the development of the trail network envisioned in this plan is to require developers to construct trails and pedestrian facilities as part of the development process. This will eliminate the need to secure funding for these improvements. A site that would be greatly served by this would be the vacant Bucks County Roses facility. Its proximity to the SEPTA rail corridor would make this a prime example of how requiring this from developers would develop an extensive township trail and bike facilities network.

Currently the Northampton Township Subdivision and Land Development Ordinance requires the installation of sidewalks as part of the land development process.

Ordinance 22-403.2.B Sidewalk
 Sidewalks shall be required on both sides of all existing and proposed streets.

To take full advantage of this ordinance, the township needs to:

- Ensure that the proposed improvements within this plan are included in all new land development and roadway improvement projects.
- Ensure that trail alignments proposed within this plan are included in the land development plans
  proposed by the developers as part of the land development process, and in the design plans for
  roadway improvements.
- Review roadway design projects to ensure that adequate area is reserved for bicycle and pedestrian
  facilities proposed in this plan, including bicycle lanes or routes, shoulder improvements, bicycle safe
  grates, signage, and crossing improvements.
- Mandate that this plan be referenced in the review of all land development applications and roadway design projects.
- Add language to the Zoning and/or Subdivision and Land Development ordinances to require developers to add trails and bike facilities as part of the land development process.
- Stop the practice of providing developer the option to pay a fee in lieu of providing sidewalks for neighborhood residents.

In those situations where trails cannot be obtained as part of the development process, the township will need to take a more complex approach to the development of trails involving the acquisition of right-of-way, securing funding, and undertaking the engineering, permitting and construction of the trail.

## Acquisition of Right-of-Way

Prior to the development of any trail, it is necessary to have control of the land. Much of the Northampton Township trail network would be placed on land already under the ownership of the township. However, as is often the case with trail projects, it might be necessary to obtain the rights to use privately-held land to achieve the development of some trails. Some of the more common techniques for the acquisition of the right-of-way for trails include:

- Easements: This is the most often used technique for acquiring the permission needed for a trail to cross private property. This is the preferred method as it is less costly than acquiring full ownership of the land. Specific to trails, an easement modifies the deed to a property to allow the use of a portion of the property for the construction of the trail and permanent use of the trail. Local examples of easements include the gas pipeline easements which cross multiple properties in the township.
- Fee simple purchase: Purchasing the needed land is an alternative to easements. However, fee simple acquisition of the land can be much more costly and time consuming as compared to easement. Additionally, fee simple ownership gives the owner complete control of the land, including all public access and conservation practice decisions.
- Lease: Similar to easements, a lease agreement can be negotiated authorizing the use of the land for
  construction of the trail. In contrast to easements, leases have a specific time frame associated with
  them. Although this type of arrangement would allow for construction of the trail, if a private property
  owner opts not to renew the lease upon its expiration, this may leave a gap in the trail network.
- Donations: Land or an easement on the land is frequently donated by a private owner, organization, or corporation. Local governments should encourage the donation of land or easements by pointing out benefits of such actions, including possible federal income and estate tax benefits and public relations value. In addition to land, corporations and other private parties also frequently provide cash donations for worthy causes, including land preservation.
- Eminent Domain: Although not desirable, and therefore not used very often, eminent domain can be used to acquire land. Eminent domain is the power of government to acquire property for public use so long as the government pays just compensation. The government can exercise the power of eminent domain to acquire property even if the property owner does not wish to sell the property. Government taking of such property is called a condemnation, or a taking. It is seldom used in part due to the need to show that the taking of the land does constitute public use.

These techniques may be used separately or in combination to facilitate acquisition.

## Securing Funding

Securing funding for the development of the township-wide trail network will require funding at every step of the process including planning, design and engineering, right-of-way acquisition and construction. There are multiple sources of funding, each with their own requirements, specific criteria regarding eligible projects, funding cycles, match requirements, etc. The sources of funds include federal, state and local funding sources, as well as private foundations and donations. Government funding programs change frequently. Those mentioned here are in place in 2019, but will likely change in the future.

#### Federal Funding Sources

The Federal Government provides funding for transportation projects through various funding programs. These are typically in the form of block grants provided to states through funding formulas and are typically administered through the state or the Delaware Valley Regional Planning Commission. On December 4, 2015, the President signed the Fixing America's Surface Transportation (FAST) Act into law (Pub. L. 114-94). There are several new programs under this bill as described on the following page:

### Surface Transportation Block Grant Set-aside Program (STBGSP)

Formerly known as the Transportation Alternatives Program (TAP), this program sets aside federal transportation funds for community-based projects designed to build infrastructure for cyclists and pedestrians. Planning, design and construction of on-road and off-road facilities including sidewalks, trails, bicycle lanes, and pedestrian and bicycle signals are some of the eligible projects. http://www.dvrpc.org/tap

#### Surface Transportation Block Grant Program (STBG)

The FAST Act amended the Surface Transportation Program (STP) contained in 23 U.S.C. 133, and changed the program name to the Surface Transportation Block Grant Program (STBG). This program has the most flexible eligibilities among all Federal-aid highway programs. In general, STBG projects may not be on local roads or rural minor collectors. There are a number of exceptions to this requirement including recreational trail projects eligible under 23 U.S.C. 206, pedestrian and bicycle projects in accordance with 23 U.S.C. 217, and Safe Routes to School projects under Section 1404 of SAFETEA-LU (23 U.S.C. 402 note). https://www.fhwa.dot.gov/fastact/factsheets/stbgfs.pdf

### Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. HSIP funds be used for safety projects that are consistent with the State's strategic highway safety plan (SHSP) and that correct or improve a hazardous road location or feature or address a highway safety problem. <a href="https://safety.fhwa.dot.gov/hsip/about.cfm">https://safety.fhwa.dot.gov/hsip/about.cfm</a>

#### Congestion Mitigation and Air Quality Program (CMAQ)

CMAQ is a transportation air quality improvement program that provides funding for both design and construction of bicycle and pedestrian facilities that serve to reduce automobile travel. A municipality/applicant must complete a CMAQ Air Quality Analysis Worksheet for Bicycle and Pedestrian Projects to document a quantifiable reduction in auto emissions and/or congestion to be eligible under this program. Under this program, the project cost is funded 80% federal and 20% state or local match. <a href="http://www.dvrpc.org/cmaq">http://www.dvrpc.org/cmaq</a>

In addition to federally funded transportation grant programs, there are other federal funding programs available for trails and recreation funding.

## United States Department of the Interior - National Parks Service (NPS) - Rivers, Trails and Conservation Assistance (RTCA) Program

This is a National Parks Service program that provides technical assistance to establish and restore greenways, rivers, trails, watersheds and open space. https://www.nps.gov/orgs/rtca/apply.htm

#### Land and Water Conservation Fund

Created by Congress in 1965, the Land and Water Conservation Fund (LWCF) is a bipartisan commitment to safeguard natural areas, water resources and our cultural heritage, and to provide recreation opportunities to all Americans. The program uses revenues from the depletion of one natural resource - offshore oil and gas - to support the conservation of land and water. This is accomplished by using royalties paid by energy companies drilling for oil and gas on the Outer Continental Shelf (OCS). These royalties are placed in the fund for the purpose of creating and protecting national parks, areas around rivers and lakes, national forests, and national wildlife refuges from development, and to provide matching grants for state and local parks and recreation projects. <a href="https://www.lwcfcoalition.com/lwcf-programs/">https://www.lwcfcoalition.com/lwcf-programs/</a>

#### State Funding Sources

The Commonwealth of Pennsylvania offers multiple funding sources in support of open space, historic and cultural resource preservation, natural resource protection, recreation and park facilities, and greenways implementation. Similar to the federal funding programs, these programs are administered by a variety of different departments. The Pennsylvania Greenways Toolbox's Funding Guide provides additional

information about these programs.

http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr\_20028922.docx

#### Pennsylvania Department of Conservation and Natural Resources (PA DCNR)

DCNR administers the federally-funded Recreational Trail Program and the state-funded Community Conservation Partnership Program (C2P2).

#### Recreational Trails Program

The Pennsylvania Recreational Trails Program (PRT) is an assistance program funded through the U.S. Department of Transportation's Federal Highway Administration (FHWA). FHWA provides funds to states to develop and maintain recreational trails and trail-related facilities for motorized and non-motorized recreational trail uses. The Department of Conservation and Natural Resources (DCNR) has been designated as the state agency responsible for administering this federal program in Pennsylvania. http://www.docs.dcnr.pa.gov/cs/groups/public/documents/document/d 001241.pdf

#### Community Conservation and Partnership Program (C2P2)

These grants are awarded to municipalities and authorized nonprofit organizations for recreation, park, trail and conservation projects. These include planning for feasibility studies, trail studies, conservation plans, master site development plans, and comprehensive recreation, park and open space and greenway plans; land acquisition for active or passive parks, trails and conservation purposes; and new development and rehabilitation of parks, trails and recreation facilities.

https://www.dcnr.pa.gov/Communities/Grants/Pages/default.aspx

## Pennsylvania Department of Community and Economic Development (PA DCED)

#### Greenways, Trails and Recreation Program (GTRP)

The PA Department of Community and Economic Development (DCED) administers this program, which allocates funds to the Commonwealth Financing Authority (CFA) for planning, acquisition, development, rehabilitation and repair of greenways, recreational trails, open space, parks and beautification projects. <a href="http://dced.pa.gov/programs/greenways-trails-and-recreation-program-gtrp/">http://dced.pa.gov/programs/greenways-trails-and-recreation-program-gtrp/</a> - .V9i0amOMFmg

#### Multimodal Transportation Fund (MTF)

The PA Department of Community and Economic Development (DCED) administers this program, which provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the commonwealth. Funds may be used for the development, rehabilitation and enhancement of transportation assets to existing communities, including lighting, sidewalk enhancement, pedestrian safety, bicycle circulation, connectivity of transportation assets and transit-oriented development.

http://dced.pa.gov/programs/multimodal-transportation-fund/ - .V9i0oGOMFmg

## Pennsylvania Department of Transportation, Bureau of Maintenance and Operations

#### Automated Red Light Enforcement (ARLE) Program

Provides opportunities for transportation enhancement grants through revenues generated by the automated red light enforcement program to improve safety and reduce congestion. No matching funds are required for the ARLE grant program. Relevant eligible projects include pedestrian safety improvements at signalized intersections such as count down timers, easily accessible and quick response pushbuttons, crosswalk striping, pedestrian signing and pedestrian mobility improvements with a combination of eligible features.

http://www.dot.state.pa.us/portal%20information/traffic%20signal%20portal/FUNDARLE.html

The township should utilize its municipal funds to leverage additional grant funding from state and federal sources. In order to develop proposed trails that will not be constructed as the result of land development and roadway projects, the township will need to apply for and receive grant funding from local, state and/or federal sources. Many state grant programs can be used as a designated match for other federal grant

programs and vice versa. By leveraging funds, the township will be able to maximize the amount of constructed improvements per municipal dollar.

#### Local Funding

There are a number of other government initiatives that can provide funding for implementing trail plans.

#### **Bond Referendums**

As evidenced by the successes of nearly \$180.0 million approved by 18 county municipalities, two Bucks County Open Space Program bond referendums totaling \$146.0 million. Both in 1998 and 2004 the township held and passed two referendums to preserve open space within its limits. The township could consider using this same model to develop its trails and bike facilities network.

#### Property Tax and Earned Income Tax

Pennsylvania's Act 153 of 1996, which amended the Pennsylvania Conservation and Land Development Act, expanded the authority of municipalities to fund open space projects through local taxes. Under the Act, two different taxation tools were identified that can be used to purchase development rights or open space lands.

Property Tax - This is a tax charged to real property owners based on a percentage of the assessed property value, not to exceed the millage authorized by voter referendum. Property taxes provide a steady source of revenue. However, because communities are limited in the total level of the millage rate, the use of property taxes to fund open space activities may inhibit the ability of the municipality to raise money for other needed activities.

Earned Income Tax - This is a tax applied only to earned income, not to real estate assets or pensions. Because of this, it may prove to be more acceptable in municipalities with a higher percentage of retired senior citizens. Pennsylvania caps the earned income tax at 1.0 percent. However, Act 153 authorizes voters to approve the levy of an increased earned income tax beyond the 1.0 percent limit, exclusively for the purpose of financing purchases of open space.

### Private Funding Sources

Grant funding is available through many private avenues, most of which have specific agendas. Key to obtaining such funding is a clear match of the project goals to the funding intent. Often, private grants require a non-profit entity to receive and administer any funds. Frequently, private funding can be used to meet the matching requirements of many public programs that require some amount of local funding as a good faith indication of local support. Finally there are in-kind gifts and cooperative partnerships that permit a right of way through private lands and develop a cooperative agreement for use, maintenance and safety. These can frequently be seen in rails-with-trails as well as trails that use utility rights of way and cooperative maintenance.

#### PECO Green Region Grants Program

Green Region grants are available to municipalities in amounts up to \$10,000. The grants can be used with other funding sources to cover a wide variety of planning and direct expenses associated with developing and implementing open space programs, including consulting fees, surveys, environmental assessments, habitat improvement, and capital improvements for passive recreation. The program is administered through National Lands Trust.

https://www.peco.com/SafetyCommunity/Community/Pages/Environment OLD.aspx

## William Penn Foundation/Delaware Valley Regional Planning Commission Regional Trails Program

The William Penn Foundation's mission is to improve the quality of life in the Greater Philadelphia region through efforts that foster rich cultural expression, strengthen children's futures, and deepen connections to nature and community. In partnership with others, the Foundation works to advance a vital, just, and caring community. The Foundation works to improve the quality of life in the Greater Philadelphia region by advancing dynamic and diverse communities that provide meaningful opportunity.

In 2011, the Foundation provided \$10 million in funding for The Regional Trails Program, administered by the Delaware Valley Regional Planning Commission (DVRPC), with the goal of capitalizing upon opportunities for trail development by providing funding for targeted, priority trail design, construction and planning projects that will promote a truly connected, regional network of multi-use trails with Philadelphia and Camden as its hub. In December 2014, DVRPC and the William Penn Foundation announced a renewed commitment to invest \$7 million in the Circuit Trails, a vast network of hundreds of miles of multiuse trails in the Greater Philadelphia region that is growing in size each year. Upon completion, the Circuit Trails will include over 800 miles of trails. In 2018, the Foundation announced another \$10.6 million in grant funding to assist in further the development of the Circuit Trails. http://www.dvrpc.org/Trails/RegionalTrailsProgram/

#### American Hiking Association - National Trails Fund

Established by the American Hiking Society in 1998, this national grants program provides funding for "hiking trail improvement" grants to active member organizations of their Hiking Alliance. Once a year, Alliance Members have the opportunity to apply for a grant (value between \$500 and \$5,000) in order to improve hiking access or hiker safety on a particular trail. https://americanhiking.org/category/national-trails-fund/

#### People for Bikes

The PeopleForBikes Community Grant Program provides funding for important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. These projects include bicycle facilities and rail trails, as well as mountain bike trails, bike parks, BMX facilities, and large-scale bicycle advocacy initiatives. <a href="https://peopleforbikes.org/our-work/community-grants/">https://peopleforbikes.org/our-work/community-grants/</a>

#### **Donations**

One often overlooked source of funding for the development and ongoing operation and maintenance of trail systems are donations. Donations may take several forms including:

- Monetary donations
- Donations of easements or land for the trail route
- Donations of goods such as landscaping and trail building materials
- Donations of professional services from architects and engineers for the development of grant applications and engineering consultant. The donation of these services can often be counted as part of the match contribution for grant applications.
- Volunteer labor from church groups, scouting organizations, civic groups, cycling clubs and environmental groups for help with fund-raising, security, trail maintenance and other support activities.

## Design and Engineering, Permitting and Construction<sup>1</sup>

The following outlines typical implementation steps for municipal trail development. The physical conditions, constraints, and adjacent and underlying landownership of the trail segment will further determine the action steps to develop the trail for public use.

- Complete deed research, boundary and topographic survey, wetlands delineation, and Pennsylvania Natural Diversity Inventory (PNDI) search, Phase 1 archeological study, as necessary, for the trail corridor segment(s).
- Develop construction documents that detail and engineer the trail improvements and associated amenities. Engineering may include structural design of bridges, culverts, railings, and pavements; traffic studies; and detailed crossing improvements. Prepare a project manual including technical and bidding specifications.
- Develop land development plans for submission and review by the municipalities affected by the trail, as required.

<sup>&</sup>lt;sup>1</sup> Tri-Municipal Master Trail & Greenway Plan November 2010, p Chapter 5-3 to 5-4.

- Obtain approvals from the various governing agencies prior to construction. The following is a listing of typical approvals for a development of this nature but may not be all-inclusive.
  - Municipal approval for land development plans within the affected municipalities, if required.
  - Bucks County Conservation District approval for erosion and sedimentation control plans and National Pollutant Discharge Elimination System (NPDES) Permit.
  - o Pennsylvania Department of Transportation approval for work within a PennDOT right-of-way.
  - Pennsylvania Department of Environmental Protection/US Army Corp. of Engineers approval for any work within the waters of the Commonwealth including delineated wetlands and stream encroachments and crossings.
  - Pennsylvania One Call. Pennsylvania law requires three working days-notice for construction phase and ten working days in design stage.
  - Approval from public utilities impacted by the trail.

Each of the above permits and approvals are typically involved and will require advance planning to facilitate the process. Adequate preparation and review time should be allotted.

 Upon receipt of all required approvals and permits and completion of the trail construction documents, the project can begin construction. This can be accomplished by either soliciting bids for construction, or utilizing in-house resources such as the township's public works department which has already completed several trail segments in the township.

### TRAIL AND BICYCLE FACILITIES DEVELOPMENT COSTS

The cost to develop the various trails included in this plan will vary depending on the type of trail constructed, the sources of funding involved, the extent and complexity of constraints and environmental challenges encountered, and the number of easements. It is also possible that many of the trails may be built by developers as part of the land development process. As no detailed engineering work such as topographic or planimetric surveys, detailed grading and site engineering have been completed, it is not possible to provide a more detailed and accurate cost estimate at this time.

The costs included here are a general guideline for the purpose of preliminary estimation of trail costs and are based on time-honored practices in the construction industry. More detailed cost estimation will be obtained as one of the outcomes of the design and engineering stage. Utilization of in-house forces (e.g., township crews) can result in costs considerably lower than those presented in this plan.

The following is a summary of the probable costs of construction for various trail types as presented in this plan. Costs for design and engineering, construction management, right-of-way acquisition and contingencies have not been included in these figures.

## Master Trail and Bicycle Plan

TABLE 24 – PROBABLE COSTS OF CONSTRUCTION

ltem	Estimated Unit Cost
8-foot wide Shared Use Asphalt Trail	\$95 per linear foot
10-foot wide Shared Use Asphalt Trail	\$110 per linear foot
10-foot wide Crushed Stone / Aggregate Shared Use Trail (Newtown Rail Trail)	\$75 per linear foot
Floating Boardwalk Trail	\$1,000 per linear foot
5-foot wide Concrete Sidewalk	\$100 per linear foot
Bicycle Sharrows (bidirectional) on Road  (Recommended placement - immediately after an intersection and spaced at intervals not greater than 250 ft thereafter. Source: AASHTO Guide for the Development of Bicycle Facilities)	\$3.00 per linear foot
Bidirectional Bicycle Lanes	\$8.50 per linear foot
Trail Signage	\$1.50 per linear foot
PennDOT Road Crossings with crosswalks, curb cuts, and rapid-rectangular flashing beacon (RRFB)	\$60,000 each
Easement costs	\$1.50 - \$2.00 per square-foot of easement area
Design and Engineering Fees	15% - 20% of estimated construction costs

## CHAPTER 7 - MAINTENANCE AND RISK MANAGEMENT

The ongoing operation and management of the trail network is essential to its long-term success and includes ongoing trail maintenance, ensuring the safety of trail users, and minimizing the liability of the township.

## SHARED USE / RAIL TRAIL MAINTENANCE

### Trail Maintenance Program and Tasks

The quality, condition, and safety of the trails are all essential to the long-term success of a trail network. To ensure successful operation of the trail, and to assist in minimizing risk both to trail users and the township, a maintenance plan is necessary. A well-designed and executed maintenance program will:

- Reduce long-term costs by extending the costs of trail components
- Help win the continued support of residents, homeowners, and businesses, which may translate into lower operating costs if residents feel pride in the trail and donate volunteer time to assist in its upkeep
- Ensure a quality recreational or travel experience for the trail user

Sufficient manpower and resources must be devoted to a regular maintenance schedule in order to meet these goals.

The Northeast Regional Office of the Rails-to-Trails Conservancy, has published an excellent guidebook entitled Rail-Trail Maintenance & Operation. The 43-page book may be downloaded, in pdf format, from the American Trails web site at this location:

https://www.americantrails.org/images/documents/railtrailmaint.pdf.

Key elements of the maintenance and management program should:

- Include a system through which trail users can contact the township with concerns regarding trail maintenance and safety
- Specify a frequency for the inventory of all trails and facilities
- Identify specific maintenance goals and standards for each type of trail
- Provide a list of the tasks necessary to achieve maintenance quality levels
- Clearly delineate which maintenance tasks are designated to specific departments or individuals
- Provide a control system for tracking accomplishments and relevant costs

The frequency of the maintenance tasks to be performed would vary based on the type of trail surface, the surrounding landscape character, and the particular segment of trail. Important short and long-term maintenance tasks that need to be addressed in the maintenance program are shown in Table 25.

TABLE 25 – RECOMMENDED TRAIL MAINTENANCE SCHEDULE

Frequency	Task	
Weekly	Litter Pickup and Trash Removal (Can also implement a Carry in / Carry out policy)	
	Restocking of any dog waste bag dispensers or receptacle stations, if provided	
Monthly	Shoulder Mowing - 4-foot minimum on each side of trail (where applicable)	
	Pavement Sweeping to remove gravel, wet leaves, broken glass and other debris	
Annually	Pruning - 4 feet back from sides of trails and vertically to maintain needed clearance	
	Fencing maintenance	
	Evaluation and removal of unhealthy or dead trees and limbs	
	Maintenance of drainage features including culvert and inlet clean out	
	Inspection of trail surfaces to determine need for patching / regrading	
	Bridge Inspection (Inspect every two years by professional engineer)	
2-years	Replace on-street pavement markings (bicycle sharrows)	
5-years	Sealcoat asphalt trails	
10-years	Resurface and/or regrade trails	
20-years	Replace / reconstruct trails	
As required	Signage - Maintain and replace as necessary	
	Gates / Bollards - Inspect and repair	
	Removal of fallen trees and limbs	
	Graffiti control and vandalism repair	
	Address any maintenance problems and hazards reported by trail users	
	Patching and minor pothole repair	
	Trail Surface (on local roads) - Resurface	
	Trail Surface (gravel road) - Repair surface damage from vehicles, erosion, etc.	
	Trail Surface (boardwalk) - Repair and replace damaged areas	

### **Estimated Maintenance Costs**

The costs associated with the repair and maintenance of the trails should be considered an ongoing expense and should be reflected in the township's annual budget. Costs will vary dependent on maintenance capabilities already in place, the type of trails, and the extent to which volunteer labor is used.

Based on data from other existing trails, annual maintenance costs range from approximately \$2,000-\$7,500 per mile as shown below. As the township currently has some trails already in place, the township should review its current maintenance expenses as a potential source for estimating future maintenance costs. Once the trail is open, future budgets should be based on actual costs from the first few years of operation.

TABLE 26 – ESTIMATED MAINTENANCE COSTS

Trail Type	Trail Length	Estimated Maintenance Costs per Mile	Source of Cost Estimate
Bicycle Lanes	1 mile	\$7,400	Tri-Municipal Master Trail & Greenway Plan (2010) http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 004949.pdf
Off-Road Trails	1 mile	\$3,000	Tri-Municipal Master Trail & Greenway Plan (2010) http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 004949.pdf
Off-Road Trails	1 mile	\$1,000 - \$5,000	Destination Peace Valley Feasibility Study (2011)  http://www.doylestownpa.org/wp- content/uploads/2013/09/Destination-Peace-Valley-Feasibility- Study-final-1-2011.pdf
Conewago Rail-Trail	5.5 miles	\$2,750	Lebanon Valley Rail-Trail and Conewago Recreation Trail 2011 User Survey (2011) http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 009851.pdf
Lebanon Valley Rail- Trail	15 miles	\$2,000	Lebanon Valley Rail-Trail and Conewago Recreation Trail 2011 User Survey (2011)_ http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 009851.pdf
Off-Road Trails	1 mile	\$2,000	Rail-Trail Maintenance and Operations (2005)_ http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 002300.pdf
Off-Road Trails	1 mile	\$5,000 - \$7,000	Cresheim Trail Feasibility Study (2008) http://www.cheltenhamtownship.org/files/documents/plans_stud_ies_drafts-Cresheim-Trail-Final-Report-05-23-08-R.pdf

## **RISK MANAGEMENT**

Similar to maintenance, the ongoing operation of trail and bicycle facilities in the township should seek to minimize the possibility of injuries on the trail. As such, risk management strategies should be taken to provide ensure safe operation of the trail. These strategies include:

- Identify and, to the extent possible, remove hazardous conditions and attractive nuisances during the original construction of the trail.
- Conduct public educational and informational programs relative to safe trail usage as it applies to various user groups including bicyclists, dog walkers, in-line skaters, etc.
- Use prominent signage to warn users of potentially dangerous areas.
- Regularly inspect the trail and correct any unsafe conditions and keep written records of inspections and maintenance activities performed.
- Develop procedures for handling medical emergencies.
- Prominently post hours of operation and other rules and regulations, along with emergency contact information. Below is an example of trail rules for the Chester Valley Trail in Chester and Montgomery counties.<sup>1</sup>

# TRAIL RULES

The following rules apply to all Chester County Parks and Trails:

- 1. Park hours are 8:00 a.m. to sunset.
- 2. Trail use is restricted to pedestrians and cyclists.
- Defacing or damaging trail property including buildings, markers, or monuments and/or disturbing or removing wildlife or vegetation is prohibited.
- 4. Fires are not permitted.
- 5. Hunting and trapping are not permitted.

- 6. Fishing permitted only in designated waterways, lakes and ponds. PA Fish and Boat Commission laws apply.
- 7. No camping is permitted on or along trail corridor.
- 8. Motorized vehicles of any type are not permitted on trail or within the corridor. All vehicles are prohibited from unauthorized areas. Motorized vehicles must be licensed and are restricted to public roadways. No person shall park outside of designated areas or park in such a way as to block any fire lane, fire trail, maintenance road, or trail
- Trespassing onto county property not open to the public, or into any construction area, building, etc. is prohibited.
- Soliciting or peddling on county property is prohibited, except under special conditions established by the department.

- Hindering, impersonating or resisting park employees is not permitted.
- Possession of, or being under the influence of, any illegal drug, alcoholic beverage or controlled substance is prohibited.
- Disorderly conduct such as intoxication, indecent language, excessive noise or indecent actions, is not permitted.
- 14. Possession and/or discharge of fireworks is prohibited.
- 15. All trash must be placed in receptacles provided.
- 16. Pets are permitted and must be restrained on a leash not exceeding six (6) feet in length. Pets must have a current license and be properly vaccinated.
- 17. Park users must abide by all signs.

Implementation of both the maintenance and risk management strategies outlined will assist in limiting the liability of government entities in the event of a personal injury lawsuit.

<sup>&</sup>lt;sup>1</sup> http://www.chesco.org/DocumentCenter/View/25344. Accessed 10/1/19.

## **CHAPTER 8 - TRAIL CONCERNS**

The development of trails often raises concerns and fears by adjacent landowners about the impact of the proposed trails in their neighborhoods. These concerns typically focus on three primary areas including:

- 1. Potential for increased crime;
- 2. Liability concerns; and
- 3. Property values.

### SAFETY AND CRIME

Recognizing the concerns that some residents of the township have relative to the potential for increased crime in their neighborhoods stemming from the development of trails and bicycle facilities, Northampton Township officials requested that this plan specifically address this issue. To address this issue, this plan addresses safety and crime concerns in three separate ways:

- Analysis of the relationship between trails and crime in the Philadelphia region;
- A review of previous studies from across the country addressing the relationship between trails and property values; and
- Recommended safety measures the township should consider in the design, development and ongoing operation of their trails and bicycle facilities network.

## Analysis of the relationship between trails and crime in the Philadelphia region

To determine the extent of crime in areas adjacent to existing trails within the Philadelphia area, and how crime in that area compares to the surrounding area, two approaches were used.

- 1. Where detailed crime statistics were available by street, we analyzed crime rates for residential streets abutting existing trails, and compared that to crime reports in other residential areas of the geographic area, most often the township, where the trail is located. This analysis was able to be completed for the following trails and geographic areas.
  - Radnor Trail Radnor Township, Delaware County
  - Pennsy Trail Haverford Township, Delaware County

For these trails, crimes in non-residential areas such as commercial districts, schools, colleges, apartment complexes, and office parks were removed so as not provide an equal comparison of residential areas abutting trails, versus other residential areas. This also closely replicates the residential areas in Northampton Township where trails are being proposed.

For some trails, this level of detailed crime reporting was not available. In those cases, we contacted local law enforcement officials to understand the extent of criminal activity in areas with trails. This was the case for the Pennypack Trail located in Lower Moreland Township and Lorimer Park in Abington Township.

It should be noted that any criminal activity that is reported in residential neighborhoods abutting trails cannot automatically be attributed to the presence of the trail, just as the presence of a sidewalk in areas without trails can be linked to crime.

### **Key Learnings:**

#### Pennypack Trail - Lorimer Park/Abington Township, Montgomery County

According to Scott Morgan, Region III Manager, Montgomery County Parks, Trails & Historic Sites, crime along the Pennypack Trail is almost non-existent. More specifically, he indicated that the most common complaint he receives is relative to dogs being off leashes within the park. Although he was aware of other incidents along the trail such as a suicide in the woods off the trail, a drug overdose, a snowmobile, and a few cars getting broken into in the trailhead parking lots, he was not aware of any homes being burglarized, any assaults, or any homeless issues.

He also indicated that there was more trouble associated with the vacant rail line prior to the establishment of the trail in the form of beer parties, drug use, graffiti and vandalism.

#### Pennypack Trail - Lower Moreland Township, Montgomery County

Rich Worthington, Deputy Emergency Management Coordinator, Lower Moreland Township indicated that from February 1, 2015 through December 31, 2016, the Lower Moreland Police Department responded to 21, 476 calls. Among these calls, only 59 / 0.27 percent occurred with ½ mile of the Pennypack Trail.

## Radnor Trail - Radnor Township, Delaware County (October 1, 2015 - September 30, 2019)

Based on an analysis of arrests and crimes over a four year period, the frequency of crime and arrests in areas abutting the Radnor Trail is no greater than the percent of residential units in that area. In other words, residential units abutting the Radnor Trail account for 5.0 percent of housing units in the township while accounting for only 4.4 percent of arrests and 2.6 percent of crime incidents.

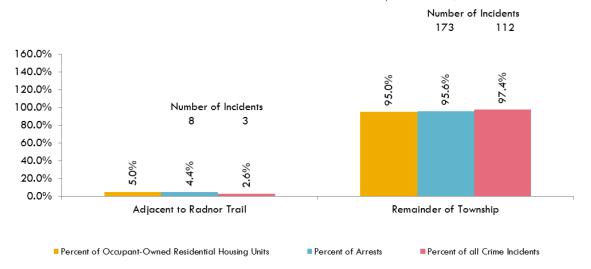


FIGURE 23 – RADNOR TRAIL VERSUS RADNOR TOWNSHIP INCIDENTS (OCTOBER 1, 2015-SEPTEMBER 2019)

The ratio of arrests and crimes to the number of housing units is lower in areas adjacent to the Radnor Trail as compared to the remainder of the township. In other words, the 46 crime incidents that occurred in the area adjacent to the Radnor Trail represents 11.4 percent of the 403 housing units adjacent to the Radnor Trail which is lower than the 13.2 percent represented by the 1,012 crime incidents as a percentage of the 7,666 housing units in the remainder of the township.

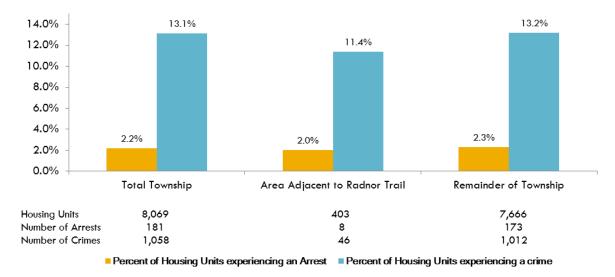


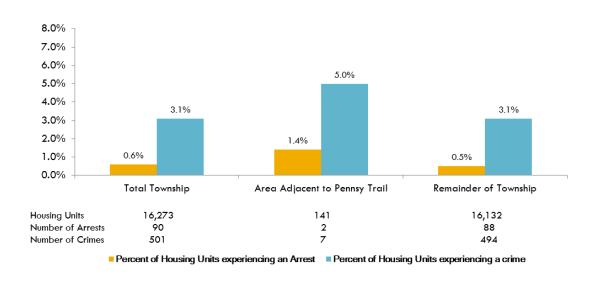
FIGURE 24 - RADNOR TOWNSHIP PERCENTAGES OF HOUSING UNITS EXPERIENCING A CRIME VERSUS AN ARREST

## Pennsy Trail - Haverford Township, Delaware County (December 1, 2018 - October 31, 2019)

Based on an analysis of arrests and crimes over an eleven month period, it would appear that the rates of arrest and crime are slightly higher in areas adjacent to the Pennsy Trail versus the remainder of the township. However, two things should be noted relative to this:

- The number of arrests and crime incidents in areas that are adjacent to the trail, are very low with limited sample sizes. Less than one crime or arrest per month occurred during the time period for which detailed data was available.
- Of the 7 criminal incidents that occurred, 6 of these were for fraud, forgery or identity theft.

FIGURE 25 – PENNSY TRAIL – HAVERFORD TOWNSHIP, PERCENTAGES OF HOUSING UNITS EXPERIENCING A CRIME VERSUS AN ARREST



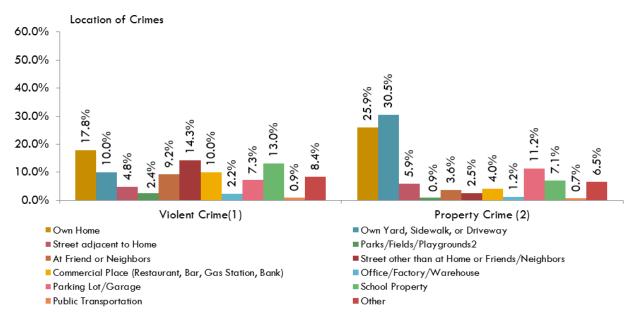
## Review of Previous Studies addressing the relationship between trails and crime

Although trails are not immune from crime, numerous studies indicate that trails themselves do not result in an increase in crime and that often crime rates are lower on trails than in other environments. Although several of these studies may be perceived as outdated, there has been a lack of ongoing research into this topic given the conclusions of these prior studies that crime is no more prevalent on trails than in the surrounding communities.

## National Crime Victimization Survey (NCVS) - Bureau of Justice Statistics (2004-2008) <a href="https://www.bjs.gov/index.cfm?ty=tp&tid=44">https://www.bjs.gov/index.cfm?ty=tp&tid=44</a>

From 2004 - 2008, the latest years for which statistics were available, only 2.4 percent of violent crimes, and less than 1.0 percent of property crimes occurred on parks, fields and playgrounds. Please note that trails are not broken out separately. In comparison, 4.8 percent of violent crimes and 5.9 percent of property crimes occur on the street immediately adjacent to the home. Crimes away from home accounted for 67.4 percent of violent crimes and 37.7 percent of property crimes.





- (1) Violent crimes exclude murder and include rape, sexual assault, robbery and aggravated or simple assault
- (2) Property crimes include household burglary, motor vehicle theft, and property theft

## Preliminary Assessment of Crime Risk along Greenways in Charlotte, North Carolina (1994-2004) http://www.buncombecounty.org/common/parks/MasterPlan/7-Safety.pdf

"Two studies of crime statistics in Mecklenburg County show greenways have lower crime rates than the surrounding community. They found that most green-ways provide a safer alternative than roads and attract local residents using the trails frequently. The first study was done in 1997 along the Mallard Creek Greenway comparing the incidence of crime with the surrounding police district and the city as a whole. The incidence of crime along the Mallard Creek Greenway and adjacent properties was nearly half that of the surrounding police district and only 12.7 percent of the countywide crime rate. Later, an extended study explored recent crime rates along all 14 green-ways within Mecklenburg County between 2001 and 2003. The data suggest that greenway-adjacent properties do not incur greater risk of crime than other properties within the same neighborhood statistical area."

### Pinellas Trail Community Impact Study (2001)

Pinellas County Metropolitan Planning Organization <a href="http://www.brucefreemanrailtrail.org/pdf/Pinellas exec.pdf">http://www.brucefreemanrailtrail.org/pdf/Pinellas exec.pdf</a>

 "Crime data from the Pinellas County Sheriff's Office and the St. Petersburg Police Department for 1993, 1995 and 1999 indicate that crime rates along the trail are no different than elsewhere in the county or city. In 1993 and 1995, crime rates along the trail were lower than county-wide rates, and in 1999 the rates were still lower, but closer to the countywide average."

#### Omaha Recreational Trails: Their Effect on Property Values and Public Safety (2000)

Donald L. Greer, Ph.D., Project Director, University of Nebraska at Omaha Recreation and Leisure Studies Program - School of Health, Physical Education and Recreation http://atfiles.org/files/pdf/omahastudy.pdf

- "Experiences with trail-related theft (4.0 percent) and property damage (4.7 percent) were reported infrequently by respondent and most of these incidents were of relatively minor nature."
- "Property owners do not appear to have a widespread concern for their safety. Trespassing, theft and vandalism by trail users were relatively infrequent events."

#### Rail-Trails and Safe Communities - The Experience on 372 Trails (1998)

Rails to Trails Conservancy

http://www.railstotrails.org/resources/documents/resource\_docs/tgc\_safecomm.pdf

A massive survey of crime of 372 rail trails in urban, suburban, and rural settings was undertaken in the late 1990s, covering 7,000 miles of trail with 45 million users (the urban component was 5 million users on 332 miles; 14 million people on 1,100 miles of suburban trails; and 26 million users on 5,282 miles of rural trails). (Tracy, 1998):

- "Only 3 percent of these trails reported any crimes against persons (assaults, muggings, rape, and murder); of the 3 percent of trails that reported a crime against a person, urban trails had a higher rate of crime than suburban ones."
- "Burglary near trails was extremely rare, more so than other crimes. Only four burglaries were reported in homes adjacent to 7,000 miles of rail trails in 1996 and 3 of these 4 were reported in rural areas. There's no evidence that these four crimes were a result of the nearby trail."

Specific to suburban rail trails and crimes, the survey revealed the following:

- "In 1996, the national rate of muggings in urban areas was 335 for each 100,000 inhabitants. Only one of 36 urban trails reported muggings, giving trails a rate of 15 muggings per 5 million users. In the suburbs, muggings occurred at a rate of 102 per 100,000 people. Only one mugging was reported among the 14 million people who used suburban trails in 1996."
- "The national rate of suburban aggravated assaults is 293 per 100,000 inhabitants; three assaults
  occurred on three suburban rail trails in 1995 and only two assaults occurred on suburban rail trails in
  1996."
- "The national rate of suburban rape of 29 per 100,000 persons; none of the suburban rail trails reported a rape in 1995 or 1996."
- "Nationally, four murders per 100,000 inhabitants occur in suburban areas; there were no reports of murder on suburban rail trails in 1995 or 1996."

## Social Justice as it Pertains to Safety on the American Tobacco Trail (2015)

North Carolina Rail-Trails / NC State University http://www.triangletrails.org/pdfs/ATT report finaldraft 6 5 15(2).pdf

This study was undertaken to examine an area along the American Tobacco Trail (ATT) in Durham, North Carolina that experienced an increase in crime in 2011. The study analyzed the relationship between crime data, built environment characteristics in adjacent neighborhoods, and the perception of crime along the

ATT. The study was initiated in response to the impact a 2011 crime increase on the ATT had on the overall perception of the trail and adjacent neighborhoods.

- "Between 2012 and 2014, over 3550 violent crimes in 14 categories were committed within a 10 minute walk of the trail. However, only 14 crimes occurred on the trail. Less than a ½ percent of all area crimes occurred on the trail. The ATT is not crime free, but it is safe and much safer than the surrounding community."
- "Over 86 percent of survey respondents perceive the ATT as safe. The trail has few reported crimes (14 crimes committed between 2012 and 2014) and is safer than the adjacent community."

#### **Trail User Surveys**

In addition to these studies, as mentioned earlier, 5 User Surveys were conducted for a variety of trails in the Philadelphia area and across Pennsylvania. These user surveys included:

- Pine Creek Rail Trail 2006 User Survey and Economic Impact Analysis (62.6 miles)
- Heritage Rail Trail County Park 2007 User Survey and Economic Impact Analysis (21.0 miles)
- Perkiomen Trail 2008 User Survey and Economic Impact Analysis (19.0 miles)
- Schuylkill River Trail 2009 User Survey and Economic Impact Analysis (56.0 miles)
- D & L Trail 2012 User Survey and Economic Impact Analysis (165.0 miles)

These studies revealed that the majority of trail users, on average 85 percent plus, felt that safety and security along the trails was either Good or Excellent. The one exception to this being the Schuylkill River Trail which is a more urbanized trail versus the other trails analyzed. However, even 80 percent of users of this trail felt that security was Good to Excellent.

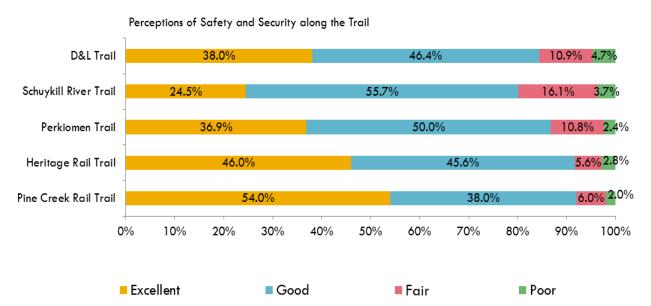


FIGURE 27 - TRAIL USER SURVEY RESULTS - PERCEPTIONS OF SAFETY AND SECURITY ALONG THE TRAIL

#### Recommendations for improving trail safety and reducing the potential for crime

Although crimes on trails rarely occur, Northampton Township should work in cooperation with its police department, the Northampton Volunteer Fire Department, and Tri-Hampton Rescue Squad to develop and implement a safety and security plan for the proposed trail network. This plan should consist of well-defined safety and security policies; the identification of trail management, law enforcement, emergency, and fire protection policies; and a system that offers timely response to issues or problems related to safety and security. Important components of the safety and security plan should include:

- Institution of user rules and regulations
- Preparation of a trail and bicycle safety manual
- Development of trail emergency procedures
- Preparation of a safety checklist for the trails
- Preparation of a trail user response form
- Development of a system for accident reporting and analysis
- Regular maintenance and inspection programs
- Site and facility development and review
- Public education and information programs educating users on safety tips for on-road bicycling
- Employee training programs for safety and emergency response

In addition to the design of a safety and security plan, the township should proactively address trail safety in the design phase of the trails. Although there are many safety regulations required by the Pennsylvania Department of Transportation specific to on-road trail and bicycle facilities, as well as the types, placement, and required signage for the crossing of roads, the township should also consider utilizing Crime Prevention through Environmental Design (CPTED) principles during the trail design process.

CPTED principles are designed to encourage desired behavior, and discourage undesired behavior on the trail system. CPTED is defined as "the proper design and effective use of the built environment that can lead to a reduction in the fear and incidence of crime and an improvement in the quality of life." As applied to trails, CPTED principles focus on access control, maximizing visibility of the trail from the surrounding community, clearly defining public and private properties and intended uses, facilitating emergency response, and long-term maintenance of the trail.

In addition to following PennDOT safety requirements and CPTED principles during the design process, the township should ensure that design and construction documents for the trails are reviewed by appropriate agencies to ensure that they meet all current safety regulations.

Finally, during the construction phase, the township should discourage the general public from using any segment of the trails that are under construction. Trail segments should not be considered open for public use until a formal dedication ceremony has been staged and authorized agents of the township have declared the pathway open.

## LIABILITY<sup>1</sup>

Trail projects often generate concerns about liability. These concerns may come from individual property owners, organizations, and municipal, county and state governments. The Rails to Trails Conservancy has published a primer on liability related to rail trails that provides useful information on this topic. It can be downloaded at the following website: <a href="http://www.railstotrails.org/resourcehandler.ashx?id=3501">http://www.railstotrails.org/resourcehandler.ashx?id=3501</a>.

There are three legal precepts, either alone or in combination that define, and in many cases, limit liability for injury resulting from trail use. The first is the concept of duty of care that speaks to the responsibility that a landowner (private or public) has to anyone on their land. Second is the Recreational Use Statute (RUS) which is available in all 50 states and provides protection to private landowners and some public landowners who allow public free access to land for recreational purposes. Third, for all private and public parties, liability insurance provides the final line of defense.

<sup>&</sup>lt;sup>1</sup> Morris, High (2000), A Primer on Trial-Related Liability Issues & Risk Management Techniques. Washington D.C.: Rails to Trails Conservancy. P 6-9.

## **Duty of Care**

Tort law, with regard to finding fault for an incident that occurs in a particular location, is concerned with the "class" of person who sustained the injury and the legal duty of care owed to a person in that class. The legal duty of care that a landowner owes a member of the general public varies from state to state but is generally divided into four categories. In most states, a landowner's responsibility for injuries depends on the status of the injured person. A landowner owes increasingly greater duties of care (i.e.; is more at risk) if the injured person is a "trespasser," a "licensee," an "invitee," or a "child."

Trespasser – a person on land without the landowner's permission, whether intentionally or by mistaken belief that they are on public land. Trespassers are due the least duty of care and therefore pose the lowest level of liability risk. The landowner is generally not responsible for unsafe conditions. The landowner can only be held liable for deliberate or reckless misconduct, such as putting up a trip wire. Adjacent landowners are unlikely to be held liable for injuries sustained by trespassers on their property.

Licensee – a person on land with the owner's permission but only for the visitor's benefit. This situation creates a slightly higher liability for the landowner. For example, a person who is permitted to hunt on a farm without paying a fee, if there were no RUS, would be classified as a licensee. If the landowner charged a fee, the hunter would probably be classified as an invitee. Again, the landowner is not responsible for discovering unsafe conditions; however the landowner must provide warning of known unsafe conditions.

Invitee – a person on the owner's land with the owner's permission, expressly or implied, for the owner's benefit, such as a paying customer. This is the highest level of responsibility and therefore carries the highest level of liability. The owner is responsible for unknown dangers that should have been discovered. Put a different way, the landowner has a duty to:

- 1. Inspect the property and facilities to discover hidden dangers;
- 2. Remove the hidden dangers or warn the user of their presence;
- 3. Keep the property and facilities in reasonably safe repair; and
- 4. Anticipate foreseeable activities by users and take precautions to protect users from foreseeable dangers.

The landowner does not ensure the invitee's safety, but must exercise reasonable care to prevent injury. Generally, the landowner is not liable for injuries caused by known, open, or obvious dangers where there has been an appropriate warning. For example, customers using an ice rink open to the public for a fee would be invitees.

Child – even if trespassing, some states accord children a higher level of protection. The concept of "attractive nuisance" is particularly relevant to children. Land forms such as ponds can be attractive to children who, unaware of potential danger, may be injured if they explore such items.

#### Recreational Use Statutes

Recreational use statutes are now on the books in all fifty states. These state laws provide protection to landowners who allow the public to use their land for recreational purposes. The theory behind these statutes is that if landowners are protected from liability they would be more likely to open up their land for public recreational use and that, in turn, would reduce state expenditures to provide such areas. To recover damages, an injured person must prove "willful and wanton misconduct" on the part of the landowner essentially the same duty of care owned to a trespasser. However, if the landowner is charging a fee for access to the property, the protection offered by the recreational use statute is lost in most states.

Pennsylvania's Recreational Use of Land and Water Act (RULWA) limits landowners liability for personal injury or property damage if they make their land available to the public for recreation for no charge. The purpose of the law is to encourage landowners to allow hikers, fishermen, and other recreational users onto their properties by limiting the traditional duty of care that landowners owe to entrants upon their land. So long as no entrance or use fee is charged, the Act provides that landowners do not have to keep their land

safe for recreational users and have no duty to warn of dangerous conditions. This immunity from liability does not protect landowners who willfully or maliciously fail to warn of dangerous conditions.

Landowners who permit or invite members of the general public onto their properties for recreational purposes, free of charge, can raise this statute as a defense if they are sued for personal injury or property damage. RULWA does not prevent landowners from being sued; it provides them with an immunity defense to claims that their negligence caused the plaintiff's injury. Negligence is the failure to exercise ordinary care such as a reasonably prudent and careful person under similar circumstances would exercise.

As noted above, although RULWA immunizes landowners from negligence claims, landowners remain liable for willful or malicious failure to guard or warn recreational users of a dangerous condition of the land. To determine whether a landowner's behavior was willful, courts will look at whether the owner had actual knowledge of the threat and whether the danger would be obvious to entrants. Actual knowledge might be presumed if the owner were aware of prior accidents at the same spot. But if the land contained a dangerous feature that should have been obvious to recreational users, they may be considered to be put "on notice," which generally would preclude landowner liability. For more information, visit <a href="http://conservationtools.org/guides/show/81-Recreational-Use-of-Land-and-Water-Act-ixzz3CAm0sug0">http://conservationtools.org/guides/show/81-Recreational-Use-of-Land-and-Water-Act-ixzz3CAm0sug0</a>.

## Liability Insurance

Insurance is the last line of defense. While the precepts of Duty of Care and the Recreational Use Statute may mean a lawsuit does not ultimately prevail in the courts, they cannot prevent a suit from being filed. Insurance is necessary for both trail owners/managers and adjacent landowners.

Specific to trail owners/managers such as Bucks County and Northampton Township, liability associated with trails, are most often is covered by an umbrella insurance policy that protects all municipal activities and facilities, the same as other park and recreation facilities.

Adjacent landowners, often have concerns over whether they will need to need to increase the amount of liability insurance under their existing homeowner's insurance policy or if their insurance premiums will increase as a function of the trail being developed. Throughout the development of the County's trails, and in assisting other municipalities in the development of trails and bicycle plans, the Bucks County Planning Commission staff has researched the issue and has spoken with numerous insurance brokers and industry professionals such as the National Association of Insurance Commissioners, the Pennsylvania Insurance Department; Bureaus of Consumer Services as well as numerous local insurance agents with the following learnings:

- Insurance carriers look at each home (and its individual perils) and policy on its own merits. The only
  instances of an adjacent property/use being considered as having a negative premium effect on a
  residential property, is when the adjacent use is of a commercial / hazardous nature. This is most
  common where multiple homes are attached or a multiuse property situation exists such as a restaurant
  adjacent to a home. This is most likely to occur in densely populated locations.
- All industry experts we have spoken with said exactly the same thing: they had never heard of any example of a public space like a trail, park or recreation field ever being a factor in the pricing of an individual homeowner's policy. Furthermore in the case of the rail trail, there is no additional peril caused by the trail as the land is separate. One industry contact even suggested that the peril is substantially reduced since the tracks are removed and the railroad has ceased operations.

While the County cannot speak to each property's unique situation or insurance coverage, we remain confident that homeowners adjacent to the trail should not be subject to increased premiums, nor do they automatically take on additional peril as it relates to liability due to the proximity of a trail to their property.

### **PROPERTY VALUES**

The last remaining concern that people often have regarding the development of trails and bicycle facilities is the impact on property values. Similar to Safety and Crime concerns, this study addresses these concerns in three ways:

- Analysis of the relationship between trails and property values in the Philadelphia region;
- A review of previous studies from across the country addressing the relationship between trails and property values; and
- Marketing of trails as a community amenity.

## Analysis of the Relationship Between Trails and Property Values in the Philadelphia Region

The Bucks County Planning Commission undertook an analysis of the impact of trails on property values across the Philadelphia region. More specifically, the analysis looked at 6 trails across the region. The trails, locations and opening dates are identified below:

- Radnor Trail Radnor Township (Delaware County) April 2006
- Pennsy Trail Haverford Township (Delaware County) January 2016
- Cynwyd Heritage Trail Lower Merion Township (Montgomery County) October 2011
- Pennypack Trail Lower Moreland and Upper Moreland townships and Bryn Athyn Borough (Montgomery County) - September 2015
- Horsham Powerline Trail Horsham Township (Montgomery County) 1998 & 2010
- Skippack Powerline Trail Skippack Township (Montgomery County) 2007

The analysis was approached in three separate ways:

- 1. Price per Square Foot Analysis The price per square foot for houses sold between February 1, 2018 and January 31, 2019 based on proximity to the trail
- 2. Rate of real estate appreciation following the opening of the trail\* for houses:
  - Backing onto the trail
  - The Zip Code that the trail is located in
  - The township that the trail is located in
  - For those same time periods, the rate of appreciation for properties located in Village Shires, Zip Code 18966, and Northampton Township

\*This second analysis was limited to the Cynwyd Heritage Trail and the Pennsy Trail as historical sales data was not available going back for the other trails.

3. Rate of Property Turnover - Although not directly looking at property values, the analysis also looked at the number of homes sold in the year following the opening of the trail as a potential indicator of whether the introduction of the trail resulted in a pronounced exodus from the neighborhood.

#### Price per Square Foot Analysis

The objective of this analysis was to determine if proximity to the trail impacted the sales price per square foot, either positively or negatively. It should be noted that this is not a statistical model and therefore does not control for other variables such as condition of the property, lot size, etc. which may also influence the sales price of a particular home.

#### **Key Learnings:**

When looking at the 6 trails in aggregate, houses located immediately adjacent to/across the street from

trails sold for \$203 per square foot which was:

- Equal to the average for all houses sold within 1 mile of the trail (\$203);
- Higher than the average of all houses sold (\$203 versus \$190 or +6.8 percent higher)
- Slightly below (-2.4 percent) houses located within 0.10 to 0.25 miles of the trails which sold for \$208 per square foot;
- Higher (+3.0 percent) than homes located 0.25 to 0.50 miles away which sold for \$197 per square foot; and
- Comparable to houses located 0.5 to 1.0 mile away from the trail which sold for \$205 per square foot (-0.9 percent)

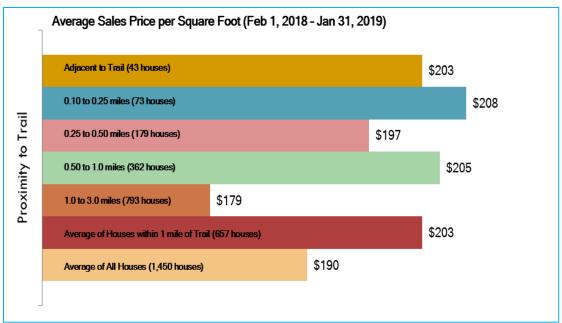


FIGURE 28-SALES PRICE PER SQUARE FOOT BASED ON PROXIMITY TO TRAIL

#### Rate of Real Estate Appreciation following the opening of the Trail

The objective of this analysis was to determine if proximity to the trail impacted the rate of real estate appreciation following the opening of the trail. Data for this analysis was obtained by looking at Zillow Zestimate of Historical Home Values. This analysis only included the Cynwyd Heritage Trail and Pennsy Trail as the other trails opened earlier, resulting in a lack of historical sales.

#### **Key Learnings:**

- The rate of real estate appreciation for homes backing to the Cynwyd Heritage Trail (+17 percent) seven years after the opening of the trail in October 2011, was similar to Lower Merion Township (+18 percent), although lower than the Zip Code in which the trail is located (+25 percent).
- Real estate appreciation rates for homes backing onto the Cynwyd Heritage Trail were slightly higher than those for Village Shires and Northampton Township as a whole.
- The rate of real estate appreciation for homes backing to the Pennsy Trail (+18 percent) three years after the opening of the trail in January 2016, was similar to both Havertown (+18 percent) and Zip Code 19083 in which the trail is located (+19 percent).
- Real estate appreciation rates for homes backing onto the Pennsy Trail were higher than those for Village Shires, Zip Code 18966, and Northampton Township as a whole, which averaged 10 percent - 11 percent during that same time period.

FIGURE 29 - ZILLOW HISTORICAL HOME VALUES - CYNWYD HERITAGE TRAIL

#### **Cynwyd Heritage Trail**

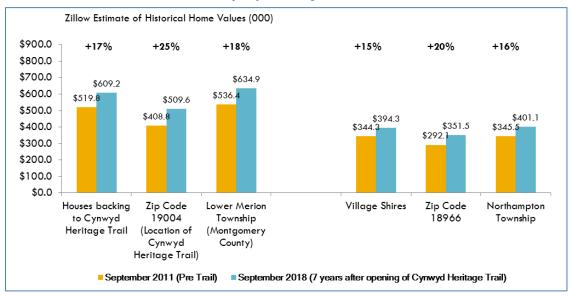
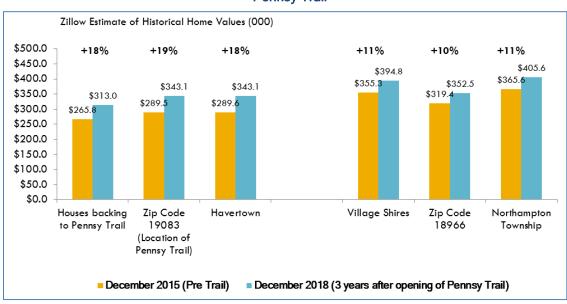


FIGURE 30 - ZILLOW HISTORICAL HOME VALUES - PENNSY TRAIL

#### **Pennsy Trail**



## Turnover of Houses within a year following the opening of the trail

The objective of this analysis was to look at the extent to which the introduction of the trail might have prompted property owners adjacent to the trail to sell following the opening of the trail.

#### **Key Learnings:**

Pennsy Trail

In the year prior to the opening of the Pennsy Trail, 5.7 percent or 8 houses, which are immediately
adjacent to the trail sold. In comparison, the turnover or number of houses declined in the year

- following the opening of the trail to 5 houses, representing 3.5 percent of the 141 houses immediately adjacent to the trail.
- In comparison to the 19083 zip code, the rate of turnover for houses immediately adjacent to the trail in the year following the opening of the trail (3.5 percent) was less than that of the zip code (4.4 percent). This lower rate of turnover indicates that there was not a higher rate of sales for properties adjacent to the trail based on the opening of the trail.

#### Cynwyd Heritage Trail

- In the year prior to the opening of the Cynwyd Heritage Trail, 3.4 percent or 2 houses, which are immediately adjacent to the trail sold. In comparison, the turnover or number of houses declined in the year following the opening of the trail to only 1 house (1.7 percent) of the 59 houses immediately adjacent to the trail.
- In comparison to the 19004 zip code, the rate of turnover for houses immediately adjacent to the trail in the year following the opening of the trail (1.7 percent) was less than that of the zip code (5.0 percent). As with the Pennsy Trail, this indicates that property owners immediately adjacent to the Cynwyd Heritage Trail did not result in a higher turnover of properties relative to the area as a whole, and in fact, was approximately 1/3<sup>rd</sup> the turnover of the zip code.

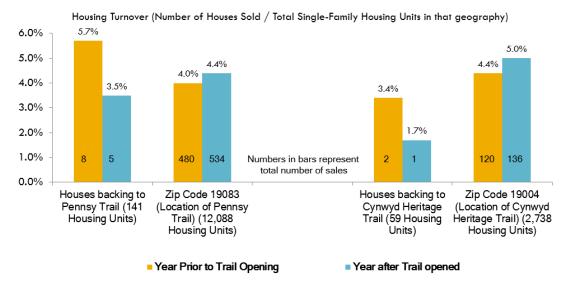


FIGURE 31- HOUSING TURNOVER PENNSY TRAIL AND CYNWYD HERITAGE TRAIL

#### Prior Research Addressing the Relationship Between Trails and Property Values

Several studies have addressed the relationship between trails and open space and their impact on property values. These studies have shown that the construction of a trail within walking distance typically has either no impact, or a positive correlation with property values.

#### **Key Findings:**

- There are numerous studies, including hedonic regression analyses performed by Econsult Solutions, which demonstrate the beneficial impact that greenways and open space have on residential property values, after controlling for variables such as home quality, distance to downtowns, and seasonality. Based on research and previous analysis, a premium of 5 percent was calculated for homes within a quarter mile of a trail.
- No relationships between property values and proximity to trails were observed. While some studies in other cities in the United States have found positive associations, others have not. This outcome therefore is consistent with other findings in the literature.

- These analyses show there are no adverse effects associated with 10 different trails in Franklin and Delaware Counties.
- Calculations based on home sales within Radnor show that homes within a quarter-mile of the Radnor Trail can attribute an estimated \$69,139 dollars of additional value to this proximity.
- Calculations based on home sales near the Perkiomen Trail show that homes within a quarter-mile of the Trail can attribute an estimated \$4,766 dollars of additional value to this proximity.
- In Bucks, Chester, Delaware, and Montgomery counties, homes immediately adjacent to protected open space can claim an average of \$10,000 in additional value over comparable homes farther than one mile from open space, and homes a half-mile from open space enjoy an average increase of \$5,000.
- This study found that the Little Miami Scenic Trail in southwest Ohio is associated with higher property values for nearby properties, across the urban, suburban, and rural sections of the trail. On average, homes sell for an additional \$7 for every foot closer to the trail, up to about a mile away from the trail. For example, a house a half mile away from the trail would sell, on average, for \$18,612 less than a house that is identical in all other aspects but is adjacent to the trail.

More details and links to these various studies can be found in Appendix D.

## Marketing of Trails as a Community Amenity

Homeowners and real estate agents increasingly recognize the value of trails, and bicycle facilities as important community amenities. This is evidenced by via homebuilder websites highlighting trails as a community amenity, real estate listings highlighting the proximity of houses for sale to adjacent or nearby trails, and real estate industry research.

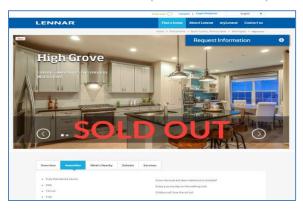
## Homebuilder Websites Promoting Trails

Recognizing that trails are a desired community amenity, most of the area's major home builders, including Toll Brothers, Lennar Homes, DR Horton, Pulte, Ryan, and NV Homes, include trails, and actively promote their availability, as part of the marketing of new home developments. This is done either via advertising trails within the community itself, proximity to trails within nearby parks, and even including the ability to search for developments that include trails as part of the community. Some examples of these can be found here with several more examples included in Appendix D.

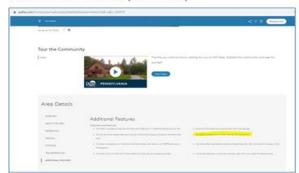




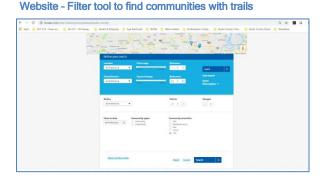
**LENNAR HOMES - HIGH GROVE (WARRINGTON TOWNSHIP)** 



#### Pulte Homes - Tall Oaks (Warminster)



**Lennar Homes** 



Toll Brothers - Fenton's Corner Trail Plan (Buckingham)



Toll Brothers - Estates at Mill Creek Ridge (Buckingham)

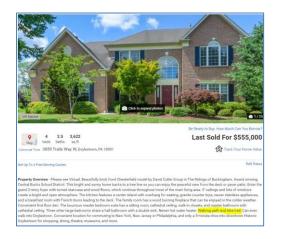


## Real Estate Listings highlighting the Proximity to Trails

The demand for trails and access to trails is not unique to just new home communities. Real estate agents across the Philadelphia region increasingly recognize that proximity to trails and bicycle facilities is another amenity to highlight when listing homes for sale. This extends to all price points and housing types including both single-family detached homes, twins, and townhouses. In fact, one local realtor posted an entry on their website highlighting \$1,000,000 homes near the Radnor Trail.







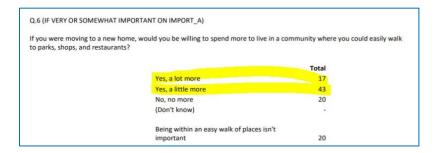


## Real Estate Industry Research

Community and Transportation Preferences Survey (2017) - National Association of Realtors <a href="https://www.nar.realtor/reports/nar-2017-community-preference-survey">https://www.nar.realtor/reports/nar-2017-community-preference-survey</a>

American Strategies conducted an internet survey of the top 50 metropolitan statistical areas in the United States on behalf of the National Association of Realtors. The survey explores Americans' wants regarding neighborhood characteristics such as proximity to parks and shopping, walkability, and commuting time, and the trade-offs in home type and size that people may be willing to accept in order to obtain those neighborhood preferences. Key findings from this survey included:

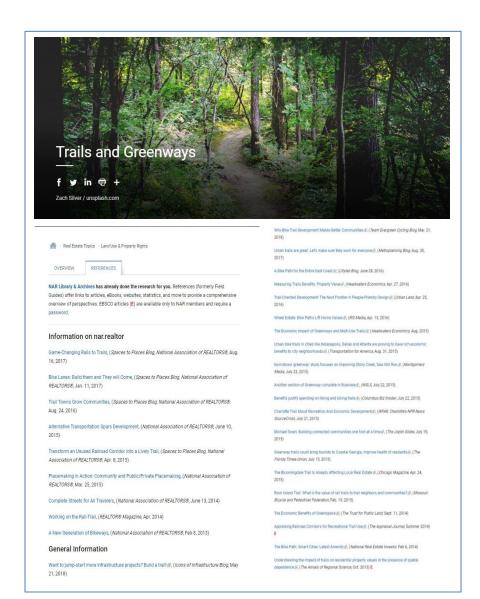
One question the survey asked is whether respondents would be willing to spend more to live in a community where you could easily walk to parks, shops and restaurants. 60 percent of respondents indicated that they would be willing to pay more for a walkable community.



#### **National Association of Realtors**

https://www.nar.realtor/trails-and-greenways#section-166076

The increased interest in Trails and Greenways prompted the National Association of Realtors, America's largest trade association, representing 1.3 million members, to develop a page on its website for providing information to realtors and home buyers on trails and greenways. The webpage currently features almost 40 studies relative to trails, greenways, and bicycle facilities.



## **CHAPTER 9 - RECOMMENDATIONS**

Development of the Northampton Township Trail & Bicycle Facility network will be a complex process require many years to achieve, the development of partnerships, securing funding through various sources of grant revenue, leveraging opportunities as part of future development and redevelopment projects, and ongoing maintenance and operational components to ensure that the network remains safe and in good condition for future generations. To help achieve the vision outlined in this plan, the township should consider the following recommendations:

- Official adoption of the plan
- Review of the priority trail rankings in this plan to determine if there are any upcoming land development
  projects where the township might be able to get the developer to fund construction of a key trail segment
  as part of the development process.
- Review both the township and PennDOT road repaving schedules to identify opportunities for incorporating proposed bike sharrows and bike lanes as part of the resurfacing project.
- Support the County-funded design and construction of the Newtown Rail Trail.
- Review the priority trail rankings to identify specific easements required for future development of trails and begin the process of acquiring the right-of-way needed.
- Where possible, consider widening the cartway width as part of future resurfacing projects on township
  roads to be able to accommodate dedicated bike lanes, particularly on those proposed for bicycle
  sharrows.
- Continue to partner with other municipalities and the County to take advantage of opportunities to extend the Northampton Township Trails and Bicycle Facilities Network beyond the municipal borders.
- Review and understand the various grant funding sources available in terms of grant requirements, project eligibility, and deadlines to ensure that the township maximizes its potential for securing grant funding for implementation of this plan.

## APPENDIX A - GLOSSARY

Access Points: Designated areas that allow the public to reach a trail from adjacent streets or areas.

**Accessible:** Typically refers to describe a site, building, facility or trail that complies with the Americans with Disabilities Act (ADA) Accessibility Guidelines and can be approached, entered, and used by physically disabled people.

**Alignment**: The configuration of the trail in horizontal and vertical planes. The bends, curves, and ups and downs of the trail.

**Asphalt:** Petroleum-based surface material that provides a smooth surface that is suitable for a wide variety of trail users including runners, walkers, bicyclists, skateboarders, etc.

**At-Grade Crossing:** A trail crossing a roadway on the same elevation as the road itself. These typically have either a traffic signal or other device that can be activated by trail users to notify vehicles of their intent to cross the roadway.

**Bicycle Lane:** A bicycle lane is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions and facilitate predictable behavior and movements between bicyclists and motorists.

**Bicycle Sharrow:** Shared lane pavement markings are bicycle symbols carefully placed to guide bicyclists to the best place to ride on the road, avoid car doors and remind drivers to share the road with cyclists. Unlike bicycle lanes, sharrows do not designate a particular part of the street for the exclusive use of bicyclists. They are simply a marking to guide bicyclists to the best place to ride and help motorists expect to see and share the lane with bicyclists.

Boardwalk: A structure elevating the trail above wet ground, water, or plant communities needing protection.

**Cross Slope:** The slope of grade of the trail perpendicular to the direction of travel. The cross slope is designed to promote drainage of water from the trail.

**Design Standards**: Specific guidelines / standards for the design and construction of trails that based on the intended users of the trail.

**Easement:** Grants the right to use a specific portion of land for a specific purpose or purposes. Easements may be limited to a specific period of time or may be granted in perpetuity, or the termination of the easement may be predicated upon the occurrence of a specific event. An easement agreement survives transfer of land ownership and is generally binding upon future owners until it expires on its own terms.

**Erosion:** Natural process by which soils move downhill; may be greatly accelerated on trails due to water, wind and user traffic.

**Grade**: The angle or slope of any surface, though here most concerned with the grade trails climb. In trail work, grade is expressed as a percentage determined by dividing the rise of the trail (vertical), over the run/length of the trail. For example, a 10-feet of rise over 100-feet or run is a 10% slope or grade.

**Midblock crossings**: Locations between intersections where a marked crosswalk has been provided. Midblock crossings are often installed in areas with heavy pedestrian traffic to provide more frequent crossing opportunities. They may also be added near major pedestrian destinations, such as schools, where people might otherwise cross at unmarked locations.

Multi-use Trails (also referred to as shared use paths): Refers to trails designed for pedestrian, equestrian, bicycles or other non-motorized wheeled use, such as wheelchairs.

**Running Slope:** This is the same as grade and represents the rise of the trail vertically divided by the length of the trail horizontally.

**Shoulder:** The usually paved portion of a road, which is contiguous to the travel lanes, allowing motor vehicle use in emergencies. When specifically delineated and marked, shoulders may serve for specialized use by pedestrians and bicyclists.

**Sight Distance**: The visible and unobstructed forward and rear view seen by a trail user from a given point along the trail.

**Stopping sight distance:** The length of highway over which a 2-foot high object on the roadway is continuously visible to the driver, with the driver's eye height assumed to be 3.5 feet above the road surface.

**Wetlands:** Swampy or marshy areas usually saturated with water and offering unique habitat for flora and fauna.

## APPENDIX B - STEERING COMMITTEE MEETING MINUTES

#### Northampton Township Trail & Bike Plan Meeting Minutes - February 5, 2019

#### Attendees:

- Supervisors: Eileen Silver, Kimberly Rose, Barry Moore, Frank O'Donnell.
- Staff: Bob Pellegrino, Bill Wert, Mike Soloman, Joe Pizzo (solicitor), Amanda Fuller (Gilmore).
- BCPC Staff: Evan Stone, Rich Brahler, Paul Gordon, Christian Regosch

Bob Pellegrino opened the meeting by providing some background on the project and a copy of the contract between the Township and the Bucks County Planning Commission.

Paul Gordon then provided a discussion guide for the meeting which was followed by a round of introductions. Mr. Gordon opened the discussion by asking members of the working group from the township, what their goals and objectives for the plan were, as well as to identify any potential trail and/or bike projects they would like to see evaluated as part of the plan. A synopsis of their comments is provided below:

#### Frank O'Donnell:

- Emphasis on connections
- Mentioned desire to connect to Northampton Township Recreation/Civic Center
- Discussed potential routing along Newtown Richboro Road
- Proposes use of Old Newtown Richboro Road near St. Leonard's Road and the trail that ends at the Langhorne Players Theater after crossing under Newtown Richboro Road at the creek
- Talked about making use of the sidewalks along Rock Way to connect to the Northampton Township Municipal Authority Property to connect to the existing trail as part of Regency at Northampton, recognizing that the current trail is private on their property.
- Loop trail around Council Rock South High School.
- Potential bike lanes along Holland Road (concerned with width)
- Wants connection from Richboro to Northampton Park
- Bike lanes on Second Street Pike to Tamanend Park
- Mentioned that a girl was killed on Buck Road a few years ago
- Bike lanes on East Holland Road
- Discussed Rail Trail and said there are 180 homes along the route. Discussed elevation issues near Grant Road
- Would also like to see connection to Aqua, if agreement from Aqua can be had.
- Said the plan should avoid neighborhood opposition
- Mentioned the bike lanes along Valley Road, between Susquehanna Rd and Manor Avenue, in Meadowbrook as a model

#### Eileen Silver:

- Asked if we were considering raising the bike lanes (cycle tracks <a href="https://nacto.org/publication/urban-bikeway-design-guide/cycle-tracks/one-way-protected-cycle-tracks">https://nacto.org/publication/urban-bikeway-design-guide/cycle-tracks/one-way-protected-cycle-tracks</a>) to make them safer. Wants them to have protection.
- Suggested using sidewalks to fill in gaps between routes
- Suggested analyzing Rail Trail in a different way that would avoid neighborhood push back. Off ROW alignment?

#### Kimberly Rose:

- Wants the trails to have destinations.
- Concerned with bike lane safety

#### Master Trail and Bicycle Plan

- Village Shire kids need a place to go to
- Believes that the Rail Trail will be a hard sell to the neighbors

#### Barry Moore:

- Concerned with bike lane safety
- Mentioned connection to Hills Development and their internal trails

#### Bob Pellegrino:

- Trail program should start with "low hanging fruit"
- Emphasize connections
- Ensure sidewalks are part of the plan

#### Group:

- Concerns with area near kennel
- Should secure buffer as Bucks County Roses is redeveloped
- Would like plan as quickly as possible (May/Jun)

#### Action Items:

- Group agreed to plan layout discussed by Paul
- Group meetings will be scheduled as milestones are reached
- Provide all graphics to group
- Point of contact will be Bob Pellegrino
- Steering committee will be meeting attendees and Adam Selisker

#### Northampton Township Trail & Bike Plan Meeting Minutes - March 5, 2019

#### Attendees:

- Supervisors: Eileen Silver, Kimberly Rose, Frank O'Donnell.
- Staff: Bob Pellegrino, Bill Wert, Mike Soloman, Joe Pizzo (solicitor), Kurt Schroeder (Gilmore).
- BCPC Staff: Evan Stone, Rich Brahler, Paul Gordon, Christian Regosch

#### **Review of Planning Areas**

Paul discussed the five planning areas and discussed the rationale for designating the areas.

• All were fine with the Planning Area designations

#### Overview of approach used to determine recommendations

Paul discussed the methodology for each type of proposed facility.

- Sharrows Corridor has a speed limit of 35 MPH or less and less than 10,000 vehicles per day.
- Bob asked for the source of the ADT information. It was PennDOT's Traffic Information Repository (TIRe) www.dot7.state.pa.us/tire
- Bike lanes Corridor has a minimum width of 33' cartway width
- Sidepaths Corridor has a minimum right-of-width of 60'

#### **Review of Planning Area 1 Recommendations**

Paul then discussed each of the identified segments. The following items were discussed.

- Segment 7 investigate potential extension to allow for connection to redevelopment at Route 232 and Hatboro Road, with connection to existing stub street.
- Segment 8 Provide connection from Twining Ford Road sharrows down along Route 232 to Highland Drive.
- Segment 9 A widening plan is in development. Determine if the plans will allow for bike lanes along Newtown-Richboro Road closer to Route 232.
- Segment 11 A trail extension plan is in the works to complete a gap in the trail near the park and Tyler.

Establishment of future meeting dates to review recommendations for other planning areas

The group agreed to meet every 2nd and 4th Tuesday at 11:00 am beginning March 28th.

#### **Action Items:**

Here are the follow-up items that I noted. Please let me know if there are others so that I can include them in the meeting minutes:

- Look into the potential for a sidepath trail along the east side of Second Street Pike between Glasgow Road/Highland Drive and Twining Ford Road
- Add an additional Future Connection Square to the map at the intersection of Sackettsford Road and Second Street Pike
- Add the trail between the Northampton Township Recreation Complex and Tyler Arts Center/State Park

#### Northampton Township Trail & Bike Plan Meeting Minutes - March 26, 2019

#### Attendees:

- Supervisors: Eileen Silver, Kimberly Rose, Frank O'Donnell.
- Staff: Bill Wert, Mike Solomon, Joe Pizzo (solicitor), Amanda Fuller (Gilmore).
- Bucks County Planning Commission (BCPC) Staff: Evan Stone, Paul Gordon, Christian Regosch

#### Discussion regarding different types of bicycle facilities

#### Bike Sharrows

- Supervisor O'Donnell inquired as to how they were able to establish Bike Sharrows on Valley Road in Huntingdon Valley given that the posted speed limit in 45 MPH.
- Paul will follow-up with municipality relative to the establishment of these bike sharrows.

#### Protected Bike Lanes

 Discussion around potential issues associated with installation of any type of protective device in terms of safety, plowing, maintenance and parking.

#### Neighborhood Bike Routes

Mr. Pizzo questioned whether bicyclists can ride their bicycles on any road regardless of the presence
of pavement markings, signage and posted speed limits. We indicated that yes, other than the exception
of limited access highways, bicyclists can ride their bike on any road.

#### Planning Area 1 Recap

• Paul presented a recap of the changes to the Area 1 map with no comments/questions.

#### Planning Area 2 Proposed Trails

- Supervisor O'Donnell asked why the trail along Jacksonville didn't extend all the way to Bristol Road.
- Paul explained the challenges with Poets Walk, challenges of establishing a sidewalk out to Jacksonville Road along Bristol Road in this area, limited connectivity beyond Bristol Road.
- This led to an additional discussion regarding the ability to connect Poets Walk and the proposed redevelopment area of the Spring House Country Club area to the proposed neighborhood bike routes located off of Pulaski Road. Paul presented our analysis and Supervisor O'Donnell commented, that as part of the redevelopment process, they had asked the developer for a trail which was rejected.
- Paul then explained the sidewalk connection (Segment #26) from Poets Walk, along Bristol Road leading to signalized intersection at Hatboro Road and Northampton Municipal Park.
- Specific to Northampton Municipal Park and Maureen Welch Elementary, Amanda Fuller from Gilmore spoke to the trail in design connecting these two facilities. Paul indicated that he would follow-up to ask for a copy of the proposed alignment.
- Hidden Meadows connector (Segment #25). Paul explained the lack of a bridge on Inland Road to connect the neighborhood between the creek and Almshouse Road to the proposed bike route through the Business and Technology Center.
- Tanyard Farms. Paul explained the lack of connectivity and evaluation of options. Frank mentioned Giuseppe's interest in utilizing the parking area on the other side of Ironworks Creek indicating that a footbridge/pedestrian bridge might provide that link in the future.
- Question was raised as to why no facilities are proposed along Hatboro Road from Bristol to Almshouse/Richboro Road. Paul explained that although speed limit was 35 MPH, ADT was over 10,000 so we weren't recommending. Evan then also explained that we had parallel routes via Neighborhood Bike Routes in Richboro Farms, Northampton Point, Windmill Village West, Centennial Acres and Eagle Valley. Paul also mentioned the proposed dedicated bike lanes along Second Street Pike which runs parallel to Hatboro Road.

Bill Wert then asked about a possible connection to the intersection of Hatboro Road/Almshouse-Richboro Roads. Everyone agreed this would be a nice addition. Paul indicated that they would follow-up to evaluate, and make certain that this could be accomplished while minimizing impact to farming area on township-owned parcel.

#### Planning Area 3

- Paul mentioned Planning Area 3 was next on the agenda and reminded everyone that this
  encompasses Holland and Village Shires.
- Supervisor Silver asked if this area also included the rail trail. Paul explained that yes, it included the portion of the rail trail corridor from Holland Road to Neshaminy Creek.
- Discussion then took place relative to the design of rail trails given that the trail would be in deep valley
  areas in some locations, elevated in other locations, and involve road crossings. BCPC staff explained
  the design process, PennDOT's involvement in road crossings, etc.
- Everyone agreed that the goal is to provide the safest user experience possible that separates users
  from vehicular traffic. To achieve that goal, all agreed that the Planning Area 3 planning should explore
  all options for establishing a continuous shared use trail, with a particular emphasis on the section
  between Holland Road and Buck Road given that the rail trail alignment runs behind or adjacent to
  homes along Grant Drive and East Rotterdam Road.

#### **Next Steps:**

- BCPC to request alignment for trail between Maureen Welsh Elementary School and Northampton Municipal Park from Gilmore Associates.
- BCPC to evaluate potential for trail on township-owned open space as part of Richboro Farms development.

#### Northampton Township Trail & Bike Plan Meeting Minutes - April 9, 2019

#### Attendees:

- Supervisors: Eileen Silver, Frank O'Donnell.
- Staff: Bob Pellegrino, Bill Wert, Mike Solomon, Joe Pizzo (solicitor)
- Bucks County Planning Commission (BCPC) Staff: Paul Gordon

#### Discussion regarding Valley Road Bicycle Sharrows

Paul Gordon provided an update to the prior question as to how the bicycle sharrows on Valley Road in Abington Township got installed in a 45 MPH speed zone based on his research and discussion with Abington Township officials. His findings included:

- The segment of Valley Road headed west from Welsh Road (Route 63) to just past Frederick Road is
  actually located in Lower Moreland Township. In this segment, there is no posted speed limit. The
  closest speed limit sign approaching this area headed westbound from the east/Welsh Road can be
  found on the segment of Valley Road to the east and is posted as 25 MPH.
- The one painted bicycle sharrow on Valley Road headed east is located within Abington Township
  which obtained the necessary permits for its installation. The sharrow itself is located in what is
  assumed to be a 25 MPH zone, as the 45 MPH speed limit sign is located just past the sharrow and at
  the start of the dedicated bicycle lane.
- Although the bicycle sharrow and 45 MPH speed limit sign are in close proximity, the sharrow is not in the 45 MPH zone as originally believed.

#### Review of updates to Planning Area 2 Map

Paul Gordon presented a recap of the changes to the Area 2 map. These updates included

- Addition of the trailhead located on New Road on township-owned property adjacent to and southeast
  of Maureen Welsh Elementary School, and the new trail currently in design to be located on school
  property connecting to Northampton Municipal Park.
- Addition of a trail as part of the Richboro Farms neighborhood connecting out to the intersection of Hatboro Road and Almshouse Road. More specifically, the trail would be located on the townshipowned parcel and would run parallel/adjacent to Joshua Drive and Almshouse Road. Supervisor O'Donnell inquired as to how close the trail would be to the first house on the right-hand side of Joshua Drive. Mr. Gordon indicated that the trail could begin/end at any point along Joshua Drive.

#### Planning Area 3 Proposed Trails

Paul Gordon then proceeded with explaining the various trails and bike facilities proposed for Planning Area 3 including an explanation of how the trails were organized for this particular section to clearly identify:

- Bucks County sponsored Neshaminy Greenway Trail
- Township sponsored/proposed trails
- Bucks County sponsored Newtown Rail Trail Alignment and an evaluation of the options for establishing a continuous shared use trail between Holland Road and Buck Road

There were no specific questions or comments regarding the Neshaminy Greenway Trail and the townshipsponsored trails.

Discussion then proceeded to the area for the Newtown Rail Trail extending from the bend in the road on East Holland Road to Bucks Road.

 Supervisor O'Donnell expressed his concerns regarding the proximity of the trail to homes adjacent to the trail including those on Grant Drive, Rotterdam Road East, Sundance Kennels, Spring Avenue, Jordan Corners and the houses adjacent to the trail corridor at the proposed crossing at Old Jordan Road.

- Paul Gordon then outlined the findings relative to establishing a continuous shared use trail in this area.
   His discussion included:
  - As an alternative to having the trail within the rail corridor in the area immediately adjacent to Spring Avenue, he encouraged the township to work with any proposed developers of the Bucks County Roses property to include a trail or easement on that property. This would shift the trail away from Spring Avenue.
  - Relative to the potential for a continuous shared use trail between Holland Road and Old Jordan Road, he indicated that it would be possible to develop a fragmented, but not continuous, shared use trail along sections of the East Holland Road corridor, primarily on township-owned open space and Council Rock School District Property. He then reviewed the challenges of establishing a continuous shared use trail along this portion of East Holland Road including:
    - Limited right-of-way width;
    - Presence of buildings and structures close to the existing roadway (often 30 feet or less);
    - Slopes and utility poles along the south side of East Holland Road in front of Holland Elementary School; and
    - Challenges associated with providing a safe crossing of East Holland Road to connect the segments identified above which would be possible to construct.
  - O He went on to explain that the only other option in this area would be to establish bike lanes along East Holland Road extending from the bend/Amsterdam Avenue, eastward to Old Jordan Road. He went on to indicate that there are already sidewalks along the southern side of East Holland Road in this area so that via the combination of bicycle lanes and sidewalks, pedestrians and bicyclists would be accommodated. However, he went on to mention that it was unlikely that children and inexperience bicyclists would feel comfortable using the bike lanes as it is a different experience than having the safety of a separate dedicated shared use trail.
  - From Old Jordan Road to Buck Road he mentioned that a shared use trail is recommended to replace the existing sidewalk in front of the schools that would extend to the intersection of Buck Road and East Holland Road.
  - The discussion then turned to the potential for a continuous shared use trail along Buck Road from East Holland Road up to the railroad bridge. He outlined the challenges in this area including the presence of HOA property along the east side of the road, and the presence of steep slopes, and unnamed stream, located on the HOA property at its intersection with the rail corridor.
    - Given these constraints, he then went on to explain how this segment would require realigning the lanes in this area so that a sidepath shared-use trail would be in the area currently occupied by the southbound lane of Buck Road, the current southbound lane would then shift to the area currently occupied by the northbound lane, and finally, shifting the northbound lane to the area currently occupied by the shoulder and acceleration/deceleration lane in front of the Hills of Northampton neighborhood.
    - He mentioned that as this is a PennDOT road, that this proposal would have to be coordinated with them and approved by them and would require a traffic impact study. He also mentioned that the realignment of the lanes still presented challenges at the East Holland Road intersection and at the underpass of the railroad bridge.
  - Finally, he mentioned the challenges of transitioning the trail back up to the rail corridor on the township-owned parcel along the northwest side of Buck Road at the railroad corridor. Although the slopes aren't as steep as those found on the opposite side of Buck Road on the Hills of Northampton HOA property, this connection would require what is called a switchback trail. This basically means that in order to accommodate the site constraints, the trail would need to cut back and forth going up the hill to get to the rail corridor which could involve costly retaining walls.

Following a brief discussion of the pros and cons of each alignment, it was decided to incorporate all of the proposed segments, along with a discussion of the challenges, merits, etc. of each, in the final planning study.

#### Northampton Township Trail & Bike Plan Meeting Minutes - April 23, 2019

#### Attendees:

- Supervisors: Eileen Silver, Frank O'Donnell, Kimberly Rose
- Staff: Bob Pellegrino, Mike Solomon, Joe Pizzo (solicitor), Amanda Fuller (Gilmore)
- Bucks County Planning Commission (BCPC) Staff: Evan Stone, Rich Brahler, Paul Gordon, Christian Regosch

#### Review of updates to Planning Area 1 Map

Paul Gordon provided an update to the Planning Area 1 map which was limited to the addition of bicycle sharrows on Worthington Mill Road, mentioning that this would require a reduction in the speed limit from 40 to 35 MPH.

#### **Planning Area 4 Proposed Trails**

Paul Gordon then proceeded with explaining the various trails and bike facilities proposed for Planning Area 4 including:

- Holland Village sidewalks and bicycle lanes (Segments 57 & 80)
- Challenge of establishing a shared-use trail from Churchville to Playwicki given the presence of slopes, wetlands, property ownership, etc. All agreed to not pursue that particular trail and to leave it off the map
- East Holland Road and Bridgetown Road from Stoneyford Road to the intersection of Bridgetown Pike and Newtown-Langhorne Road (Segments 58 - 61)
- Bike Sharrows along Crescent Drive, East Patricia Road, Beverly Road, Heron Road and East Heron Road. These are used to help channel/funnel residents to the intersection of Holland Road and Churchville Lane (Segments 62 - 64) and to the proposed Newtown Rail Trail (Segment 66), including a small shared-use trail along the southeast side of Holland Road from the rail corridor to East Patricia Road (Segment 74)
- Bicycle sharrows along Rocksville Road from Buck Road to Wooden Bridge Road (Segment 65)
- Proposed shared-use trail along Buck Road from the intersection of Holland Road and Buck Road and extending northeast to the existing trail at the southeast corner of the Holland Middle School/Hillcrest Elementary School property (Segments 67 - 70, 76 - 79, and 81)
- Holland Road shared-use trail from Northampton Preserve/Hope Road to Churchville Lane and connection across YMCA and Holland Elementary School property over to Mallard Road (Segments 71 & 72)
- Pine Run connector trail through the woods connecting Honeysuckle Road, Mallard Road and Woodlake Drive (Segment 75)
- Bucks County sponsored Neshaminy Creek Trail from intersection of Bridgetown Pike and Newtown-Langhorne Road to Playwicki Park (Segment 82)

There was limited discussion regarding these segments. The primary concern had to do with the cost of implementation given the number of bicycle sharrows and/or neighborhood bike routes being proposed throughout the township. Paul Gordon and Evan Stone reminded those present that neighborhood bike routes are a relatively inexpensive option as these basically just involve directional signs. Similarly, although bike sharrows do require the painting of sharrows on the roads, these are still less expensive than shared-use trails, although without providing the same level of trail user protection as off-road trails.

Bob Pellegrino asked for the regulations regarding the spacing of bicycle sharrows. Paul Gordon indicated that he would confirm, but thought that the American Association of State Highway and Transportation

Officials (AASHTO) standards required the placement immediately after each stop sign and then 500 feet on each side of the road thereafter.

There was then discussion around the phased implementation of the plan with Supervisors Silver and O'Donnell both indicating their interest in focusing initially on the development of trails and bike facilities connecting some of the existing facilities in the township versus development of the proposed rail trail.

The next meeting is scheduled for May 14, 2019 at which Planning Area 5 will be discussed. Paul Gordon indicated that he would also bring a map showing all of the proposed trails and bike facilities for the township to show all of the connectivity.

#### Northampton Township Trail & Bike Plan Meeting Minutes - May 14, 2019

#### Attendees:

- Supervisors: Eileen Silver, Frank O'Donnell, Kimberly Rose
- Staff: Bob Pellegrino, Mike Solomon, Joe Pizzo (solicitor), Amanda Fuller (Gilmore)
- Bucks County Planning Commission (BCPC) Staff: Evan Stone, Rich Brahler, Paul Gordon, Christian Regosch

#### Planning Area 5 Proposed Trails

A total of thirty one (31) trails and bicycle facilities were proposed and discussed, along with several neighborhood bike routes, for Planning Area 5. Key trails highlighted and discussed included:

- Newtown Rail Trail, and proposed connector trails, between Bristol Road and Holland Road;
- Churchville Lane including a proposed floating bridge/boardwalk over the reservoir running adjacent to Churchville Lane;
- Opportunities for trails on the AQUA PA/Churchville Reservoir property;
- Bicycle sharrows along Upper Holland Road between Bustleton Pike and Holland Road;
- A combination of bicycle lanes and a shared use trail along Lower Holland Road between Chapel Drive and Holland Road.

There was also discussion regarding the lack of a proposed trail along Ironworks Creek on properties owned by Bucks County and Northampton Township located between the Green Valley and Pheasant Run neighborhoods, extending from Lower Holland Road to Elm Avenue. While recognizing that the upper stretch of this area off of Lower Holland Road has an existing access road that is already used as a trail to access the pond located approximately 1,100 feet southeast, extending the trail in this area and beyond would be very costly due to the significant amount of wetlands in the area.

A township-wide map showing all of the proposed trails and bicycle facilities was also presented as a reminder of the overall connectivity to be created via this proposed network, and to assess any potential gaps in the proposed network.

No specific follow-up items were identified relative to specific trails or bicycle facilities. The township did request some time to review the proposed trails and bicycle facilities but authorized the planning consultant to move forward with the development of the planning study document.

## APPENDIX C - SCORING EVALUATION AND RANKING OF NORTHAMPTON TOWNSHIP TRAILS AND BICYCLE FACILITIES

Tabulation of Scores and Ranking for Northampton Trails and Bicycle Facilities

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Area	Trail No	Trail Name	Begin and End Points	Trail Type	Trail Sponsor	Mileage	Cost to Northampton Township to Construct	ROW Ownership	Presence of Natural Resource and Manmade Constraints	Connectivity to Neighborhoods	Connectivity to Schools	Connectivity to Commercial	Connectivity to Parks / Existing Trails / Libraries / Senior Centers	Potential Future Connectivity	User Safety	Total Score (27 Points Maximum)	FINAL RANK OUT OF 53
3, 4 &	47 - 50 / 69 / 102 - 104	Newtown Rail Trail	Bristol Road to Neshaminy Creek (Shared Use Trail within SEPTA Right-of-Way)	Shared Use Trail	County	4.48	3.0	2.0	2.5	3.0	0.0	2.0	3.0	3.0	3.0	21.5	1
2 & 5	23 / 95	New Road	Hatboro Road to Bustleton Pike via Mehler & Hilltop	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (1.52 miles)	Township	1.97	3.0	3.0	3.0	3.0	2.0	0.0	1.0	3.0	0.6	18.6	2
3	43	Old Jordan Road	Middle Holland Road to East Holland Road	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (0.45 miles)	Township	0.89	3.0	3.0	3.0	3.0	3.0	0.0	0.0	2.0	0.8	17.8	3
3	30 - 35	Neshaminy Greenway Trail	Tyler State Park/Langhorne Players to Big Meadow Park	Shared Use Trail & Bike Sharrows	County	3.58	3.0	1.8	0.0	3.0	1.0	1.0	3.0	3.0	1.7	17.5	4
5	88 - 92	Upper Holland Road	Bustleton Pike to Holland Road	Bike Sharrows - Existing Sidewalks & Shared Use Trail	Township	2.71	1.8	1.0	2.5	2.0	2.0	2.0	3.0	1.0	1.3	16.5	5
3	39	Middle Holland Road	Rock Way to Old Jordan Road	Bike Lanes - Existing Sidewalk	Township	0.38	3.0	1.0	3.0	2.0	1.0	0.0	1.0	2.0	2.0	15.0	6
1 & 3	12 - 18 / 36	Newtown Richboro Road	West Pickering Road to St. Leonards	Bike Lanes - Existing Sidewalks & Shared-Use Trail	Township	2.27	1.0	1.5	1.5	2.0	1.0	0.0	3.0	2.0	2.8	14.8	7
1	6 - 7	Temperance Lane	Spencer Road to Almshouse Road	Bike Sharrows - No Sidewalks	Township	1.80	3.0	3.0	3.0	1.0	0.0	2.0	0.0	2.0	0.5	14.5	8
4	70 - 73 / 79 - 82 / 84	Buck Road	Holland Road to Schools	Shared Use Trail	Township	1.47	0.0	0.0	1.0	3.0	2.0	1.0	1.0	3.0	3.0	14.0	9A
3	46	Stoneyford Road	Big Meadow Park to East Holland Road	Bike Sharrows - Existing Sidewalks	Township	0.82	3.0	3.0	3.0	1.0	0.0	0.0	1.0	2.0	1.0	14.0	9B
2 & 5	24 / 86	Tanyard Road	Hatboro Road to Bustleton Pike	Bike Sharrows - Existing Sidewalks	Township	1.42	3.0	3.0	3.0	2.0	0.0	1.0	0.0	1.0	1.0	14.0	9C

## Master Trail and Bicycle Plan

A	rea	Trail No	Trail Name	Begin and End Points	Trail Type	Trail Sponsor	Mileage	Cost to Northampton Township to Construct	ROW Ownership	Presence of Natural Resource and Manmade Constraints	Connectivity to Neighborhoods	Connectivity to Schools	Connectivity to Commercial	Connectivity to Parks / Existing Trails / Libraries / Senior Centers	Potential Future Connectivity	User Safety	Total Score (27 Points Maximum)	FINAL RANK OUT OF 53
	3	51 - 52	East Holland Road	Amsterdam Avenue to Old Jordan Road	Shared Use Trail & Bike Lanes - Existing Sidewalks	Township	0.82	2.0	1.0	3.0	1.0	2.0	0.0	1.0	2.0	1.8	13.8	12
	4	66	East Heron Road	Buck Road to Bridgetown Pike	Bike Sharrows - No Sidewalks	Township	0.97	3.0	3.0	3.0	2.0	0.0	0.0	0.0	2.0	0.5	13.5	13
	3	38	Rock Way (Widening of existing sidewalk)	Richboro Road to Middle Holland Road	Shared Use Trail	Township	0.86	2.0	0.3	2.0	1.0	1.0	0.0	2.0	2.0	3.0	13.3	14
	2	28	Richboro Farms Connector Trail	Joshua Drive to intersection of Hatboro Road & Almshouse Road	Shared Use Trail	Township	0.27	1.0	3.0	3.0	1.0	0.0	1.0	0.0	1.0	3.0	13.0	15
	5	87	Bustleton Pike	Tanyard Road/Anthony Drive to Upper Holland Road	Bike Lanes - Existing Sidewalk	Township	0.30	3.0	1.0	3.0	1.0	0.0	1.0	0.0	2.0	2.0	13.0	15
	3	54 - 55	Buck Road	East Holland Road to Newtown Rail Trail	Shared Use Trail	Township	0.69	1.0	0.0	2.0	1.0	2.0	1.0	1.0	2.0	3.0	13.0	15
	2	26	Hidden Meadows Connector	Hill Road to Steam Whistle Drive	Shared Use Trail	Township	0.10	3.0	3.0	2.8	0.0	0.0	1.0	0.0	0.0	3.0	12.8	18
	2	29	New Road Trailhead/Maureen Welch Trail (In Design)	New Road to Northampton Township Municipal Park	Shared Use Trail	Township	0.24	1.0	3.0	2.8	0.0	1.0	0.0	1.0	1.0	3.0	12.8	18
	4	65	Crescent Drive, Mallard Road & Heroi Road	n Holland Elementary School to Buck Road	Bike Sharrows - No Sidewalks	Township	0.41	3.0	3.0	3.0	1.0	0.0	0.0	0.0	2.0	0.5	12.5	20
	4	67	East Patricia Road/Beverly Road	Holland Road to Crescent Drive	Bike Sharrows - No Sidewalks	Township	0.67	3.0	3.0	3.0	1.0	0.0	0.0	0.0	2.0	0.5	12.5	20
	4	68	Rocksville Road	Buck Road to Wooden Bridge Road	Bike Sharrows - No Sidewalks	Township	0.77	3.0	3.0	3.0	1.0	0.0	0.0	0.0	2.0	0.5	12.5	20
	3	37	Council Rock High School South	Netwon Richoro Road to Middle Holland Road	Shared Use Trail	Township	0.07	2.0	0.3	3.0	1.0	1.0	0.0	1.0	1.0	3.0	12.3	23
2	& 5	25 / 93 - 94	Second Street Pike	Windsor Drive to Heather Road	Bike Lanes - No Sidewalks & Shared-Use Trail	Township	1.12	2.8	1.0	2.5	3.0	0.0	0.0	0.0	2.0	1.0	12.2	24

Area	Trail No	Trall Name	Begin and End Points	Trall Type	Trail Sponsor	Mileage	Cost to Northampton Township to Construct	ROW Ownership	Presence of Natural Resource and Manmade Constraints	Connectivity to Neighborhoods	Connectivity to Schools	Connectivity to Commercial	Connectivity to Parks / Existing Trails / Libraries / Senior Centers	Potential Future Connectivity	User Safety	Total Score (27 Points Maximum)	FINAL RANK OUT OF 53
3		East Holland Road (Hillcrest Elementary School)	Old Jordan Road to Buck Road	Shared Use Trail	Township	0.17	1.5	1.5	0.8	0.0	2.0	0.0	1.0	2.0	3.0	11.8	25
4	74	Holland Road	Hope Road to Churchville Lane	Shared Use Trail	Township	0.28	1.0	0.0	2.8	1.0	1.0	0.0	1.0	2.0	3.0	11.8	25
1	4	Spencer Road	Almshouse Road to Sackettsford Road	Bike Sharrows - No Sidewalks	Township	1.66	3.0	3.0	3.0	1.0	0.0	0.0	0.0	1.0	0.5	11.5	25
1	8 - 9	Hatboro Road	Almshouse to Sackettsford Road	Bike Lanes - No Sidewalks & Bike Sharrows - No Sidewalks	Township	1.62	3.0	1.0	3.0	1.0	0.0	1.0	0.0	2.0	0.5	11.5	25
1	10 - 11	Second Street Pike & Twining Ford Road	Highland Drive to Tyler State Park	Bike Sharrows - No Sidewalks	Township	1.25	2.8	2.8	1.5	2.0	0.0	0.0	2.0	0.0	0.5	11.5	25
2	22	Pulinski Road	Jacksonville Road to Hatboro Road	Bike Sharrows - No Sidewalks	Township	1.10	3.0	3.0	3.0	1.0	0.0	0.0	0.0	1.0	0.5	11.5	25
4	76	Rocksville Road	Holland Road to Buck Road	Shared Use Trail	Township	0.10	1.5	0.0	2.5	0.0	0.0	1.0	1.0	2.0	3.0	11.0	31
4	85	Neshaminy Greenway Trail (Proposed)	Bridgetown Pike to Playwicki Park	Neshaminy Greenway Trail (Proposed)	County	0.93	3.0	0.8	0.0	0.0	0.0	0.0	3.0	1.0	3.0	10.8	32
1	1	Sackettsford Road	New Hope Ivyland Railroad to Second Street Pike	Bike Sharrows - No Sidewalks	County	1.21	3.0	1.0	3.0	0.0	0.0	0.0	1.0	2.0	0.5	10.5	33
1	3	Old Jacksonville Road	Almshouse Road to Sackettsford Road	Bike Sharrows - No Sidewalks	Township	1.75	3.0	3.0	3.0	0.0	0.0	0.0	0.0	1.0	0.5	10.5	33
1	5	Grenoble Road	New Hope Ivyland Railroad to Spencer Road	Bike Sharrows - No Sidewalks	Township	0.89	3.0	3.0	3.0	0.0	0.0	0.0	0.0	1.0	0.5	10.5	33
4	63	Bridgetown Pike	East Holland Road to Newtown-Langhorne Road	Bike Sharrows - No Sidewalks	Township	1.10	3.0	1.0	3.0	1.0	0.0	0.0	0.0	2.0	0.5	10.5	33
3 & 4	44 - 45 / 61 - 62 / 64	East Holland Road	Buck Road to Bridgetown Pike	Shared Use Trail & Bike Lanes & Bike Sharrows	Township	1.29	1.5	1.0	2.0	2.0	0.0	0.0	0.0	2.0	1.8	10.3	37
4	77	Holland Road	East Patricia Road to Newtown Rail Trail	Shared Use Trail	Township	0.09	1.5	0.0	2.8	1.0	0.0	0.0	0.0	2.0	3.0	10.3	38
3	40 - 42	Holland Road	East Holland Road to Middle Holland Road	Bike Lanes - Limited Sidewalks & Shared-Use Trail	Township	0.98	2.0	0.5	2.5	2.0	0.0	0.0	1.0	1.0	1.1	10.1	39

Area	Trail No	Trall Name	Begin and End Points	Trail Type	Trail Sponsor	Mileage	Cost to Northampton Township to Construct	ROW Ownership	Presence of Natural Resource and Manmade Constraints	Connectivity to Neighborhoods	Connectivity to Schools	Connectivity to Commercial	Connectivity to Parks / Existing Trails / Libraries / Senior Centers	Potential Future Connectivity	User Safety	Total Score (27 Points Maximum)	FINAL RANK OUT OF 53
5	116	Churchville Farm	Churchville Reservoir to Holland Road	Shared Use Trail	Township	0.64	1.0	2.0	2.0	0.0	0.0	0.0	1.0	1.0	3.0	10.0	40
2	21	Jacksonville Road	Ashley Drive to Pulinski Road	Shared Use Trail	Township	0.69	0.8	2.0	2.0	1.0	0.0	0.0	0.0	1.0	3.0	9.8	41
4	60 / 83	Holland Village	Elaine Drive to Holland Commons & Holland Village Shopping Center	Bike Lanes - Proposed Sidewalks	Township	0.27	2.5	0.5	2.5	0.0	0.0	2.0	0.0	0.0	2.0	9.5	42
5	97 - 98	Lower Holland Road	Chapel Drive to Holland Road	Shared Use Trail & Bicycle Sharrows	Township	1.28	0.8	0.9	2.0	2.0	0.0	0.0	1.0	1.0	1.5	9.2	43
1	19	Advent Lutheran Church/Northamptor Bucks Co Mun Authority	n Second Street Pike to Anselm Drive	Shared Use Trail	Township	0.11	1.0	0.0	3.0	1.0	0.0	0.0	0.0	1.0	3.0	9.0	44
4	75	Holland Elementary School/Lower Bucks Holland Outdoor Recreation	Crescent Drive to Holland Road	Shared Use Trail	Township	0.25	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	3.0	9.0	44
4	78	Pine Run	Beverly Road/Mallard Road/Woodlake Drive	Shared Use Trail	Township	0.22	1.0	3.0	0.0	1.0	0.0	0.0	0.0	1.0	3.0	9.0	44
1	20	Worthington Mill Road	Second Street Pike to Neshaminy Creek	Bike Sharrows - No Sidewalks	Township	1.79	3.0	1.0	2.0	1.0	0.0	0.0	0.0	1.0	0.5	8.5	47
2	27	Bristol Road	Wordsworth Drive to Hatboro Road	Sidewalks Only	Township	0.92	2.0	0.0	2.0	0.0	1.0	0.0	3.0	0.0	0.5	8.5	47
5	106	Northampton Crest Connector Trail	Radcliffe Drive to Aqua PA Trail	Shared Use Trail	Township	0.12	1.5	0.0	3.0	0.0	0.0	0.0	0.0	1.0	3.0	8.5	47
5	96	Bustleton Pike	Hilltop Drive to Green Valley Drive	Shared Use Trail	Township	0.09	1.5	0.0	1.5	1.0	0.0	0.0	0.0	1.0	3.0	8.0	50
1	2	Bryan's Farm	Sackettsford Road to Neshaminy Creek	Shared Use Trail	Township	0.81	1.0	1.5	1.0	0.0	0.0	0.0	0.0	1.0	3.0	7.5	51
5	114 - 115	Churchville Reservoir		Shared Use Trail	Township	0.30	1.0	0.0	2.0	0.0	0.0	0.0	1.0	0.0	3.0	7.0	52
5	107 - 113	Churchville Lane	Bristol Road t Holland Road	Shared Use Trail/Floating BW & Bike Sharrows - Proposed Sidewalks	Township	1.54	0.5	0.3	0.0	1.0	0.0	0.0	1.0	1.0	1.6	5.3	53

Area	Trall No	Trall Name	Trall Type	Trail Sponsor	Mileage	ROW OWNERSHIP	NUMBER OF HOUSING UNITS CONNECTED	schools	COMMERCIAL AREAS	PARKS, EXISTING TRAILS, LIBRARIES, SENIOR CENTERS			CONNI	ECTING TR	AIL NUI	MBERS			TOTAL NUMBER OF CONNECTIONS TO OTHER PROPOSED TRAILS	FINAL RANK OUT OF 53
3, 4 & 5	47 - 50 / 6 102 - 10	9 / Newtown Rail Trail	Shared Use Trail	County	4.48	SEPTA ROW	2,109		Village Shires Shopping / Churchville Del Center / Churchville	Newtown Rail Churchville Churchville Churchville Trail (Under Nature Center Historic District Reservoir Construction)	100	101 105	99	77 51	56	54/55	43 5	7 58	12	1
2 & 5	23 / 95	New Road	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (1.52 miles)	Township	1.97	Northampton Township	1,093	Maureen Weish Churchville E.S. E.S.		Northampton Municipal Park	29	93 94	96	25 22					6	2
3	43	Old Jordan Road	Bike Sharrows - Existing Sidewalks (0.45 miles) / No Sidewalk (0.45 miles)	Township	0.89	Northampton Township	1,388	Rolling Hills Hillcrest E.S. Holland M.S. E.S.			32	39 47/48	52	53					5	3
3	30 - 35	Neshaminy Greenway Trail	Shared Use Trail & Bike Sharrows	County	3.58	Northampton Twsp/Village Shires/PennDOT	3,255	Rolling Hills E.S.	Village Shires Shopping Center	Tyler State Park Big Meadow Tyler State Park Hampton Estates Ball Trail Fields	36	39 43	57	49 50	46				7	4
5	88 - 92	Upper Holland Road	Bike Sharrows - Existing Sidewalks & Shared Use Trail	Township	2.71	Npton Bucks Muni Auth / CR School District / Twsp / Various	579	Richboro E.S. Future Sloane School	Addisville Cross Roads Commons Plaza	Existing trails  James Kinney Northampton along Middle  Senior Center Free Library Holland &  Holland Rd	87	40							2	5
3	39	Middle Holland Road	Bike Lanes - Existing Sidewalk	Township	0.38	PennDOT	998	Rolling Hills E.S.		Existing trail / wide sidewalk along Middle Holland Rd	32	38 43							3	6
1&3	12 - 18 /	6 Newtown Richboro Road	Bike Lanes - Existing Sidewalks & Shared-Use Trail	Township	2.27	Township/PennDOT/Tyler State Park	949	Council Rock South H.S.		Northampton Tyler State Park Recreation Complex  Tyler State Park Existing Trail Existing Trails Richboro Rd	30	31 38							3	7
1	6 - 7	Temperance Lane	Bike Sharrows - No Sidewalks	Township	1.80	Northampton Township	423		School House Village of Center Richboro		4	8 9							3	8
4	70 - 73 79 - 82 /	Buck Road	Shared Use Trail	Township	1.47	PennDOT/Private/Heritage Conservancy	1,118	Holland M.S. Hillcrest E.S.	Pheasant Valley Center	Existing trail on school property	68	76 65	66	74 75					6	9A
3	46	Stoneyford Road	Bike Sharrows - Existing Sidewalks	Township	0.82	Northampton Township	483			Big Meadow Park	34	35 45	64						3	9B
2 & 5	24 / 86	Tanyard Road	Bike Sharrows - Existing Sidewalks	Township	1.42	Northampton Township	988		Cross Roads Plaza		25	87							2	9C

								NUMBER OF HOUSING												TOTAL NUMBER OF CONNECTIONS TO OTHER	FINAL RANK
Are	8	Trail No	Trail Name	Trail Type	Trail Sponsor	Mileage	ROW OWNERSHIP	UNITS CONNECTED		schools	COMMERCIAL AREAS	PARKS, EXISTING TRAILS, LIB	BRARIES, SENIOR CENTERS			co	NNECTING TRAIL	NUMBERS		PROPOSED TRAILS	OUT OF 53
3		51 - 52	East Holland Road	Shared Use Trail & Bike Lanes - Existing Sidewalks	Township	0.82	PennDOT	351	Holland M.S.	Hillcrest E.S.		Trail on School District Property		56 4	3 47		53 69			5	12
4		66	East Heron Road	Bike Sharrows - No Sidewalks	Township	0.97	Northampton Township	655						65 7	2 84					3	13
3		38	Rock Way (Widening of existing sidewalk)	Shared Use Trail	Township	0.86	Northampton Township / Council Rock School District	484	Council Rock South H.S.			sidewalk along (Middle Holland S	Existing trails on Council Rock South HS property	17 3	7 39					3	14
2		28	Richboro Farms Connector Trail	Shared Use Trail	Township	0.27	Northampton Township	140			Tanner Brothers			8						1	15
5		87	Bustleton Pike	Bike Lanes - Existing Sidewalk	Township	0.30	PennDOT	388			Cross Roads Plaza			86 8	8 89		92			4	15
3		54 - 55	Buck Road	Shared Use Trail	Township	0.69	PennDOT	273	Holland M.S.	Hillcrest E.S.	Village Shires Shopping Center	Trail on School District Property		44 5	3			48		3	15
2		26	Hidden Meadows Connector	Shared Use Trail	Township	0.10	Township & Paper Street	31			Northampton Twsp Business & Tech Ctr									0	18
2		29	New Road Trailhead/Maureen Welch Trail (in Design)	Shared Use Trall	Township	0.24	Northampton Township / Council Rock School District	0	Maureen Welsi E.S.	h		Northampton Municipal Park		23						1	18
4		65	Crescent Drive, Mallard Road & Heron Road	Bike Sharrows - No Sidewalks	Township	0.41	Northampton Township	269						66 6	7 72		75 84			5	20
4		67	East Patricia Road/Beverly Road	Bike Sharrows - No Sidewalks	Township	0.67	Northampton Township	403						65 7	5 77		78			4	20
4		68	Rocksville Road	Bike Sharrows - No Sidewalks	Township	0.77	Northampton Township	490						70 7	Sidev conne to 8	tion				3	20
3		37	Council Rock High School South	Shared Use Trail	Township	0.07	Council Rock School District	216	Council Rock South H.S.			Existing trails on Council Rock HS property		38						1	23
2 &	5 2	25 / 93 - 94	Second Street Pike	Bike Lanes - No Sidewalks & Shared-Use Trail	Township	1.12	PennDOT	1,121						23 9	5 24		36			4	24

																		TOTAL NUMBER	R
							NUMBER OF HOUSING											OF CONNECTIONS TO OTHER	FINAL RANK
Area	Trail No	Trail Name	Trail Type	Trail Sponsor	Mileage	ROW OWNERSHIP	UNITS CONNECTED		SCHOOLS	COMMERCIAL AREAS	PARKS, EXISTING TRAILS, LIBRARIES, SENIOR CENTERS			CONNECTI	NG TRAIL	NUMBERS	3	PROPOSED TRAILS	OUT OF 53
3	51 - 52	East Holland Road	Shared Use Trail & Bike Lanes - Existing Sidewalks	Township	0.82	PennDOT	351 H	Holland M.S.	Hillcrest E.S.		Trail on School District Property	56 43	3 47	53 69				5	12
4	66	East Heron Road	Bike Sharrows - No Sidewalks	Township	0.97	Northampton Township	655					65 73	2 84					3	13
3	53	East Holland Road (Hillcrest Elementary School)	Shared Use Trail	Township	0.17	Northampton Township & Council Rock School District	62 H	Holland M.S.	Hillcrest E.S.		Trail/Playground at Hillcrest Elementary School	43 44	52	54				4	25
4	74	Holland Road	Shared Use Trail	Township	0.28	School District, YMCA, Private	109 H	Holland E.S.			Existing trail along Holland Road in front of Northampton Preserve	75 11	2 113	116				4	25
1	4	Spencer Road	Bike Sharrows - No Sidewalks	Township	1.66	Northampton Township	158				Fissire	5 6						2	25
1	8 - 9	Hatboro Road	Bike Lanes - No Sidewalks & Bike Sharrows - No Sidewalks	Township	1.62	PennDOT	466			Tanner Brothers		6 7	28	1				4	25
1	10 - 11	Second Street Pike & Twining Ford Road	Bike Sharrows - No Sidewalks	Township	1.25	PennDOT/Northampton Township	567				Tyler State Park Trails							0	25
2	22	Pulinski Road	Bike Sharrows - No Sidewalks	Township	1.10	Northampton Township	332					21						1	25
4	76	Rocksville Road	Shared Use Trail	Township	0.10	Northampton Township/Northampton Preserve HOA?	50			Pheasant Valley Center	Existing trail along Holland Road in front of Northampton Preserve	68 7	Sidewall connection to 82					3	31
4	85	Neshaminy Greenway Trail (Proposed)	Neshaminy Greenway Trail (Proposed)	County	0.93	Bucks County / Private Properties	22				Bucks County Core Creek Playwicki Park Open Space Park	63						1	32
1	1	Sackettsford Road	Bike Sharrows - No Sidewalks	County	1.21	PennDOT	60				Forks of Neshaminy Open Space	2 3	4	9				4	33
1	3	Old Jacksonville Road	Bike Sharrows - No Sidewalks	Township	1.75	Northampton Township	86					1 5						2	33
1	5	Grenoble Road	Bike Sharrows - No Sidewalks	Township	0.89	Northampton Township	58					3 4						2	33
4	63	Bridgetown Pike	Bike Sharrows - No Sidewalks	Township	1.10	PennDOT	161					62 8	5					2	33
3 & 4	44 - 45 / 61 - 62 / 64	East Holland Road	Shared Use Trail & Bike Lanes & Bike Sharrows	Township	1.29	PennDOT	629					53 54	46	63				4	37
4	77	Holland Road	Shared Use Trail	Township	0.09	Private Property	134					67 69	104					3	38
3	40 - 42	Holland Road	Bike Lanes - Limited Sidewalks & Shared-Use Trail	Township	0.98	Northampton Twsp/Private Property	772				Existing trail/wide sidewalk along Middle Holland Rd	92 9	3					2	39

													TOTAL NUMBER OF	
				Trail			NUMBER OF HOUSING UNITS						CONNECTIONS TO OTHER PROPOSED	FINAL RANK OUT OF
Area	Trail No	Trail Name	Trail Type	Sponsor	Mileage	ROW OWNERSHIP	CONNECTED	SCHOOLS	COMMERCIAL AREAS	PARKS, EXISTING TRAILS, LIBRARIES, SENIOR CENTERS		CONNECTING TRAIL NUMBERS	TRAILS	53
5	116	Churchville Farm	Shared Use Trail	Township	0.64	Bucks County	50			Existing trail along Holland Road in front of Northampton Preserve	74		1	40
2	21	Jacksonville Road	Shared Use Trail	Township	0.69	PennDOT	171				22		1	41
4	60 / 83	Holland Village	Bike Lanes - Proposed Sidewalks	Township	0.27	PennDOT/Multiple Private Owners for Sidewalk	64		Holland Holland Village Shopping Center				o	42
5	97 - 98	Lower Holland Road	Shared Use Trail & Bicycle Sharrows	Township	1.28	Northampton Twsp/Private	819			Pheasant Run	41 42		2	43
1	19	Advent Lutheran Church/Northamptor Bucks Co Mun Authority	N Shared Use Trail	Township	0.11	Advent Lutheran Church & Northampton Bucks Co Mun Auth	223				20		1	44
4	75	Holland Elementary School/Lower Bucks Holland Outdoor Recreation	Shared Use Trail	Township	0.25	Council Rock SD & Lower Bucks YMCA	124	Holland E.S.		Hollend Outdoor Recreation Center	67 74		2	44
4	78	Pine Run	Shared Use Trail	Township	0.22	Northampton Township	394				67		1	44
1	20	Worthington Mill Road	Bike Sharrows - No Sidewalks	Township	1.79	PennDOT	447				19		1	47
2	27	Bristol Road	Sidewalks Only	Township	0.92	Multiple Private Owners	54	Maureen Welsh E.S.		Northampton Hatboro Road Warminster Municipal Park Trail (Existing) Community Park			o	47
5	106	Northampton Crest Connector Trail	Shared Use Trail	Township	0.12	Northampton Chase HOA	77				105		1	47
5	96	Bustleton Pike	Shared Use Trail	Township	0.09	Private Property	194				95		1	50
1	2	Bryan's Farm	Shared Use Trail	Township	0.81	Northampton Township & Private	6				1		1	51
5	114 - 115	Churchville Reservoir	Shared Use Trail	Township	0.30	AQUA PA/Bucks County	76			Churchville Reservoir			o	52
5	107 - 113	Churchville Lane	Shared Use Trail/Floating BW & Bike Sharrows - Proposed Sidewalks	Township	1.54	AQUA PA/Bucks Co/Township/PennDOT	153			Churchville Nature Center	105 74		2	53

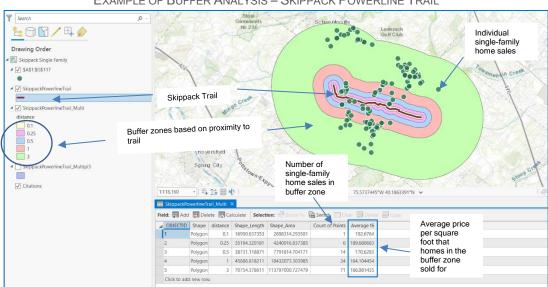
## APPENDIX D - TRAIL CONCERNS

#### **PROPERTY VALUES**

## Price per Square Foot Analysis - Methodology

The analysis consisted of the following steps:

- Mapping the location of the 6 trails included in the analysis
- Obtaining and mapping addresses, sales prices, and square footage for single-family houses sold in the townships where the 6 trails were located for the time period of February 1, 2018 through January 31, 2019.
- Once the addresses were mapped, a buffer analysis utilizing Geographic Information Systems (GIS) was conducted to include only those sales located within 3 miles of the location of the trail.
- Individual buffers within the 3 mile radius were then created as follows:
  - Within 0.1 miles (Includes homes that back to trail and are across the street)
  - 0.1 miles to 0.25 miles
  - 0.25 miles to 0.50 miles
  - 0.5 miles to 1.0 miles
  - 1.0 miles to 3.0 miles
- GIS tools were then used to calculate the average price per square foot for the houses sold in each of the buffer zones.



EXAMPLE OF BUFFER ANALYSIS - SKIPPACK POWERLINE TRAIL

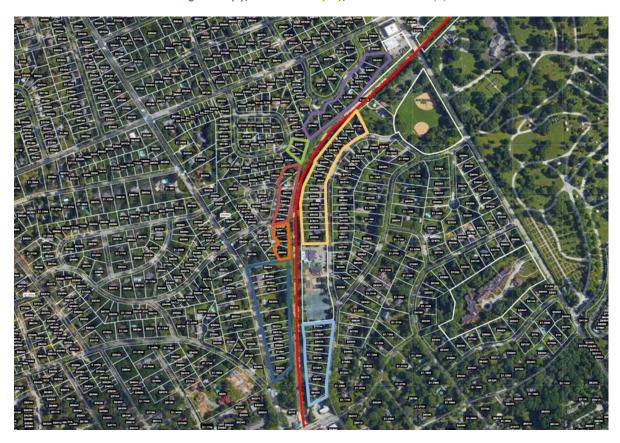
Results were then aggregated across the six trails included in the analysis.

# Rate of Real Estate Appreciation following the opening of the Trail - Methodology

- For each trail, an inventory of houses backing onto the trail was identified. This resulted in a total of 59 houses backing to the Cynwyd Heritage Trail and 141 homes to the Pennsy Trail. Using Zillow data, we were also able to obtain the historical estimated home values extending as far back as the opening dates for each of the trails. The Cynwyd Heritage Trail opened in October 2011 and the Pennsy Trail in January 2016. For the Cynwyd Heritage Trail we looked at real estate appreciation from September 2011 to September 2018 (7 years) and from December 2015 to December 2018 (3 years) for the Pennsy Trail.
- For comparison purposes, we also looked at the zip code in which the trail is located, and the surrounding municipality. We also looked at real estate appreciation rates in Village Shires, Zip Code 18966 which encompasses the area which the Newtown Rail Trail would traverse, and Northampton Township as a whole.

Map of Houses Located Adjacent to Cynwyd Heritage Trail (----) with Street Names and Number of Houses

Conshohocken State Road (13), Snowden Road (4), E. Lodges Lane (6), Levering Circle (2), Rolling Road (9), Trevor Road (17), Llandrillo Road (8)



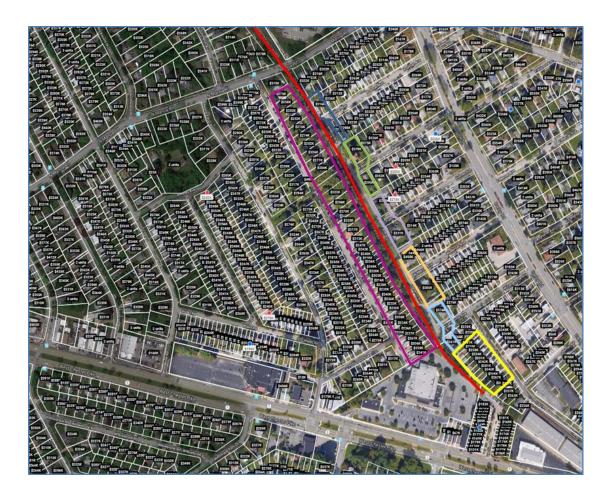
Maps of Houses Located Adjacent to Pennsy Trail (----) with Street Names and Number of Houses





Harvard Road (1), Yale Road (2), Princeton Road (2), W. Manoa Road (1), Washington Avenue (26), N. Manoa Road (2)





## Turnover of Houses within a year following the opening of the trail

- To determine this we collected the number of property sales for homes immediately adjacent to the trail for the year prior to the opening of the trail, and the year following the opening of the trail.
- We also looked at the number of sales in those same periods for the zip codes in which the trails are located. This provided a basis of comparison to determine if the percentage of property turnover was higher for properties adjacent to the trail as compared to the surrounding area.

## Prior Research Addressing the Relationship between Trails and Property Values

Investing in Our Future - Quantifying the Impact of Completing the East Coast Greenway in the Delaware River Watershed (2019)

 ${\it East Coast Greenway Alliance, NV5, and Econsult Solutions, Inc.}\\$ 

 $\frac{https://www.greenway.org/uploads/attachments/cjtonj33o1zqb23qijb3fza0l-ecg-in-the-delaware-valley-report-final-reduced.pdf$ 

 "There are numerous studies, including hedonic regression analyses performed by Econsult Solutions, which demonstrate the beneficial impact that greenways and open space have on residential property values, after controlling for variables such as home quality, distance to downtowns, and seasonality. Based on research and previous analysis, a premium of 5 percent was calculated for homes within a quarter mile of a trail."

#### The Impact of Central Ohio Trails (2015)

Mid-Ohio Regional Planning Commission and the Central Ohio Greenways and Trails Group <a href="https://headwaterseconomics.org/wp-content/uploads/Trail">https://headwaterseconomics.org/wp-content/uploads/Trail</a> Study 106-OH-Central-Trails-Impact.pdf

- "No relationships between property values and proximity to trails were observed. While some studies in other cities in the United States have found positive associations, others have not. This outcome therefore is consistent with other findings in the literature."
- "These analyses show there are no adverse effects associated with 10 different trails in Franklin and Delaware Counties."

## The Economic Value of Protected Open Space in Southeastern Pennsylvania (2011) Greenspace Alliance and Delaware Valley Regional Planning Commission

http://economyleague.org/files/Protected Open Space SEPA 2-11.pdf
http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr 008790.pdf

- "Calculations based on home sales within Radnor show that homes within a quarter-mile of the Radnor Trail can attribute an estimated \$69,139 dollars of additional value to this proximity."
- "Calculations based on home sales near the Perkiomen Trail show that homes within a quarter-mile of the Trail can attribute an estimated \$4,766 dollars of additional value to this proximity."
- "In Bucks, Chester, Delaware, and Montgomery counties, homes immediately adjacent to protected open space can claim an average of \$10,000 in additional value over comparable homes farther than one mile from open space, and homes a half-mile from open space enjoy an average increase of \$5.000."

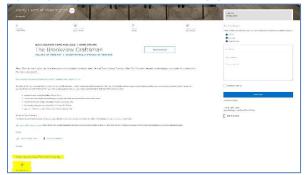
# The Impact of the Little Miami Scenic Trail on Single Family Residential Property Values (2008) Duygu Karadeniz, University of Cincinnati School of Planning https://headwaterseconomics.org/trail/22-miami-scenic-trail/

"This study found that the Little Miami Scenic Trail in southwest Ohio is associated with higher property values for nearby properties, across the urban, suburban, and rural sections of the trail. On average, homes sell for an additional \$7 for every foot closer to the trail, up to about a mile away from the trail. For example, a house a half mile away from the trail would sell, on average, for \$18,612 less than a house that is identical in all other aspects but is adjacent to the trail."

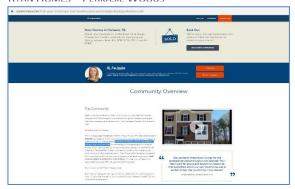
## Marketing of Trails as a Community Amenity

## Homebuilder Websites Promoting Trails - Additional Examples

TOLL BROTHERS - PERRY FARM AT WARRINGTON



RYAN HOMES — PERKASIE WOODS



DR HORTON HOMEBUILDER

WEBSITE – FILTER TOOL TO FIND COMMUNITIES WITH TRAILS



TOLL BROTHERS — ENCLAVE AT ELLIS PRESERVE NEWTOWN SQUARE — DELAWARE COUNTY



PULTE HOMES - TICE ESTATES / DEER VALLEY (PERKASIE)



DR HORTON – ARCADIA STATION (SCHWENKSVILLE)



TOLL BROTHERS – LISETER (NEWTOWN SQUARE –



TOLL BROTHERS — ENCLAVE AT THE PROMENADE

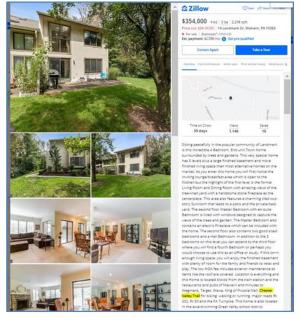
UPPER DUBLIN TOWNSHIP — MONTGOMERY COUNTY

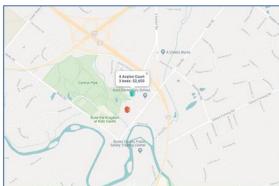


Trails along perimeter of communities

### Real Estate Listings highlighting the Proximity to Trails - Additional Examples







About a Avviinon Court

Beautiful expended 'Blandoor' model (2700+sch. 3 bedroom, 2.5 bath)
available for rent in the supplit after Deylestoom Station townhome
community. Wave, or statice Its Deylestoom's Certain Fair, Needles Its
and Kutz elementary school. The main floor features hardwood foots and
ceramic tell throwing or static Blandoor food and room ceramic cell microphous a compended for plan consisting of the highing room,
diring room, family room, each in ktocher, Florida room, and powder room. 9
fire high ceilings and oversized widnoors food all rooms with abundant
natural light. Crown moidling, a tray ceiling, custom trim, and a double side
fregiblica era et few of the main floor's stand out features. The each in ktoche
has new granific counter topos, stainless steel appliances, and fono if
cabinet spece. Siding glass doors in the Florida soom lade for an expansive
IPR hardwood deck complete with an outdoor speaker system perfect for
entertaining. Disstrain includes the Matter Bedroom with try gerilling, crown
moidling, walk-in closest, and attached master shin with large exolating tub.
Two additional bedrooms with crown midding, a hall ball and the leandy
room complete the upstains. Head downstains to the spocious custom
frished lower level featuring beautiful custom bulls in adhered yomoprie
with freplace, stone curround, custom timi work, surround sound speakers
and pierry of storage. Wilk out the silling glass doos sirectly not to the
custom power patio and landscaped gurden. The lower level also provides
inside access to the 2-org sprage and additional storage. Located just 2
miles to Doylestown Borough with great thooping and restauratin, minutes
to route 61 and the 202 bypass, and within the highly regarded Certail
Buick School District, this home is perfect for just about anyone. Potential
terrans will registe background and certed thecks, and non peris or should.



This beautifully updated and expanded 1920 stone colonial is located in Bala Cymyyd-s best neighborhood. Containing 3 stones, 4 bedroom 3.5 baths, and a finished basement, all surrounded by towering trees and green grounds, this light-fillid house has everything, including heated marble and the floors, brain frew AC and heating, and a flow that works for families and entertaining. A marble entrance Foyer with heated floors opens to a spacious Living Room with theorativo of floors and a freelpable or on one side and to a floring Room with decorative molidings on another. A beautiful Richor and the granite countertops and attached Breakfast Area will take you to a spacious Family Room with marble floor and oversized windows looking out over an expansive flagstone path. The Laundry Room is conveniently located on the main level along with an additional first floor play room? Den with heated floors and abundance of natural light along with a second gas freelpaloc. The second floor includes an extra large Master Bedroom with a valuated ceiling; string area and beautifully renovated Bathroom with heated floor and jaccuzit style tub. Two additional Bedrooms and a hallway bath with jaccuzit tub are also on the same level. The third floor includes a Bedroom with a walk in closest and full Bathroom. The finished iower level includes an Office and recreation space, as well as additional storage. Home systems are completed updated, including AC, heating, smart home wring (including Next thermostats), many windows, and minisplits. Located in the award-winning Lover, Merion School District, close to major highways and walking distance to Cymyyd Tran staffolion. Cymyyd frait fathage Tran. Safavlock, downtown Bala and new Cymwyd Club pool. Make an appointment to see this magnificent house today.



516 Maplewood Rd., Wayne, PA 19087 5 bedrooms, 3 full and 3 half bathrooms, 6,791 square feet, \$1,390,000

This handsome center-hall Colonial features three full floors of living space just steps from the Radnor Trail.

amenities

include a third floor rec room, a family room with limestone floors and slate fireplace, a huge rear patio for outdoor entertaining, and a sensitively designed 1998 extension that added sun rooms on the first and second floors. In the basement is a large indoor entertainment space with home theater, wet bar, powder room and wine cellar. A detached 3-car garage sits on the property as well. [Team Pulos | BHHS Fox & Roach]

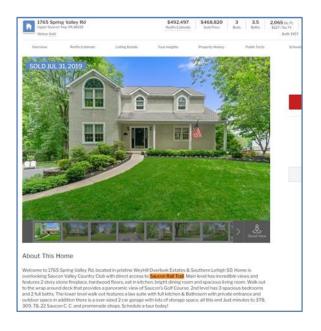
#### Master Trail and Bicycle Plan







Welcome to your beautiful Colonial style home in Brayton Gardens! This 4 bedroom, 2 1/2 bath home boasts over 2,300 sq ft., not including the finished basement, which adds an additional 1,000 plus sq ft. Plus there is an over-sized two car garage. Pried in ownership is seen through out the home. First floor features an open floor plan with plenty of natural light. The great sized family room has gas fireplace, recessed lighting and ac celling fan. The kitchen has ample counter and cabinet space, a great sized pantry, breakfast area with newer sliding glass doors out to the deck. Laundy/muld room on the first floor. This level is completed by a formal dining room, living room, and powder room. When you go upstairs, you will find four great sized bedrooms perfect for all. The master bedroom is exactly what you have been looking for 1-lis 1 Tri2, with large walkin closet and master bath with a large shower stall and a double vanity sink with corian counters. Moving on to the finished basement, there are four multi-purpose areas that all flow nito each other. The bar area even has two full sized booths! Caming area is perfect for pool, darts, and hanging out. Off to the other side, you can dance or workout on your Marley floor. Addition storage area finishes the basement area. Battery back-up sump pump will keep your basement dry. Outside is just as great as the inside. Property is a halface, with 12 1x16 tex deck, with additional side deck cooking area, complete with a natural gas grill. Great development, with Baryton Graden will be and within walking sittance to the new Great Blue Heron Park. You will love the privacy that this home offers and the entertaining potential. Come see for yourself you will not be disappointed.



## **Crime Analysis**

The analysis consisted of the following steps:

 Obtained available crime statistics for the municipalities in which the trails analyzed are located from the following websites:

Radnor Trail - <a href="https://spotcrime.com/pa">https://spotcrime.com/pa</a>

Pennsy Trail - https://www.haverfordtownship.org/department/blotter.php?fDD=4-58

- Formatted and consolidated the crime statistics to focus only on residential streets by removing crime
  incidents and arrests that took place in commercial areas, school property, colleges and universities,
  etc. This was done to provide a like comparison for most of Northampton Township which is primarily
  residential in nature. This was done on a block by block basis as some streets are both residential and
  commercial.
- Obtained housing unit counts by type for the respective municipalities from the American Fact Finder website as part of the United States Census Bureau. The source of the information was from the SELECTED HOUSING CHARACTERISTICS information from the 2012-2016 American Community Survey 5-Year Estimates.

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\_16\_5YR\_DP\_04&prodType=table

Housing counts were then adjusted to remove apartments and houses located in the commercial areas
identified above. This was done by accessing the Delaware and Montgomery counties Property Search
databases and searching and identifying residential properties, based on land use codes, in the
corresponding blocks and streets identified in the crime statistics. Again, this was done to ensure that
we were then looking at housing counts only in residential areas.

http://delcorealestate.co.delaware.pa.us/pt/search/advancedsearch.aspx?mode=advanced https://propertyrecords.montcopa.org/pt/search/advancedsearch.aspx?mode=advanced

- Once crime incidents and arrests and housing counts were isolated to residential areas, we then
  identified those incidents and housing counts on streets adjacent to the trail.
- Crime rates were then calculated by dividing the number of crimes/arrests by the housing counts for the municipality/area in total, the areas adjacent to the trail, and the remaining portion of the area or municipality. This calculation identified the percentage of homes that had experienced some type of criminal activity or arrest.

Example: Crime incidents/arrests 184
Housing units 5,000

Housing units 5,000 184 incidents / 5,000 housing units = 3.68%

• In addition, the percentage of overall crime which occurred in the areas adjacent to the trail and outside of the trail were compared to the percentage of residential housing units. In other words, if the houses adjacent to the trail represented only 5% of total housing units but 10 percent of crime incidents, then it would appear that houses closer to trails account for a disproportionate amount of crime incidents. Following are the detailed analyses for each trail, followed by the crime incident reports.

	Total	Adj to		Remainder	
	Township	Trail	Percent	of Twsp	Percent
Total Arrests & Crime Incidents	1,239	54	4.4%	1,185	95.6%
Arrests	181	8	4.4%	173	95.6%
Driving Under the Influence	7	0	0.0%	7	100.0%
Underage Drinking	6	0	0.0%	6	100.0%
Narcotics	20	0	0.0%	20	100.0%
Public Drunkeness	4	0	0.0%	4	100.0%
Not Available	144	8	5.6%	136	94.4%
Total Arrests	181	8	4.4%	173	95.6%
Crime Incidents					
Assaults	115	3	2.6%	112	97.4%
Burglary	45	4	8.9%	41	91.1%
Other	12	0	0.0%	12	100.0%
Robbery	2	0	0.0%	2	100.0%
Shootings	0	0	-	0	-
Theft	740	33	4.5%	707	95.5%
Vandalism	144	6	4.2%	138	95.8%
Crime Incidents	1,058	46	4.3%	1,012	95.7%
Total Arrests	181	8	4.4%	173	95.6%
Total Crime Incidents	1,058	46	4.3%	1,012	95.7%
Total Arrests & Crime Incidents	1,239	54	4.4%	1,185	95.6%
Total Housing Units	8,069	403	5.0%	7,666	95.0%
Arrests - Percent of Housing Units experiencing	2.2%	2.0%		2.3%	
Crime Incidents - Percent of Housing Units experiencing	13.1%	11.4%		13.2%	
Arrests + Crime Incidents - Percent of Housing Units experiencing	15.4%	13.4%		15.5%	

	T-4-1	Adj to		Remainder of	
	Total	Pennsy			B
Total Arrests & Crime Incidents	Township 591	Trail 9	Percent 1.5%	Haverford Twsp 582	Percent 98.5%
Total Allests & Cliffe Hickerits	331	,	1.5/6	302	30.370
Arrests	90	2	2.2%	88	97.8%
Assault	16	0	0.0%	16	100.0%
Controlled Substance/Marijuana	25	2	8.0%	23	92.0%
DUI	20	0	0.0%	20	100.0%
Loitering	8	0	0.0%	8	100.0%
Theft	5	0	0.0%	5	100.0%
Other	16	0	0.0%	16	100.0%
Crime Incidents	501	7	1.4%	494	98.6%
Burglary	14	0	0.0%	14	100.0%
Criminal Mischief	30	0	0.0%	30	100.0%
Disorderly Conduct/Public Drunkeness	19	0	0.0%	19	100.0%
Forgery/Fraud/Identity Theft	161	6	3.7%	155	96.3%
Theft	215	1	0.5%	214	99.5%
Vandalism	49	0	0.0%	49	100.0%
Other	13	0	0.0%	13	100.0%
Total Arrests	90	2	2.2%	88	97.8%
Total Crime Incidents	501	7	1.4%	494	98.6%
Total Arrests & Crime Incidents	591	9	1.5%	582	98.5%
Total Housing Units	16,273	141	0.9%	16,132	99.1%
Arrests - Percent of Housing Units experiencing	0.6%	1.4%		0.5%	
Crime Incidents - Percent of Housing Units experiencing	3.1%	5.0%		3.1%	
Arrests + Crime Incidents - Percent of Housing Units experiencing	3.6%	6.4%		3.6%	

	Type of Crime	Block	Street	Adjacent to Pennsy Trail	Total Count	Count Adj to Pennsy Trail	Date
Δrrest	- Assault (Aggravated & Simple)	200 block of	Strathmore Road		1		05/10/19
741630	, south ( 165 a rate a a simple)	200 block of	Stratimore noda		•		03/10/13
Arrest	- Assault (Aggravated & Simple) / Reckless Endangerment	3500 block of	Darby Road		1		12/17/18
Arrest	- Assault (Aggravated & Simple) / Reckless Endangerment	400 block of	Glendale Road		1		03/11/19
Arrest	- Assault (Aggravated)	100 block of	Mill Road		1		09/27/19
Arrest	- Assault (Aggravated) / DUI / Theft / Receiving Stolen Property	2600 block of	Chestnut Avenue		1		07/16/19
	- Assault (Simple) / Disorderly Conduct / Public Drunkenness - Simple Assault / Criminal Mischief / Harassment	Unit block of 400 block of	Downs Circle Steel Road		1		08/08/19 10/14/19
Arrest	- Simple Assault / Harassment	800 block of	Aubrey Avenue		1		09/03/19
Arrest	- Simple Assault / Harassment	800 block of	Aubrey Avenue		1		09/03/19
	- Simple Assault / Harassment	400 block of	Bryan Street		1		04/23/19
	- Simple Assault / Harassment - Simple Assault / Harassment	500 block of 200 block of	Country Club Lane Kathmere Road		1		01/19/19 06/08/19
	- Simple Assault / Harassment	200 block of	Kathmere Road		1		06/08/19
	- Simple Assault / Harassment	400 block of	Steel Road		1		10/14/19
	- Simple Assault / Harassment	1400 block of	Windsor Park Lane		1		06/11/19
	- Simple Assault / Marijuana	Unit block of	Golf House Road		1		03/29/19
	- Controlled Substance		Mount Pleasant and Fairmount Roads		1		12/29/18
Arrest	- Controlled Substance	Unit block of	N. Drexel Avenue		1		08/06/19
Arrest	- Controlled Substance / Assault (Aggravated) / Disorderly Conduct	100 block of	Rodney Circle		1		07/08/19
	- Controlled Substance / Drug Parapharnalia	600 block of	Ashurst Road		1		05/03/19
	- Controlled Substance / Drug Parapharnalia	900 block of 400 block of	Old Manoa Road Glendale Road		1		03/22/19
	- Controlled Substance / Drug Paraphernalia - Controlled Substance / Drug Paraphernalia	400 block of	Glendale Road		1		08/24/19
	- Controlled Substance / Drug Paraphernalia	100 block of	Harvard Road	Υ	1	1	06/28/19
	- Controlled Substance / Drug Paraphernalia		Haverford Road and Haverford Court		1		02/21/19
Arrest	- Controlled Substance / Drug Paraphernalia	900 block of	Old Manoa Road		1		03/22/19
Arrest	- Controlled Substance / Drug Paraphernalia	Unit block of	E. Park Road		1		03/23/19
Arrest	- Controlled Substance / Drug Paraphernalia	800 block of	Penn Street		1		07/01/19
	Controlled Substance / Drug Paraphernalia / Public Drunkenness	100 block of	Brentwood Road		1		04/07/19
	- Marijuana - Marijuana	1100 block of 2400 block of	Garfield Avenue Hollis Road		1		05/01/19 01/10/19
Δrrest	- Marijuana / Drug Parapharnalia / Theft	500 block of	Circle Drive		1		03/09/19
Arrest	- Marijuana / Drug Paraphernalia - Marijuana / Drug Paraphernalia - Marijuana / Drug Paraphernalia	400 block of	Brentwood Road Burmont and Steel Roads		1		03/12/19 06/10/19
Arrest	- Marijuana / Drug Paraphernalia	1300 block of	Burmont Road		1		01/15/19
	- Marijuana / Drug Paraphernalia - Marijuana / Drug Paraphernalia	600 block of	Darby and Woodcroft Roads Dayton Road		1		04/06/19 12/06/18
	- Marijuana / Drug Paraphernalia		Dill Drive and James Drive		1		04/10/19
	- Marijuana / Drug Paraphernalia	400 block of	Ardmore Avenue		1		04/04/19
	- Marijuana / Drug Paraphernalia	700 block of	Woodland Drive	Υ	1	1	02/13/19
Arrest	- Marijuana / Drug Paraphernalia / Public Drunkenness - DUI	2600 block of	Darby Road Bellemead and W. Marthart Avenue		1		04/12/19 01/25/19
Arrest		200 block of	Buck Lane		1		12/30/18
Arrest			Burmont and Ellston Roads		1		06/24/19
Arrest		Unit block of	Colonial Road		1		12/29/18
Arrest		Unit block of 1600 block of	Grove Place Lawrence Road		1		02/01/19 01/06/19
Arrest		1600 block of	Lawrence Road		1		10/26/19
Arrest			W. Ardmore Avenue and Ellis Road		1		12/20/18
Arrest	- DUI / Careless Driving		E. Manoa Road and Karakung Drive		1		03/23/19
	- DUI / Careless Driving / Public Drunkenness	Unit block of	Kathmere Road  Achille Road and Roosevelt Avenue		1		09/17/19
	- DUI / Controlled Substance - DUI / Controlled Substance		Achille Road and Roosevelt Avenue  Crescent Hill Road and Rose Tree Lane		1		09/13/19
	- DUI / Controlled Substance		Earlington and Strathmore Roads		1		02/08/19
	- DUI / Marijuana	1600 block of	Colony Lane		1		04/05/19
	- DUI / Marijuana		E. Township Line and Bewley Roads		1		01/27/19
	- DUI / Other - DUI / Other	400 block of	Ardmore Avenue and County Line Road  Earlington Road		1		02/20/19
	- DUI / Other		Vincent Road and Bryan Street		1		03/08/19
Arrest	- DUI / Other - DUI / Other	100 block of	W. Westwood Park Drive Windsor Park Lane and Walnut Hill Lane		1		12/03/18 09/17/19

Type of Crime	Block	Street	Adjacent to Pennsy Trail	Total Count	Count Adj to Pennsy Trail	Date
1,750.0.0			,,			
Arrest - Loitering / Trespass / Public Drunkenness / Disorderly Conduct	1400 block of	Brierwood Road		1		08/04/19
Arrest - Loitering and prowling at night	1500 block of	Lawndale Avenue		1		05/22/19
Arrest - Loitering and prowling at right  Arrest - Loitering and prowling at night	1300 01000 01	Tenby and E Park Roads		1		05/08/19
Arrest - Lottering and prowning at hight		reliby and L Park Roads		1		03/08/13
Arrest - Loitering and prowling at night / Theft (from Vehicle)	300 block of	Campbell Avenue		1		01/26/19
Arrest - Loitering and prowning at highly Thert (from Vehicle)	300 DIOCK OI	Campbell Avenue		1		01/26/19
Arrest - Loitering and prowling at night / Theft (from Vehicle)	200  -   f	Devile Devil				04/22/40
Arrest - Loitering and prowling at night / Thert (from Venicle)	300 block of	Davis Road		1		04/22/19
						00/45/40
Arrest - Loitering and prowling at night / Theft (from Vehicle)	Unit block of	E. Langhorne Avenue		1		08/15/19
Arrest - Loitering and prowling at night / Theft (from Vehicle)	200 block of	Farnham Road		1		02/22/19
Arrest - Loitering and prowling at night / Trespass / Theft	100 block of	Grove Place		1		07/23/19
Arrest - Theft (from Vehicle)	300 block of	Davis Road		1		04/22/19
Arrest - Theft (from Vehicle)	300 block of	Davis Road		1		04/22/19
Arrest - Theft (from Vehicle)	Unit block of	Upland Road		1		05/03/19
Arrest - Theft / Receiving Stolen Property	Unit block of	Sycamore Road		1		02/13/19
Arrest - Theft by Taking	1600 block of	Rose Glen Road		1		02/19/19
Arrest - Trespass / Burglary	800 block of	Aubrey Avenue		1		10/28/19
Arrest - Trespass / Burglary	2400 block of	Merwood Lane		1		09/05/19
Arrest - Warrant	400 block of	Colfax Road		1		02/08/19
Arrest - Warrant	100 block of	E. Benedict Avenue		1		10/15/19
Arrest - Warrant	1100 block of	Garfield Avenue		1		06/24/19
Arrest - Warrant	100 block of	Greenbriar Lane		1		06/21/19
Arrest - Warrant		Holbrook and Bennington Roads		1		08/17/19
Arrest - Warrant	500 block of	Howell Lane		1		04/13/19
Arrest - Warrant	100 block of	Juniper Road		1		09/08/19
Arrest - Criminal Contempt	200 block of	Campbell Avenue		1		09/03/19
Arrest - Criminal Contempt	500 block of	Country Club Lane		1		03/22/19
Arrest - Criminal Contempt	800 block of	Martin Avenue		1		09/17/19
Arrest - Criminal Contempt	800 DIOCK OI	IVIAI UII AVEIIGE		1		03/17/13
Arrest - Rape (Attempted) / Simple Assault / Trespass	2600 block of	Chestnut Avenue		1		03/30/19
Arrest - Forgery / Theft	Unit block of	Princeton Road	Only 100 block	1		05/23/19
Arrest - Forgery / Theft / Fraud	1200 block of	Steel Road		1		05/23/19
Arrest - Fraud / Identity Theft	100 block of	Colfax Road		1		09/19/19
Burglary	300 block of	Ardmore Avenue		1		02/06/19
Burglary	800 block of	Aubrey Avenue		1		07/24/19
Burglary	2700 block of	Belmont Avenue		1		05/19/19
Burglary	Unit block of	Blakely Road		1		02/15/19
Burglary	800 block of	Cricket Avenue		1		06/09/19
Burglary	Unit block of	Decatur Road		1		08/22/19
Burglary	500 block of	Fairmont Road		1		02/02/19
Burglary	1000 block of	Sproul Road		1		10/11/19
Burglary	1300 block of	Steel Road		1		12/20/18
Burglary	2200 block of	Steel Road		1		04/08/19
Burglary	1700 block of	Tyson Road		1		07/26/19
Burglary	600 block of	Valley View Road		1		09/19/19
Burglary - Attempted	1200 block of	Center Road		1		03/28/19
Burglary - Attempted	Unit block of	Myrtle Avenue		1		06/09/19
Criminal Mischief	800 block of	Aubrey Avenue		1		03/03/19
Criminal Mischief	500 block of	Brookline Boulevard		1		08/22/19
Criminal Mischief	2400 block of	Bryn Mawr Avenue		1		02/24/19
Criminal Mischief	1500 block of	Burmont Road		1		10/17/19
Criminal Mischief	2700 block of	Chestnut Avenue		1		04/14/19
Criminal Mischief Criminal Mischief	100 block of	Clearfield Road		1		02/18/19
	100 block of	E. Golfview Road		1		08/18/19
Criminal Mischief Criminal Mischief	200 block of 300 block of	E. Hathaway Lane E. Hathaway Lane		1		08/06/19
				1		08/06/19
Criminal Mischief	1200 block of	Ellston Road		1		06/19/19
Criminal Mischief	100 block of	Friendship Road		1		01/11/19
Criminal Mischief	100 block of	Friendship Road		1		02/05/19
Criminal Mischief	100 block of	Friendship Road		1		05/15/19
Criminal Mischief	1300 block of	Harrington Road		1		04/16/19
Criminal Mischief	400 block of	Heatherwood Road		1		10/29/19
Criminal Mischief	200 block of	James Drive		1		10/13/19
Criminal Mischief	200 block of	Lee Circle		1		07/16/19
Criminal Mischief	100 block of	Lexington Avenue		1		02/18/19
Criminal Mischief	1200 block of	Manor Road		1		08/08/19
Criminal Mischief	Unit block of	Meadows Lane		1		05/22/19
Criminal Mischief	1000 block of	Pennsylvania Avenue		1		12/15/18
Criminal Mischief	2400 block of	Poplar Road		1		07/16/19
Criminal Mischief	1300 block of	Rose Tree Lane		1		12/18/18
Criminal Mischief		Township Line Road and Farwood Road		1		06/06/19
Criminal Mischief	1400 block of	Virginia Avenue		1		02/08/19
Criminal Mischief	200 block of	W. Hillcrest Avenue		1		12/28/18
Criminal Mischief	200 block of	W. Hillcrest Avenue		1		07/01/19
Criminal Mischief	Unit block of	W. Marthart Avenue		1		06/24/19
Criminal Mischief	300 block of	Windsor Park Lane		1		06/24/19
Criminal Mischief	Unit block of	Woodbine Road		1		10/12/19
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					Count Adj	
T (6.1	St I			Total	to Pennsy	5
Type of Crime	Block		Adjacent to Pennsy Trail	Count	Trail	Date 05/10/10
Disorderly Conduct Disorderly Conduct	300 block of 1000 block of	E. Eagle Rd Garfield Avenue		1 1		05/10/19 05/19/19
Disorderly Conduct	200 block of	Marple Road		1		07/31/19
Disorderly Conduct	100 block of	Mill Road		1		06/01/19
Disorderly Conduct	200 block of	Pembroke Road		1		12/22/18
Disorderly Conduct	300 block of	Walnut Place		1		09/21/19
Public Drunkenness	700 block of	Buck Lane		1		01/15/19
Public Drunkenness		E. Manoa and Earlington Roads		1		12/30/18
Public Drunkenness	200 block of	E. Township Line Road		1		07/12/19
Public Drunkenness	1100 block of	Garfield Avenue		1		05/25/19
Public Drunkenness		Hathaway Lane and Merwood Road		1		05/17/19
Public Drunkenness		Haverford and Overhill Roads		1		07/27/19
Public Drunkenness		Haverford and Overhill Roads		1		07/27/19
Public Drunkenness	200 block of	Lincoln Avenue		1		08/02/19
Public Drunkenness Public Drunkenness	Unit block of	Nancy Drive		1		08/24/19
Public Drunkenness Public Drunkenness	Unit block of 200 block of	Ormond Avenue Pine Ridge Road		1		07/22/19 02/25/19
Public Drunkenness	Unit block of	Ralston Avenue		1		08/09/19
Public Drunkenness	1400 block of	Windsor Park Lane		1		01/19/19
Forgery	800 block of	Garden Avenue		1		07/19/19
Forgery	2900 block of	Oakford Road		1		04/05/19
Fraud	400 block of	Achille Road		1		10/13/19
Fraud	1200 block of	Allston Road		1		08/02/19
Fraud	1300 block of	Annabella Avenue		1		04/15/19
Fraud	1300 block of	Annabella Avenue		1		04/17/19
Fraud	300 block of	Ardmore Avenue		1		08/15/19
Fraud	1500 block of	Ashton Road		1		03/02/19
Fraud	Unit block of	Bambi Lane		1		02/22/19
Fraud	Unit block of	Barbara Lane		1		10/10/19
Fraud	800 block of	Biddle Street		1		07/04/19
Fraud	800 block of	Biddle Street		1		10/05/19
Fraud	400 block of	Blakely Road		1		02/25/19
Fraud Fraud	1200 block of 2300 block of	Bon Air Road Bryn Mawr Avenue		1 1		02/20/19 07/26/19
Fraud	2100 block of	Bryn Mawr Place		1		05/23/19
Fraud	1000 block of	Carroll Road		1		01/05/19
Fraud	1300 block of	Center Road		1		10/24/19
Fraud	200 block of	Charles Drive		1		08/20/19
Fraud	2400 block of	Chestnut Avenue		1		01/19/19
Fraud	100 block of	Clamar Avenue		1		04/11/19
Fraud	200 block of	Colfax Road		1		02/03/19
Fraud	Unit block of	Dartmouth Road		1		08/14/19
Fraud	1400 block of	Dorchester Road		1		12/30/18
Fraud	100 block of	E. Turnbull Avenue		1		01/28/19
Fraud	100 block of	Earlington Road		1		12/27/18
Fraud	100 block of	Earlington Road		1		02/21/19
Fraud	400 block of	Earlington Road		1		01/30/19
Fraud	Unit block of	Foster Avenue		1		04/04/19
Fraud	800 block of	Garden Avenue		1		01/04/19
Fraud Fraud	300 block of 500 block of	Glen Ridge Drive Glendale Road		1		01/29/19
Fraud	100 block of	Green Lane		1		04/03/19 05/07/19
Fraud	300 block of	Greenbriar Lane		1		01/30/19
Fraud	300 block of	Greenbriar Lane		1		05/17/19
Fraud	400 block of	Greenview Lane		1		06/12/19
Fraud	1600 block of	Hampton Road		1		09/20/19
Fraud	1300 block of	Harrington Road		1		07/23/19
Fraud	Unit block of	Harvard Road	Only 100 block	1		12/20/18
Fraud	100 block of	Hastings Avenue		1		12/12/18
Fraud	200 block of	Hathaway Lane		1		02/16/19
Fraud	400 block of	Heatherwood Road		1		02/13/19
Fraud	Unit block of	W. Hillcrest Avenue		1		09/12/19
Fraud	2500 block of	Hirst Terrace		1		07/18/19
Fraud	2600 block of	Hirst Terrace		1		08/12/19
Fraud	700 block of	Howard Avenue		1		09/21/19
Fraud	200 block of 300 block of	James Drive		1		12/26/18
Fraud Fraud	500 block of	Kathmere Road Kathmere Road		1		02/05/19 10/10/19
Fraud	400 block of	Lawrence Road		1		03/07/19
Fraud	1400 block of	Leedom Road		1		03/07/19
Fraud	Unit block of	Llandillo Road		1		09/06/19
Fraud	1500 block of	Melrose Avenue		1		09/03/19
Fraud	Unit block of	W. Mercer Avenue		1	1	07/25/19
Fraud	600 block of	Merion Avenue		1		04/28/19
Fraud	100 block of	N. Ormond Avenue		1		10/24/19
Fraud	2400 block of	Olcott Avenue		1		12/07/18
Fraud	2200 block of	Olcott Avenue		1		05/17/19
Fraud	2400 block of	Olcott Avenue		1		06/19/19
Fraud	900 block of	Old Manoa Road		1		07/01/19

				Total	Count Adj to Pennsy	
Type of Crime	Block 200 block of	Street	Adjacent to Pennsy Trail	Count	Trail	Date 01/09/19
Fraud Fraud	300 block of Unit block of	Olympic Avenue Princeton Road	Only 100 block	1 1		05/11/19
Fraud	Unit block of	Princeton Road	Only 100 block	1		06/14/19
Fraud	Unit block of	Ralston Avenue	0.11, 100 block	1		04/03/19
Fraud	Unit block of	Ralston Avenue		1		04/27/19
Fraud	3000 block of	Robin Lane		1		08/26/19
Fraud	100 block of	Rockland Road		1		04/29/19
Fraud	200 block of	Rodmor Road		1		02/09/19
Fraud	100 block of	Rodney Circle		1		12/16/18
Fraud	1600 block of	Rose Glen Road		1		06/13/19
Fraud	700 block of	Rugby Road		1		07/06/19
Fraud Fraud	200 block of 100 block of	Sagamore Road Shelbourne Road		1 1		04/03/19 12/17/18
Fraud	100 block of	Signal Road		1		02/15/19
Fraud	1200 block of	Steel Road		1		04/29/19
Fraud	1500 block of	Steel Road		1		10/02/19
Fraud	100 block of	Stockton Road		1		06/08/19
Fraud	Unit block of	Sycamore Road		1		01/29/19
Fraud	100 block of	Upland Road		1		04/25/19
Fraud	Unit block of	Upland Road		1		03/22/19
Fraud	1300 block of	Virginia Avenue		1		02/04/19
Fraud	100 block of	W. Clearfield Road	V	1		06/12/19
Fraud Fraud	Unit block of 200 block of	W. Mercer Avenue Walnut Hill Lane	Υ	1 1	1	01/15/19 10/08/19
Fraud	Unit block of	Waverly Road		1		12/18/18
Fraud	Unit block of	Waverly Road		1		12/29/18
Fraud	1600 block of	Woodmere Way		1		05/13/19
Fraud	2400 block of	Wynnefield Drive		1		09/17/19
Theft - Identity	500 block of	Achille Road		1		10/25/19
Theft - Identity	100 block of	Allgates Drive		1		08/05/19
Theft - Identity	1100 block of	Allston Road		1		08/21/19
Theft - Identity	700 block of	Ardmore Avenue		1		04/30/19
Theft - Identity	2200 block of	Avon Road		1		03/01/19
Theft - Identity Theft - Identity	2600 block of 2100 block of	Bala Lane Belvedere Avenue	Υ	1 1	1	07/16/19 07/09/19
Theft - Identity	2100 block of	Belvedere Avenue	Ϋ́Υ	1	1	08/08/19
Theft - Identity	1200 block of	Bon Air Road		1	-	08/02/19
Theft - Identity	Unit block of	Braeburn Road		1		05/23/19
Theft - Identity	Unit block of	Brennan Drive		1		05/21/19
Theft - Identity	700 block of	Buck Lane		1		01/02/19
Theft - Identity	1500 block of	Burmont Road		1		12/18/18
Theft - Identity	Unit block of	Castle Rock Drive		1		04/05/19
Theft - Identity	500 block of	Central Avenue		1		03/03/19
Theft Identity	Unit block of	College Avenue		1		09/09/19
Theft - Identity Theft - Identity	Unit block of 300 block of	Coopertown Road Crescent Hill Drive		1 1		01/07/19 10/07/19
Theft - Identity	1500 block of	Dorchester Road		1		02/01/19
Theft - Identity	100 block of	E. Marthart Avenue		1		08/16/19
Theft - Identity	1200 block of	Ellston Road		1		06/24/19
Theft - Identity	300 block of	Exeter Road		1		10/21/19
Theft - Identity	Unit block of	Gilmore Road		1		07/17/19
Theft - Identity	200 block of	Golf View Road		1		02/20/19
Theft - Identity	100 block of	Green Lane		1		05/29/19
Theft Identity	300 block of	Greenbriar Lane		1		03/09/19
Theft - Identity Theft - Identity	300 block of Unit block of	Greenbriar Lane Hastings Avenue		1 1		06/20/19 06/10/19
Theft - Identity	200 block of	Heatherwood Road		1		07/09/19
Theft - Identity	Unit block of	Holbrook Road		1		03/16/19
Theft - Identity	700 block of	Humphreys Road		1		05/22/19
Theft - Identity	200 block of	Ivy Rock Lane		1		08/16/19
Theft - Identity	400 block of	Kenmore Road		1		12/12/18
Theft - Identity	100 block of	Lee Circle		1		12/20/18
Theft - Identity	1300 block of	Leedom Road		1		02/12/19
Theft - Identity	1200 block of	Leedom Road		1		10/04/19
Theft - Identity	100 block of 700 block of	Lewis Road Loraine Street		1 1		06/02/19
Theft - Identity Theft - Identity	1600 block of	Melrose Avenue		1		12/14/18 08/15/19
Theft - Identity	1900 block of	Melrose Avenue		1		06/08/19
Theft - Identity	Unit block of	W. Mercer Avenue		1	1	09/23/19
Theft - Identity	700 block of	Merion Avenue		1		12/12/18
Theft - Identity	2400 block of	Merwood Lane		1		02/13/19
Theft - Identity	2900 block of	Morris Road		1		06/05/19
Theft - Identity	400 block of	N. Eagle Road		1		09/06/19
Theft - Identity	Unit block of	N. Ormond Avenue		1		07/22/19
Theft Identity	1300 block of	Northup Road		1		06/18/19
Theft - Identity	700 block of	Oak Way		1		02/01/19

					Count Adj	
T (6.1	<b>8</b> 11		A.P	Total	to Pennsy	
Type of Crime	Block	Street	Adjacent to Pennsy Trail	Count	Trail	Date
Theft - Identity Theft - Identity	100 block of 300 block of	Oxford Hill Lane Oxford Road		1 1		02/01/19 04/12/19
Theft - Identity	3100 block of	Parkview Drive		1		10/12/19
Theft - Identity	Unit block of	Princeton Road	Only 100 block	1		07/23/19
Theft - Identity	Unit block of	Rodman Avenue	Υ	1	1	04/07/19
Theft - Identity	2400 block of	Rosewood Lane		1		01/02/19
Theft - Identity	300 block of	Sagamore Road		1		02/05/19
Theft - Identity	2400 block of	Saint Denis Lane		1		09/27/19
Theft - Identity	500 block of	Shelbourne Road		1		05/06/19
Theft - Identity	2800 block of	St. Mary's Road		1		10/21/19
Theft - Identity	200 block of	Strathmore Road		1		07/02/19
Theft - Identity	400 block of	Strathmore Road		1		10/25/19
Theft - Identity	1700 block of	Sue Ellen Drive		1		09/17/19
Theft I dentity	Unit block of	Treaty Road		1 1		10/26/19 03/10/19
Theft - Identity Theft - Identity	500 block of 500 block of	Upland Road Upland Road		1		04/05/19
Theft - Identity	200 block of	Valley Ridge Road		1		08/14/19
Theft - Identity	1500 block of	Virginia Avenue		1		07/16/19
Theft - Identity	Unit block of	W. Hillcrest Avenue		1		09/07/19
Theft - Identity	300 block of	Walnut Hill Lane		1		05/06/19
Theft - Identity	400 block of	Washington Avenue	No - 500 & 600 blocks only	1		04/26/19
Theft - Identity	2600 block of	Wendy Road		1		10/11/19
Theft - Identity	Unit block of	Westview Road		1		03/19/19
Theft - Identity	Unit block of	Woodcroft Road		1		06/07/19
Theft - Identity	2400 block of	Wynnefield Drive		1		03/21/19
Theft	1000 block of	Allston Road		1		05/01/19
Theft	700 block of	Ashurst Road		1		08/21/19
Theft	2500 block of	Belmont Avenue		1		07/04/19
Theft	300 block of	Bewley Road		1		05/09/19
Theft	Unit block of	Blackburn Lane		1 1		05/23/19
Theft Theft	Unit block of Unit block of	Blakely Road Brennan Drive		1		05/14/19 02/02/19
Theft	100 block of	Brentwood Road		1		02/02/19
Theft	100 block of	Brentwood Road		1		04/10/19
Theft	500 block of	Brookline Boulevard		1		04/23/19
Theft	700 block of	Buck Lane		1		01/16/19
Theft	Unit block of	Caenarvon Lane		1		05/09/19
Theft	100 block of	Campbell Avenue		1		04/23/19
Theft	2700 block of	Chestnut Avenue		1		02/21/19
Theft	100 block of	Colfax Road		1		06/07/19
Theft	Unit block of	Colonial Road		1		03/02/19
Theft	Unit block of	Colonial Road		1		03/27/19
Theft	Unit block of	Colonial Road		1		03/27/19
Theft	Unit block of	Colonial Road		1		03/27/19
Theft Theft	1600 block of 500 block of	Colony Lane Country Club Lane		1 1		07/25/19 03/21/19
Theft	JOO BIOCK OF	Crescent Hill Drive and Rose Tree Lane		1		03/21/19
Theft	600 block of	Dayton Road		1		07/22/19
Theft	Unit block of	Decatur Road		1		08/22/19
Theft	Unit block of	Decatur Road		1		08/22/19
Theft	1000 block of	Delaware Avenue		1		04/23/19
Theft	1300 block of	Delmont Avenue		1		04/13/19
Theft	1300 block of	Dermond Avenue		1		03/29/19
Theft	1200 block of	Dermond Road		1		02/05/19
Theft	1300 block of	Dermond Road		1		03/29/19
Theft	400 block of	Devon Road		1		07/31/19
Theft	500 block of	Devon Road		1		04/23/19
Theft	800 block of	Dover Road		1		03/20/19
Theft Theft	800 block of 300 block of	Dover Road		1 1		04/25/19
Theft	300 block of	E. Eagle Road E. Manoa Road		1		05/01/19 04/12/19
Theft	1200 block of	Edgewood Road		1		05/01/19
Theft	1200 block of	Edgewood Road		1		05/01/19
Theft	100 block of	Ellis Road		1		06/05/19
Theft	500 block of	Ellis Road		1		10/22/19
Theft	Unit block of	Fairhaven Road		1		12/12/18
Theft	200 block of	Farnham Road		1		02/22/19
Theft	200 block of	Farnham Road		1		02/22/19
Theft	200 block of	Farnham Road		1		02/22/19
Theft	300 block of	Farwood Road		1		01/21/19
Theft	Unit block of	Farwood Road		1		07/17/19
Theft	100 block of	Friendship Road		1		01/28/19
Theft	1200 block of	Garfield Avenue Glendale Road		1		02/14/19
Theft Theft	400 block of 300 block of	Glendale Road Golf Hills Road		1 1		07/09/19 06/26/19
· · · · · · · · · · · · · · · · · · ·	JOO DIOCK OF	SS. Tillis Noud		1		00/20/13

	Type of Crime	Block	Street	Adjacent to Pennsy Trail	Total Count	Count Adj to Pennsy Trail	Date
Theft	Type of Crime	100 block of	Grove Place	Adjacent to Pennsy Trail	1	ITali	07/11/19
Theft		100 block of	Harvard Road	Υ	1	1	03/12/19
Theft		300 block of	Hathaway Lane	·	1	-	12/08/18
Theft		700 block of	Hathaway Lane		1		08/16/19
Theft		400 block of	Heatherwood Road		1		03/10/19
Theft		300 block of	Highland Lane		1		04/13/19
Theft		300 block of	Highland Lane		1		05/01/19
Theft		300 block of	Highland Lane		1		05/01/19
Theft		200 block of	W. Hillcrest Avenue		1		09/18/19
Theft		100 block of	Juniper Road		1		04/08/19
Theft		500 block of	Kathmere Road		1		05/01/19
Theft		2300 block of	Kenilworth Road		1		07/04/19
Theft		200 block of	Kenmore Road		1		05/01/19
Theft		1400 block of	Kingsley Road		1		03/20/19
Theft		600 block of	Lakeside Avenue		1		07/04/19
Theft		2000 block of	Laurel Road		1		09/09/19
Theft		1500 block of	Lawndale Avenue		1		04/13/19
Theft		1800 block of	Lawrence Road		1		10/03/19
Theft		200 block of	Lee Circle		1		01/09/19
Theft		200 block of	Lee Circle		1		01/09/19
Theft		200 block of	Lee Circle		1		08/19/19
Theft		Unit block of	Llandillo Road		1		02/14/19
Theft		Unit block of	Llandillo Road		1		05/08/19
Theft		1400 block of	Maryland Avenue		1		04/27/19
Theft Theft		Unit block of 1500 block of	Meadows Lane Melrose Avenue		1 1		05/01/19 02/07/19
Theft		700 block of	Merion Avenue		1		05/26/19
Theft		700 block of	Millbrook Lane		1		01/02/19
Theft		700 block of	Millbrook Lane		1		03/08/19
Theft		200 block of	Morlyn Avenue		1		01/09/19
Theft		2800 block of	Morris Road		1		07/26/19
Theft		1600 block of	Mount Pleasant Road		1		04/27/19
Theft		600 block of	N. Eagle Road		1		10/19/19
Theft		2400 block of	Olcott Avenue		1		07/04/19
Theft		900 block of	Old Manoa Road		1		09/06/19
Theft		300 block of	Olympic Avenue		1		02/02/19
Theft		200 block of	Oxford Hill Lane		1		03/26/19
Theft		200 block of	Oxford Hill Lane		1		03/26/19
Theft		7000 block of	Parkview Drive		1		09/29/19
Theft		7000 block of	Parkview Drive		1		09/29/19
Theft		400 block of	Pembroke Road		1		02/22/19
Theft		600 block of	Penfield Avenue		1		03/11/19
Theft		700 block of	Penfield Avenue		1		03/11/19
Theft		800 block of	Penn Street		1		02/13/19
Theft		1700 block of	Powdermill Lane		1		05/20/19
Theft		800 block of	Powdermill Lane		1		05/20/19
Theft		1600 block of	Ridgeway Road		1		08/28/19
Theft Theft		200 block of 2500 block of	Rodney Circle		1 1		10/25/19
Theft		400 block of	Rosemont Avenue Sagamore Road		1		09/16/19 05/27/19
Theft		300 block of	Steel Road		1		03/27/19
Theft		100 block of	Strathmore Road		1		02/22/19
Theft		400 block of	Strathmore Road		1		05/09/19
Theft		1500 block of	Sunny Hill Lane		1		03/26/19
Theft		1500 block of	Sunny Hill Lane		1		03/26/19
Theft		1500 block of	Sunny Hill Lane		1		03/26/19
Theft		1500 block of	Sunny Hill Lane		1		03/26/19
Theft		Unit block of	Treaty Road		1		03/29/19
Theft		100 block of	E. Turnbull Avenue		1		05/20/19
Theft		100 block of	E. Turnbull Avenue		1		05/20/19
Theft		300 block of	Twin Oaks Drive		1		02/22/19
Theft		100 block of	W. Hillcrest Avenue		1		12/14/18
Theft		500 block of	Wales Road		1		06/09/19
Theft		200 block of	Walnut Place		1		12/18/18
Theft		200 block of	Walnut Place		1		12/18/18
Theft		200 block of	Walnut Place		1		12/26/18
Theft		200 block of	Walnut Place		1		04/23/19
Theft		100 block of	Whitemarsh Road		1		12/12/18
Theft		200 block of	Wickford Road		1		02/22/19
Theft		Unit block of	Williams Road		1		05/01/19
Theft		300 block of	Windsor Park Lane		1		06/19/19
Theft		400 block of	Wynne Avenue		1		03/10/19

	,					Count Adj
	Torre of Orlean	Di- di	C11	Adia	Total	to Pennsy
Theft	Type of Crime  - Attempted	Block 1000 block of	Street Allston Road	Adjacent to Pennsy Trail	Count 1	Trail Date 05/01/19
	- Attempted	1100 block of	Allston Road		1	05/01/19
	- Attempted	600 block of	Ashurst Road		1	05/03/19
	- Attempted	600 block of	Ashurst Road		1	05/03/19
Theft -	- Attempted	2500 block of	Belmont Avenue		1	09/16/19
	- Attempted	2500 block of	Belmont Avenue		1	09/16/19
	- Attempted	100 block of	Brentwood Road		1	03/10/19
	- Attempted	1500 block of	Brierwood Road		1	03/26/19
	- Attempted	1500 block of	Brierwood Road		1	05/27/19
	- Attempted	400 block of	Colfax Road		1	04/19/19
	- Attempted - Attempted	Unit block of 300 block of	Colonial Road Davis Road		1	06/13/19 04/22/19
	- Attempted	Unit block of	Decatur Road		1	08/22/19
	- Attempted	Unit block of	Decatur Road		1	08/22/19
	- Attempted	1400 block of	Delmont Avenue		1	03/20/19
Theft -	- Attempted	Unit block of	E. Langhorne Avenue		1	02/22/19
Theft -	- Attempted	100 block of	Earlington Road		1	03/22/19
	- Attempted	100 block of	Flintlock Road		1	03/29/19
	- Attempted	100 block of	Flintlock Road		1	03/29/19
	- Attempted	800 block of	Grove Place		1	05/03/19
	- Attempted - Attempted	Unit block of 400 block of	Kathmere Road Kathmere Road		1	02/22/19 05/01/19
	- Attempted	200 block of	Kenmore Road		1	05/01/19
	- Attempted	300 block of	Kenmore Road		1	05/01/19
Theft -	- Attempted	400 block of	Kenmore Road		1	05/01/19
Theft -	- Attempted	200 block of	Lee Circle		1	01/09/19
	- Attempted	100 block of	Myrtle Avenue		1	04/29/19
	- Attempted	200 block of	Oxford Hill Lane		1	03/26/19
	- Attempted	200 block of	Oxford Hill Lane		1	03/26/19
	- Attempted - Attempted	200 block of Unit block of	Oxford Hill Lane Pennsylvania Avenue		1	03/26/19 02/14/19
	- Attempted	Unit block of	Pennsylvania Avenue		1	02/14/19
	- Attempted	Unit block of	Princeton Road	Only 100 block	1	02/22/19
	- Attempted	Unit block of	Princeton Road	Only 100 block	1	02/22/19
	- Attempted	100 block of	Rodney Circle		1	01/09/19
Theft -	- Attempted	300 block of	Sagamore Road		1	05/01/19
	- Attempted	200 block of	Signal Road		1	03/29/19
	- Attempted	200 block of	Signal Road		1	03/29/19
	- Attempted	1400 block of	Sunny Hill Lane		1	03/26/19
	- Attempted	1500 block of	Sunny Hill Lane Upland Road		1	03/26/19
	- Attempted - Attempted	Unit block of 200 block of	Wickford Road		1	05/03/19 02/22/19
	- Attempted	Unit block of	Williams Road		1	05/01/19
	- Attempted from Vehicle	2100 block of	Bryn Mawr Place		1	12/30/18
	- Attempted from Vehicle	600 block of	Lawson Avenue		1	12/29/18
Theft -	- Attempted from Vehicle	2700 block of	St. Mary's Road		1	08/09/19
	- Bicycle	700 block of	Ardmore Avenue		1	09/12/19
	- Bicycle	100 block of	Clemson Road		1	08/29/19
	- Bicycle - Bicycle	800 block of 700 block of	Dover Road E. Manoa Road		1	06/28/19
	- Bicycle	200 block of	Hastings Avenue		1	04/09/19 10/27/19
	- Bicycle	800 block of	Lorraine Street		1	10/05/19
	- Bicycle	200 block of	Stanley Avenue		1	10/04/19
Theft -	- from Vehicle	100 block of	Allgates Drive		1	01/24/19
	- from Vehicle	600 block of	Ashurst Road		1	12/27/18
	- from Vehicle	700 block of	Ashurst Road		1	12/27/18
	- from Vehicle	2400 block of	Bryn Mawr Avenue		1	07/15/19
	- from Vehicle - from Vehicle	2400 block of 300 block of	Bryn Mawr Avenue Campbell Avenue		1	07/15/19 01/26/19
	- from Vehicle	300 block of	Crescent Hill Drive		1	12/29/18
	- from Vehicle	1400 block of	Delmont Avenue		1	12/29/18
Theft -	- from Vehicle	300 block of	E. Manoa Road		1	10/16/19
	- from Vehicle	200 block of	Foster Avenue		1	10/24/19
	- from Vehicle	100 block of	Friendship Road		1	01/24/19
	- from Vehicle	100 block of	Friendship Road Glenbrook Road		1	01/24/19
	- from Vehicle - from Vehicle	Unit block of Unit block of	Glenbrook Road Glenbrook Road		1	10/06/19 10/06/19
	- from Vehicle	400 block of	Glendale Road		1	07/31/19
	- from Vehicle	700 block of	Hathaway Lane		1	08/09/19
	- from Vehicle	700 block of	Hathaway Lane		1	08/09/19
	- from Vehicle		Ivy Rock and Fairlamb Roads		1	08/01/19
	- from Vehicle	300 block of	Kathmere Road		1	12/19/18
	- from Vehicle	300 block of	Kathmere Road		1	12/20/18
	- from Vehicle - from Vehicle	1400 block of 1400 block of	Kingsley Road Kingsley Road		1	12/29/18
	- from Vehicle - from Vehicle	1000 block of	Larchmont Avenue		1	01/01/19 12/27/18
	- from Vehicle	900 block of	Larchmont Avenue		1	12/27/18
	- from Vehicle	600 block of	Lawson Avenue		1	12/23/18
	- from Vehicle	600 block of	Lawson Avenue		1	12/29/18
	- from Vehicle	600 block of	Lawson Avenue		1	10/21/19
	- from Vehicle	700 block of	Lawson Avenue		1	12/29/18
	- from Vehicle	700 block of	Lawson Avenue		1	12/30/18
	- from Vehicle	600 block of	Merion Avenue		1	12/27/18
	- from Vehicle - from Vehicle	2700 block of 1500 block of	Morris Road Robinson Avenue		1	08/09/19 10/27/19
	- from Vehicle	1500 block of	Robinson Avenue		1	10/27/19
	- from Vehicle	1800 block of	Robinson Avenue		1	10/08/19
	- from Vehicle	600 block of	Valley View Road		1	10/06/19
	- Motor Vehicle	200 block of	Juniper Road		1	03/27/19
	- Motor Vehicle	700 block of	Panmure Road		1	05/23/19
	- Motor Vehicle	200 block of	Rodney Circle		1	01/09/19
	- Motor Vehicle - Services	100 block of 2400 block of	Tenby Road Poplar Road		1	03/09/19 02/02/19
ment.		2-100 BIOCK UI			-	02/02/19

				Tatal	Count Adj	
Type of Crime	Block	Street	Adjacent to Pennsy Trail	Total Count	to Pennsy Trail	Date
Vandalism	600 block of	Ashurst Road	•	1		05/08/19
Vandalism	2500 block of	Bryn Mawr Avenue		1		03/19/19
Vandalism	1500 block of	Burmont Road		1		05/22/19
Vandalism	Unit block of	Campbell Avenue		1		09/14/19
Vandalism	500 block of	Central Avenue		1		06/13/19
Vandalism	100 block of	Colfax Road		1		04/24/19
Vandalism	3200 block of	Darby Road		1		10/27/19
Vandalism	1300 block of	Delmont Avenue		1		06/19/19
Vandalism	200 block of	E. Benedict Avenue		1		08/05/19
Vandalism Vandalism	Unit block of 300 block of	E. Golfview Road E. Hathaway Lane		1 1		10/19/19 08/30/19
Vandalism	Unit block of	E. Mercer Avenue		1		05/18/19
Vandalism	Unit block of	E. Mercer Avenue		1		06/18/19
Vandalism	100 block of	E. Turnbull Avenue		1		12/18/18
Vandalism	1400 block of	Fairview Avenue		1		02/03/19
Vandalism	1400 block of	Fairview Avenue		1		02/03/19
Vandalism	100 block of	Flintlock Road		1		08/28/19
Vandalism	100 block of	Friendship Road		1		01/05/19
Vandalism	400 block of	Glendale Road		1		10/10/19
Vandalism	400 block of	Glendale Road		1		10/01/19
Vandalism	Unit block of	Grove Place		1		05/03/19
Vandalism	3000 block of	Hermosa Lane		1		10/21/19
Vandalism	200 block of	James Drive		1		12/08/18
Vandalism		Kenilworth Road and Winchester Roads		1		01/01/19
Vandalism	1600 block of	Lawrence Road		1		08/14/19
Vandalism	200 block of	Lenox Road		1		05/19/19
Vandalism	300 block of	Mill Road		1		12/11/18
Vandalism Vandalism	400 block of 500 block of	Mill Road Mill Road		1 1		12/12/18 01/17/19
Vandalism	500 block of	Mill Road		1		12/27/18
Vandalism	100 block of	N. Belfield Avenue		1		12/27/18
Vandalism	600 block of	N. Eagle Road		1		10/12/19
Vandalism	2900 block of	Oakford Road		1		03/25/19
Vandalism	3000 block of	Robin Lane		1		05/20/19
Vandalism	2700 block of	Saint Mary's Road		1		09/23/19
Vandalism	100 block of	Shawnee Road		1		12/23/18
Vandalism	200 block of	Signal Road		1		10/19/19
Vandalism	300 block of	Spring Road		1		10/03/19
Vandalism	1400 block of	Sunny Hill Lane		1		09/03/19
Vandalism	100 block of	Treaty Road		1		06/13/19
Vandalism	100 block of	Tunbridge Road		1		10/12/19
Vandalism	Unit block of	Vernon Road		1		01/18/19
Vandalism	Unit block of	Vernon Road		1		06/01/19
Vandalism	Unit block of	Vernon Road		1		06/04/19
Vandalism Vandalism	Unit block of Unit block of	W. Hillcrest Avenue W. Marthart Avenue		1 1		10/26/19
Vandalism				1		05/02/19 09/29/19
Vandalism	600 block of 2400 block of	Willowbrook Road Wynnefield Drive		1		07/28/19
Vandalism	2500 block of	Wynnefield Drive		1		08/28/19
Liquor Law Violation	100 block of	Clamar Avenue		1		01/20/19
Liquor Law Violation	500 block of	College Avenue		1		02/22/19
Liquor Law Violation		Gladstone Road and Lexington Avenue		1		07/22/19
Liquor Law Violation	800 block of	Myrtle Avenue		1		08/30/19
Liquor Law Violation	200 block of	Walnut Hill Lane		1		02/17/19
Liquor Law Violation - Underage Drinking	300 block of	E. Township Line Road		1		06/30/19
Liquor Law Violation - Underage Drinking	100 block of	Mill Road		1		07/26/19
Aggravated Assault		Rose Tree Lane and Glen Gary Drive		1		02/12/19
Narcotics		Mount Pleasant and Fairmount Roads		1		12/29/18
Robbery - Attempted	100 block of	E Eagle Road		1		05/07/19
Simple Assault	500 block of	Country Club Lane		1		01/19/19
Simple Assault	500 block of	Maple Hill Road		1		12/25/18
Weapons	1000 block of	Larchmont Avenue		1		03/04/19

					44:	Total	Count Adj to Radnor
Type of Crime	Type of Arrest	Date	Add ress	Street	Ad jacent to Radnor Trail	Count	to Kadnor Trail
Arrest	DRIVING UNDER THE INFLUENCE - ALCOHOL	9/11/2018	500 BLOCK OF	N WAYNE AVENUE		1	
Arrest	DRIVING UNDER THE INFLUENCE - ALCOHOL	10/17/2018		S RAD NOR CHESTER RD		1	
Arrest	DRIVING UNDER THE INFLUENCE - ALCOHOL	2/26/2019		SAW MILL RD		1	
Arrest Arrest	DRIVING UNDER THE INFLUENCE - ALCOHOL DRIVING UNDER THE INFLUENCE - ALCOHOL	5/29/2019 6/13/2019	100 BLOCK OF 300 BLOCK OF	FAIR FAX RD BRYN MAWR AV		1	
Arrest	DRIVING UNDER THE INFLUENCE - ALCOHOL	7/26/2019	300 0100 1101	N ABERDEEN AVENUE		1	
Arrest	DRIVING UNDER THE INFLUENCE - ALCOHOL	8/27/2019		BELLEVUE AV		1	
Arrest	LIQUOR LAW-UNDERAGE-PURCH,CONSMP,POSSESS	6/1/2019	400 BLOCK OF	BOXWOODRD		1	
Arrest	LIQUOR LAW-UNDERAGE-PURCH,CONSMP,POSSESS	9/14/2019	1000 BLOCK OF	CONESTOGA RD		1	
Arrest Arrest	LIQU OR LAW-UND ERAGE-PURCH, CONSMP, POSSESS LIQU OR LAW-UND ERAGE-PURCH, CONSMP, POSSESS	9/14/2019 9/14/2019		MEAD OWOOD RD MEAD OWWOOD AVENUE		1	
Arrest	LIQUOR LAW-UNDERAGE-PURCH, CONSMP, POSSESS	9/14/2019		ROBERTS RD		1	
Arrest	LIQUOR LAW-UNDERAGE-PURCH,CONSMP,POSSESS	9/27/2019	100 BLOCK OF	GARRETT AV		1	
Arrest	NARCOTICS - REPORTS	10/16/2018		PAUL RD		1	
Arrest	NARCOTICS - REPORTS	1/31/2019	900 BLOCK OF	GLEN BROOK AVENUE		1	
Arrest Arrest	NARCOTICS - REPORTS	7/26/2019	100 BLOCK OF 600 BLOCK OF	LANTOGA RD CLYDE RD		1	
Arrest	N AR COTICS - REPORTS N AR COTICS-POSSESSION - MAR IJU ANA, ETC.	8/27/2019 9/28/2018	300 BLOCK OF	PEMBROKE AVENUE		1	
Arrest	NAR COTICS-POSSESSION - MARIJU ANA, ETC.	11/7/2018	UNIT BLOCK OF	OLD OAKS RD		1	
Arrest	N AR COTICS-POSSESSION - MARIJU ANA,ETC.	11/8/2018	200 BLOCK OF	UPPER GULPH RD		1	
Arrest	N AR COTICS-P OSSESSION - MARIJU ANA, ETC.	11/21/2018	600 BLOCK OF	S ITHAN AVENUE		1	
Arrest	N AR C OTICS-P OSSESSION - MARIJU ANA, ETC.	11/24/2018		S ABER DE EN AVENUE		1	
Arrest Arrest	N AR C OTICS-P OSSE SSION - MAR IJU ANA, ETC. N AR C OTICS-P OSSE SSION - MAR IJU ANA, ETC.	11/29/2018 12/1/2018		BROOKSIDE AVENUE WALNUT AVENUE		1	
Arrest	N AR C OTICS-P OSSESSION-MARIJU ANA,ETC.	12/1/2018	500 BLOCK OF	CONESTOGA RD		1	
Arrest	NAR COTICS-POSSESSION - MARIJU ANA.ETC.	2/26/2019	700 BLOCK OF	CHURCH RD		1	
Arrest	N AR C OT ICS-P OSSESSION - MAR IJU ANA, ETC.	3/8/2019	200 BLOCK OF	S RAD NOR CHESTER RD		1	
Arrest	N AR C OT ICS-P OSSESSION - MARIJU ANA, ETC.	3/26/2019	200 BLOCK OF	GU LPH CREEK RD		1	
Arrest	N AR C OT ICS-P OSSESSION - MARIJU ANA,ETC.	5/26/2019	400 BLOCK OF	BRYN MAWR AV		1	
Arrest	N AR C OTICS-P OSSESSION - MARIJU ANA,ETC.	7/19/2019 9/13/2019		RAW LES RUN LANE		1	
Arrest Arrest	N AR C OTICS-P OSSESSION - MAR IJU ANA, ETC. N AR C OTICS-P OSSESSION - MOR PHINE, HER OIN, ETC	9/13/2019 8/29/2018	600 BLOCK OF 900 BLOCK OF	CONESTOGA RD GLENBROOK AVENUE		1	
Arrest	NARCOTICS-USE-MARIJUANA, HASHISH, ETC	11/18/2018	UNIT BLOCK OF	ALDWYN LA		1	
Arrest	Not Available	1/12/2016	200 BLOCK OF	HILLDALE RD		1	
Arrest	Not Available	1/12/2016	UNIT BLOCK OF	MEAD OWOOD RD		1	
Arrest	Not Available	1/18/2016		ITHAN RD		1	
Arrest	Not Available	2/6/2016	100 BLOCK OF	LOW RYS LANE		1	
Arrest	Not Available	2/6/2016	100 BLOCK OF	S LOWRYS LANE		1	
Arrest Arrest	Not Available Not Available	2/6/2016 2/6/2016	100 BLOCK OF 500 BLOCK OF	SUMMER HILL LANE VAN LEARS RUN		1	
Arrest	Not Available	2/21/2016	200 BLOCK OF	ROBERTS RD		1	
Arrest	Not Available	2/23/2016	600 BLOCK OF	COUNTY LINE RD		1	
Arrest	Not Available	2/26/2016	900 BLOCK OF	GLENBROOK AVENUE		1	
Arrest	Not Available	2/28/2016	100 BLOCK OF	STATION RD		1	
Arrest	Not Available	2/29/2016	900 BLOCK OF	GLEN BROOK AVENUE		1	
Arrest Arrest	Not Available Not Available	3/3/2016 3/4/2016	100 BLOCK OF 600 BLOCK OF	VASSAR CI S ITHAN AVENUE		1	
Arrest	Not Available	3/6/2016	400 BLOCK OF	KING OF PRUSSIA RD		1	
Arrest	Not Available	3/11/2016	400 000000	PETRIE AVENUE		1	
Arrest	Not Available	3/18/2016	100 BLOCK OF	W WAYNE AVENUE		1	
Arrest	Not Available	3/25/2016	200 BLOCK OF	GU L PH C R E E K R D		1	
Arrest	Not Available	3/26/2016	100 BLOCK OF	HILLSIDE CI		1	
Arrest	Not Available	3/26/2016	300 BLOCK OF	S DEVON AVENUE		1	
Arrest Arrest	Not Available Not Available	4/4/2016 4/8/2016	200 BLOCK OF	N ITHAN AVENUE CALLANAN AV		1	
Arrest	Not Available	4/8/2016	100 BLOCK OF	EACHUS AVENUE		1	
Arrest	Not Available	4/8/2016		MEAD OWOOD RD		1	
Arrest	Not Available	4/26/2016	600 BLOCK OF	S ITHAN AVENUE		1	
Arrest	Not Available	5/1/2016		ARTHUR RD		1	
Arrest	Not Available	5/5/2016		PINETREE RD		1	
Arrest Arrest	Not Available Not Available	5/13/2016 5/15/2016	100 BLOCK OF 600 BLOCK OF	EACHUS AVENUE BRIARWOOD RD		1	
Arrest	Not Available	6/4/2016	300 BLOCK OF	CONESTOGA RD	γ	1	1
Arrest	Not Available	6/8/2016	400 BLOCK OF	BOXWOODRD	•	1	-
Arrest	Not Available	6/12/2016	100 BLOCK OF	KENILWORTH RD		1	
Arrest	Not Available	6/15/2016	100 BLOCK OF	VAUCLAIN LANE		1	
Arrest	Not Available	6/17/2016		PINE TREE RD		1	
Arrest Arrest	Not Ava ilable Not Ava ilable	6/25/2016 7/9/2016	600 BLOCK OF 900 BLOCK OF	BROOKSIDE AVENUE GLENBROOK AVENUE		1	
Arrest	Not Available	7/9/2016	UNIT BLOCK OF	LONGWOOD DRIVE		1	
Arrest	Not Available	8/7/2016	200 BLOCK OF	HARES LANE		1	
Arrest	Not Available	8/13/2016	1000 BLOCK OF	CONESTOGA RD		1	
Arrest	Not Available	8/17/2016	UNIT BLOCK OF	CLOVER LANE		1	
Arrest	Not Available	8/18/2016	700 BLOCK OF	SPROUL RD		1	
Arrest	Not Available	8/21/2016	600 BLOCK OF	S ITHAN AVENUE		1	
Arrest Arrest	Not Available Not Available	9/4/2016 9/24/2016	200 BLOCK OF 300 BLOCK OF	S RAD NOR CHESTER RD CONESTOGA RD	Υ	1	1
Arrest	Not Available	9/30/2016	300 DEOCK OF	ROCK ROSE LANE	'	1	4
Arrest	Not Available	10/17/2016		BRIARWOODRD		1	
Arrest	Not Available	10/25/2016	200 BLOCK OF	TRIANON LANE		1	
Arrest	Not Available	10/29/2016	700 BLOCK OF	CORNERSTONE LANE		1	
Arrest	Not Available	11/2/2016	1000 BLOCK OF	RADNORRD		1	
Arrest	Not Available Not Available	11/2/2016	200 BLOCK OF 400 BLOCK OF	U PPER GULPH RD		1	
Arrest Arrest	Not Available Not Available	11/3/2016 11/13/2016	400 BLOCK OF	N WAYNE AVENUE S DEVON AVENUE		1	
Arrest	Not Available	11/20/2016	100 BLOCK OF	HICKORY LANE		1	
Arrest	Not Available	11/20/2016	200 BLOCK OF	LANDOVER RD		1	
Arrest	Not Available	11/30/2016	300 BLOCK OF	BRYN MAWR AV		1	
Arrest	Not Available	12/2/2016	1000 BLOCK OF	CONESTOGA RD		1	

					Adjacent to	Total	Count Adj to Radnor
Type of Crime	Type of Arrest	Date	Add ress	Street	RadnorTrail	Count	Trail
Arrest	Not Available	12/7/2016		PEMBROKE AVENUE		1	
Arrest	Not Available	12/17/2016		S BELLEVUE AVENUE		1	
Arrest	Not Available	12/22/2016	400 BLOCK OF	MAPLEWOOD RD		1	
Arrest Arrest	Not Available Not Available	12/26/2016	900 BLOCK OF	WILLIAMS RD GLENBROOK AVENUE		1	
Arrest Arrest	Not Available Not Available	12/30/2016 1/6/2017	900 BLOCK OF 600 BLOCK OF	S ITHAN AVENUE		1	
Arrest	Not Available	1/17/2017	600 BLOCK OF	CHURCH RD		1	
Arrest	Not Available	1/21/2017	200 BLOCK OF	SPRUCE TREE RD		1	
Arrest	Not Available	2/3/2017	700 BLOCK OF	CORNERSTONE LANE		1	
Arrest	Not Available	2/10/2017	800 BLOCK OF	GODFREY RD		1	
Arrest	Not Available	2/11/2017	1400 BLOCK OF	COUNTY LINE RD		1	
Arrest	Not Available	2/11/2017	900 BLOCK OF	GLEN BROOK AVENUE		1	
Arrest	Not Available Not Available	2/19/2017	1000 BLOCK OF	CONESTOGA RD		1	
Arrest Arrest	Not Available Not Available	2/19/2017 2/24/2017	100 BLOCK OF 200 BLOCK OF	DEBARAN LANE LANSDOWNE AVENUE		1	
Arrest	Not Available	2/27/2017	200 BLOCK OF	CHURCH RD		1	
Arrest	Not Available	3/17/2017		CHURCH RD		1	
Arrest	Not Available	3/19/2017	300 BLOCK OF	ST DAVIDS RD		1	
Arrest	Not Available	4/17/2017	600 BLOCK OF	S ITHAN AVENUE		1	
Arrest	Not Available	4/22/2017	1000 BLOCK OF	CONESTOGA RD		1	
Arrest	Not Available	4/28/2017	700 BLOCK OF	BROOKE RD		1	
Arrest	Not Available	5/5/2017	400 BLOCK OF	S DEVON AVENUE		1	
Arrest	Not Available Not Available	5/8/2017	400 BLOCK OF 400 BLOCK OF	CONESTOGA RD CONESTOGA RD	Y	1	1
Arrest Arrest	Not Available Not Available	5/9/2017 5/21/2017	400 BLOCK OF	N BELLEVUE AVENUE	*	1	1
Arrest	Not Available	6/1/2017		S DEVON AVENUE		1	
Arrest	Not Available	6/11/2017		ST DAVIDS RD		1	
Arrest	Not Available	6/17/2017		EARLES LANE		1	
Arrest	Not Available	7/5/2017	100 BLOCK OF	MOSCIA LANE		1	
Arrest	Not Available	7/9/2017	900 BLOCK OF	GLEN BROOK AVENUE		1	
Arrest	Not Available	7/13/2017		EARLES LAN E		1	
Arrest	Not Available	7/18/2017	700 BLOCK OF	BRYN MAWR AV		1	
Arrest	Not Available	8/2/2017	100 BLOCK OF	S ABERDEEN AVENUE		1	
Arrest	Not Available Not Available	8/3/2017 8/13/2017	UNIT BLOCK OF	CHAMOUNIX RD HIGHLAND AVENUE	Υ	1	1
Arrest Arrest	Not Available	8/13/2017	200 BLOCK OF 800 BLOCK OF	COLONYRD	Y	1	1
Arrest	Not Available	8/21/2017	200 BLOCK OF	WILLIAMS RD		1	
Arrest	Not Available	8/23/2017	800 BLOCK OF	S VALLEY FORGE RD		1	
Arrest	Not Available	8/24/2017	800 BLOCK OF	NORTHWINDS DRIVE		1	
Arrest	Not Available	9/22/2017	200 BLOCK OF	GULPH CREEK RD		1	
Arrest	Not Available	9/26/2017	200 BLOCK OF	WILLIAMS RD		1	
Arrest	Not Available	9/30/2017	900 BLOCK OF	SULGRAVE LANE		1	
Arrest	Not Available Not Available	10/5/2017	200 BLOCK OF 300 BLOCK OF	SINKLER DRIVE MALIN RD		1	
Arrest Arrest	Not Available Not Available	10/6/2017 10/19/2017	300 BLOCK OF	WEST AVENUE		1	
Arrest	Not Available	11/5/2017	700 BLOCK OF	BRYN MAWR AV		1	
Arrest	Not Available	11/17/2017	400 BLOCK OF	BARCLAY RD		1	
Arrest	Not Available	11/17/2017		NEWTOWN RD		1	
Arrest	Not Available	11/20/2017		ST DAVIDS RD		1	
Arrest	Not Available	12/15/2017		GODFREYRD		1	
Arrest	Not Available	12/21/2017	100 BLOCK OF	BROOKE FAR M RD		1	
Arrest	Not Available	12/21/2017	800 BLOCK OF	VAUCLAIN LANE		1	
Arrest Arrest	Not Ava ilable Not Ava ilable	12/24/2017 1/9/2018	700 BLOCK OF 200 BLOCK OF	GODFREY RD S RAD NOR CHESTER RD		1	
Arrest	Not Available	1/10/2018	900 BLOCK OF	GLENBROOK AVENUE		1	
Arrest	Not Available	1/15/2018		PAUL RD		1	
Arrest	Not Available	1/17/2018	200 BLOCK OF	S RAD NOR CHESTER RD		1	
Arrest	Not Available	1/27/2018	900 BLOCK OF	HAVER FOR D R D		1	
Arrest	Not Available	2/3/2018	500 B LOCK OF	CONESTOGA RD		1	
Arrest	Not Available	2/3/2018		S DEVON AVENUE		1	
Arrest	Not Available Not Available	2/14/2018 2/25/2018	800 BLOCK OF 700 BLOCK OF	GODFREY RD CONFSTOGA RD		1	
Arrest Arrest	Not Available Not Available	3/1/2018	200 BLOCK OF	BROOK ST		1	
Arrest	Not Available	3/1/2018	700 BLOCK OF	WOODLEA RD		1	
Arrest	Not Available	4/3/2018	900 BLOCK OF	GLENBROOK AVENUE		1	
Arrest	Not Available	5/5/2018	100 BLOCK OF	RADNOR AVENUE		1	
Arrest	Not Available	6/1/2018	600 BLOCK OF	SAW MILL RD		1	
Arrest	Not Available	6/10/2018	600 BLOCK OF	S ITHAN AVENUE		1	
Arrest	Not Available	6/18/2018	500 BLOCK OF	S DEVON AVENUE		1	
Arrest Arrest	Not Ava ilable Not Ava ilable	6/20/2018 6/25/2018		WEST AVENUE HIGHLAND AVENUE	Υ	1	1
Arrest	Not Available Not Available	7/11/2018	UNIT BLOCK OF	GREYTHORNE WOODSCIR	Y	1	1
Arrest	Not Available	7/11/2018	UNIT BLOCK OF	GREYTHORNE WOODSCIR	Y	1	1
Arrest	Not Available	7/29/2018	100 BLOCK OF	FAIR FAX RD		1	•
Arrest	Not Available	8/17/2018	600 BLOCK OF	CONESTOGA RD		1	
Arrest	Not Available	8/25/2018		MEAD OWOOD RD		1	
Arrest	Not Available	11/13/2018		NEWTOWN RD		1	
Arrest	Not Available	11/14/2018	700 BLOCK OF	KING OF PRUSSIA RD		1	
Arrest	Not Available	11/17/2018		CHAMOUNIXRD		1	
Arrest	Not Available Not Available	4/12/2019	100 81 00 4 00	GULPH CREEK RD		1	
Arrest Arrest	Not Available Not Available	4/13/2019 4/13/2019	100 BLOCK OF 200 BLOCK OF	GARRETT AV WILLIAMS RD		1	
Arrest	Not Available Not Available	4/15/2019	200 DECOUN OF	S RAD NOR CHESTER RD		1	
Arrest	Not Available	6/2/2019	400 BLOCK OF	FAIRVIEW AV		1	
Arrest	Not Available	6/6/2019		CHANDLER LA		1	
Arrest	Not Available	6/8/2019		ORCHARD WAY		1	
Arrest	Not Available	6/8/2019	600 BLOCK OF	SPROUL RD		1	
Arrest	Not Available	10/17/2019		PEMBROKE AVENUE		1	
Arrest	PUBLIC DRUNKENESS PUBLIC DRUNKENESS	10/10/2018 12/7/2018	700 BLOCK OF 200 BLOCK OF	MILLER STREET ROBERTS RD		1	
Arrest Arrest	PUBLIC DRUNKENESS PUBLIC DRUNKENESS	12/7/2018 8/18/2019	200 BLOCK OF 400 BLOCK OF	ROBERTS RD RAMBLEW OOD DRIVE		1	
Arrest	PUBLIC DRUNKENESS	8/31/2019		WILLOW AVENUE		1	

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				Adjacent to	Total	Count Adj to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Assault	1/1/2016	300 BLOCK OF	LIBERTY LANE	Υ	1	1
Assault Assault	2/22/2016 2/28/2016	200 BLOCK OF 500 BLOCK OF	BROOK ST WATCH HILL RD		1	
Assault	3/9/2016	200 BLOCK OF	FITZWILLIAMS LA		1	
Assault	3/10/2016	100 BLOCK OF	OWENS LANE		1	
Assault	3/15/2016	400 BLOCK OF	W BEECHTREE LA		1	
Assault	3/17/2016 3/22/2016	UNIT BLOCK OF 100 BLOCK OF	WENTWORTH LANE FAIRFAX RD		1	
Assault Assault	4/3/2016	UNIT BLOCK OF	WOODSTONE LA		1	
Assault	4/7/2016	UNIT BLOCK OF	ALDWYN LA		1	
Assault	4/12/2016	600 BLOCK OF	SPROUL RD		1	
Assault Assault	4/16/2016 4/17/2016	200 BLOCK OF	NEWTOWN RD BROOK ST		1	
Assault	4/23/2016	100 BLOCK OF	GARRETT AV		1	
Assault	5/8/2016	200 BLOCK OF	BEECHWOOD DRIVE		1	
Assault	5/20/2016	200 BLOCK OF	LENOIR AVENUE		1	
Assault	5/29/2016	700 BLOCK OF	BRYN MAWR AV		1	
Assault Assault	6/21/2016 6/27/2016	200 BLOCK OF 200 BLOCK OF	WYNDOM LANE W WAYNE AVENUE		1	
Assault	7/4/2016	UNIT BLOCK OF	LOWRYS LANE		1	
Assault	7/7/2016	900 BLOCK OF	HUNT RD		1	
Assault	7/19/2016	600 BLOCK OF	BROOKSIDE AVENUE		1	
Assault Assault	8/4/2016 9/4/2016	700 BLOCK OF 400 BLOCK OF	NEWTOWN RD N BELLEVUE AVENUE		1	
Assault	9/12/2016	100 BLOCK OF	GARRETT AV		1	
Assault	9/13/2016		WOODSTONE LA		1	
Assault	9/27/2016	UNIT BLOCK OF	WEST AVENUE		1	
Assault	10/25/2016	900 BLOCK OF	HUNT RD		1	
Assault Assault	10/26/2016 11/10/2016	700 BLOCK OF UNIT BLOCK OF	S ROBERTS RD S LOWRYS LANE		1	
Assault	11/12/2016	700 BLOCK OF	CONESTOGA RD		1	
Assault	11/17/2016	200 BLOCK OF	N ABERDEEN AVENUE		1	
Assault	11/26/2016	UNIT BLOCK OF	HARFORD LANE		1	
Assault Assault	12/1/2016 12/29/2016	600 BLOCK OF 500 BLOCK OF	DARBY PAOLI RD MAPLEWOOD AVENUE		1	
Assault	2/1/2017	100 BLOCK OF	CONESTOGA RD		1	
Assault	2/5/2017	100 BLOCK OF	CONESTOGA RD		1	
Assault	2/21/2017	UNIT BLOCK OF	S LOWRYS LANE		1	
Assault Assault	3/2/2017 3/14/2017	100 BLOCK OF 600 BLOCK OF	PETRIE AVENUE BROOKSIDE AVENUE		1	
Assault	5/10/2017	500 BLOCK OF	DARBY PAOLI RD		1	
Assault	5/11/2017	700 BLOCK OF	S ROBERTS RD		1	
Assault	6/1/2017	600 BLOCK OF	MILL RD		1	
Assault	6/3/2017	200 BLOCK OF	IVEN AVENUE		1	
Assault Assault	6/12/2017 6/15/2017	UNIT BLOCK OF 400 BLOCK OF	EARLES LANE LOUELLA AVENUE		1	
Assault	6/27/2017	UNIT BLOCK OF	WEST AVENUE		1	
Assault	8/9/2017	700 BLOCK OF	SOUTHWINDS DRIVE		1	
Assault	8/14/2017	200 BLOCK OF	BLOOMINGDALE AV		1	
Assault Assault	8/23/2017 10/8/2017	100 BLOCK OF 100 BLOCK OF	GARRETT AV BLACK FRIAR RD		1	
Assault	10/19/2017	UNIT BLOCK OF	DEVONWOOD RD		1	
Assault	11/27/2017	100 BLOCK OF	CUMBERLAND PL		1	
Assault	12/2/2017		WEST AVENUE		1	
Assault Assault	12/9/2017 12/16/2017	400 BLOCK OF	NEWTOWN RD N BELLEVUE AVENUE		1	
Assault	1/7/2018	UNIT BLOCK OF	WEST AVENUE		1	
Assault	1/24/2018	500 BLOCK OF	CONESTOGA RD		1	
Assault	1/25/2018	100 BLOCK OF	HICKORY LANE		1	
Assault Assault	1/26/2018 2/11/2018	400 BLOCK OF 200 BLOCK OF	BARCLAY RD BLOOMINGDALE AV		1	
Assault	3/12/2018	100 BLOCK OF	RADNOR RD		1	
Assault	3/17/2018	100 BLOCK OF	WILLOWBURN RD		1	
Assault	3/22/2018	100 BLOCK OF	FAIRFAX RD		1	
Assault Assault	4/4/2018 5/3/2018	UNIT BLOCK OF 200 BLOCK OF	WEST AVENUE BARCLADEN CI		1	
Assault	5/5/2018	100 BLOCK OF	N LOWRYS LA		1	
Assault	5/11/2018	400 BLOCK OF	ST DAVIDS AV		1	
Assault	5/12/2018	400 BLOCK OF	W BEECHTREE LA		1	
Assault Assault	5/17/2018	200 BLOCK OF	MIDLAND AVENUE CHANDLER LA		1	
Assault	5/18/2018 6/4/2018	500 BLOCK OF 200 BLOCK OF	IVEN AVENUE		1	
Assault	6/8/2018	100 BLOCK OF	POPLAR AVENUE		1	
Assault	6/14/2018	300 BLOCK OF	BAILEY RD		1	
Assault	6/22/2018 7/6/2018	900 BLOCK OF	LEWIS LANE CONESTOGA RD	Υ	1	1
Assault Assault	7/6/2018 8/7/2018	300 BLOCK OF	BOXWOOD RD	1	1	1
Assault	8/10/2018	900 BLOCK OF	WOOTTON RD		1	
Assault	8/16/2018	200 BLOCK OF	UPPER GULPH RD		1	
Assault	8/21/2018	100 BLOCK OF	BROOKLEA RD HUNT RD		1	
Assault Assault	8/31/2018 9/1/2018	900 BLOCK OF 200 BLOCK OF	BARCLADEN CI		1	
Assault	10/7/2018	800 BLOCK OF	COLONY RD		1	
Assault	10/10/2018	200 BLOCK OF	HERMITAGE DRIVE		1	
Assault	10/11/2018	100 BLOCK OF	EATON DRIVE		1	
Assault Assault	10/26/2018 10/27/2018	100 BLOCK OF 200 BLOCK OF	LANTOGA RD N ABERDEEN AVENUE		1	
Assault	10/28/2018	500 BLOCK OF	ATTERBURY RD		1	

			<del></del>			
						Count Adj
				Adjacent to	Total	to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Assault	11/7/2018	100 BLOCK OF	CONESTOGA RD		1	
Assault	11/19/2018	700 BLOCK OF	S ITHAN AVENUE		1	
Assault	11/22/2018	300 BLOCK OF	CONESTOGA RD	Υ	1	1
Assault	11/23/2018	200 BLOCK OF	HILLDALE RD	•	1	_
Assault	1/11/2019	100 BLOCK OF	BANBURY WAY		1	
Assault	1/17/2019	100 BLOCK OF	GARRETT AV		1	
Assault	1/28/2019	200 BLOCK OF	BLOOMINGDALE AV		1	
Assault	1/29/2019	500 BLOCK OF	CONESTOGA RD		1	
Assault	3/2/2019	200 BLOCK OF	HILLDALE RD		1	
Assault	3/3/2019	200 BLOCK OF	BARCLADEN CI		1	
Assault	4/1/2019	700 BLOCK OF	NEWTOWN RD		1	
Assault	4/9/2019	200 BLOCK OF	HILLDALE RD		1	
Assault	6/1/2019	100 BLOCK OF	ROCK ROSE LANE		1	
Assault	6/8/2019	200 BLOCK OF	CONESTOGA RD		1	
Assault	6/8/2019	200 BLOCK OF	CONESTOGARD		1	
Assault	6/8/2019	500 BLOCK OF	MONTGOMERY LA		1	
Assault	6/8/2019	500 BLOCK OF	MONTGOMERY LA		1	
Assault	6/10/2019	100 BLOCK OF	PATTON LANE		1	
Assault	7/9/2019	200 BLOCK OF	FITZWILLIAMS LA		1	
Assault	7/9/2019	200 BLOCK OF	FITZWILLIAMS LA		1	
Assault	7/10/2019	200 BLOCK OF	SHANNON CI		1	
Assault	7/25/2019	200 BLOCK OF	WILLIAMS RD		1	
Assault	8/15/2019 8/31/2019	700 BLOCK OF 400 BLOCK OF	ROBINHOOD RD		1 1	
Assault			N BELLEVUE AVENUE			
Assault	10/1/2019	500 BLOCK OF	HUSTON RD		1	
Assault	10/5/2019	400 BLOCK OF	FAIRVIEW AV		1	
Assault	10/6/2019	700 BLOCK OF	MOORE AVENUE		1	
Burglary	10/28/2015	700 BLOCK OF	DARBY PAOLI RD		1	
Burglary	10/28/2015	700 BLOCK OF	DARBY PAOLI RD		1	
Burglary	10/28/2015	700 BLOCK OF	DARBY PAOLI RD		1	
Burglary	10/30/2015	500 BLOCK OF	CHANDLER LANE		1	
Burglary	11/10/2015	800 BLOCK OF	COLONY COURT		1	
Burglary	11/10/2015	800 BLOCK OF	COLONY COURT		1	
Burglary	1/30/2016	600 BLOCK OF	NEWTOWN RD		1	
Burglary	2/5/2016	300 BLOCK OF	COUNTRYVIEW DRIVE		1	
Burglary	2/6/2016	600 BLOCK OF	NEWTOWN RD		1	
Burglary	2/7/2016	100 BLOCK OF	S ROBERTS RD		1	
Burglary	2/9/2016	500 BLOCK OF	RAMBLEWOOD DRIVE		1	
Burglary	2/11/2016	700 BLOCK OF	CONESTOGA RD		1	
Burglary	3/12/2016	200 BLOCK OF	BARCLADEN CI		1	
Burglary	3/14/2016	500 BLOCK OF	CONESTOGA RD		1	
Burglary	4/9/2016	400 BLOCK OF	FAIRVIEW AV		1	
Burglary	4/10/2016	700 BLOCK OF	S BRYN MAWR AVENUE		1	
Burglary	4/13/2016	300 BLOCK OF	EDGEHILL RD	Υ	1	1
Burglary	7/9/2016	500 BLOCK OF	ST DAVIDS RD		1	
Burglary	9/5/2016	400 BLOCK OF	IVEN AVENUE		1	
Burglary	10/3/2016	800 BLOCK OF	SPROUL RD		1	
Burglary	12/1/2016	100 BLOCK OF	WOODS LANE		1	
Burglary	12/14/2016	600 BLOCK OF	BROOKSIDE AVENUE		1	
Burglary	1/2/2017	400 BLOCK OF	MEADOWBROOK AVENUE		1	
Burglary	1/2/2017	400 BLOCK OF	MEADOWBROOK AVENUE		1	
Burglary	2/22/2017	UNIT BLOCK OF	ORCHARD LANE	Υ	1	1
Burglary	2/22/2017	700 BLOCK OF	PARKES RUN LANE	Υ	1	1
Burglary	5/25/2017	400 BLOCK OF	KING OF PRUSSIA RD		1	
Burglary	6/29/2017	700 BLOCK OF	WOODLEA RD		1	
Burglary	7/31/2017	600 BLOCK OF	LANMORE AVENUE		1	
Burglary	8/26/2017	800 BLOCK OF	BRIARWOOD RD		1	
Burglary	9/28/2017	UNIT BLOCK OF	WOODS LANE		1	
Burglary	11/16/2017	400 BLOCK OF	WYLDHAVEN RD		1	
Burglary	12/1/2017	800 BLOCK OF	HUNT RD		1	
Burglary	12/6/2017	100 BLOCK OF	CAMBRIA CT		1	
Burglary	1/19/2018	400 BLOCK OF	INVERARAY RD		1	
Burglary	2/16/2018	1000 BLOCK OF	CONESTOGA RD		1	
Burglary	5/25/2018	100 BLOCK OF	HILLSIDE CI		1	
Burglary	9/26/2018	900 BLOCK OF	PARKES RUN LANE	Υ	1	1
Burglary	11/18/2018	UNIT BLOCK OF	BARLEY CONE LA		1	
Burglary	2/27/2019	200 BLOCK OF	ORCHARD WAY		1	
Burglary	2/28/2019	UNIT BLOCK OF	ITHAN WOODS LANE		1	
Burglary	4/13/2019	600 BLOCK OF	MILL RD		1	
Burglary	4/16/2019	100 BLOCK OF	GARRETT AV		1	
Burglary	7/19/2019	100 BLOCK OF	FAIRFAX RD		1	
Burglary	8/3/2019	900 BLOCK OF	WELDON LANE		1	
Other	5/16/2016	200 BLOCK OF	ST DAVIDS CT		1	
Other	5/16/2016	100 BLOCK OF	GARRETT AV		1	
Other	7/10/2016	100 BLOCK OF	MEREDITH AVENUE		1 1	
Other	3/13/2018	400 BLOCK OF	BARCLAY RD			
Other	4/7/2018	200 BLOCK OF	N WAYNE AVENUE		1	
Other	9/29/2018	700 BLOCK OF	CAMPWOODS RD		1	
Other	10/4/2018	400 BLOCK OF	S DEVON AVENUE		1	
Other	10/19/2018	100 BLOCK OF	W WAYNE AVENUE		1	
Other	11/8/2018	400 BLOCK OF	N WAYNE AVENUE		1	
Other	11/12/2018	800 BLOCK OF	BRYN MAWR AV		1	
Other	4/3/2019	100 BLOCK OF	EACHUS AVENUE		1	
Other	4/20/2019	900 BLOCK OF	WELDON LANE		1	
Robbery	12/18/2015	100 BLOCK OF	PINE TREE RD		1	
Robbery	9/14/2017		ALDWYN LA		1	

Radnor Trail - Crime & Arrests	(October	2015 - S	eptember 2019)		<b></b> .	Count Adj
Type of Crime Type of Arrest	Date	Address	Street	Adjacent to Radnor Trail	Total Count	to Radnor Trail
Theft	10/19/2015	200 BLOCK OF	LENOIR AVENUE		1	
Theft Theft	10/19/2015 10/20/2015	300 BLOCK OF	WINDSOR AVENUE HAWTHORNE RD AND OLD OAKS RD		1 1	
Theft	1/10/2016	200 BLOCK OF	IVEN AVENUE		1	
Theft	1/12/2016	600 BLOCK OF	CORNERSTONE LANE		1	
Theft	1/12/2016	200 BLOCK OF	IVEN AVENUE		1	
Theft Theft	1/15/2016 1/17/2016	1000 BLOCK OF 200 BLOCK OF	CONESTOGA RD W WAYNE AVENUE		1	
Theft	1/21/2016	500 BLOCK OF	W WAYNE AVENUE		1	
Theft	2/1/2016	700 BLOCK OF	CAMPWOODS RD		1	
Theft	2/8/2016	100 BLOCK OF	GARRETT AV		1	
Theft Theft	2/8/2016 2/9/2016	UNIT BLOCK OF UNIT BLOCK OF	GREYTHORNE WOODS CIR WENTWORTH LANE	Υ	1 1	1
Theft	2/10/2016	OWN DEGENOR	LANDOVER RD		1	
Theft	2/11/2016	400 BLOCK OF	INVERARAY RD		1	
Theft	2/16/2016	400 BLOCK OF	CHESTNUT LANE		1	
Theft Theft	2/18/2016 2/19/2016	UNIT BLOCK OF 100 BLOCK OF	HIGHFIELD LANE EACHUS AVENUE		1	
Theft	2/22/2016	200 BLOCK OF	RAVENSCLIFF RD		1	
Theft	2/24/2016	100 BLOCK OF	BROWNING LANE		1	
Theft	2/25/2016	100 BLOCK OF	BARCLADEN RD		1	
Theft Theft	3/1/2016 3/1/2016	UNIT BLOCK OF 1000 BLOCK OF	BEATRICE DR CONESTOGA RD		1	
Theft	3/3/2016	800 BLOCK OF	MONTPARNASSE PL		1	
Theft	3/6/2016	100 BLOCK OF	MORNINGSIDE CI		1	
Theft	3/8/2016	UNIT BLOCK OF	HAYMARKET LA		1	
Theft Theft	3/10/2016 3/11/2016	400 BLOCK OF 400 BLOCK OF	N WAYNE AVENUE BELROSE LANE		1	
Theft	3/11/2016	400 BLOCK OF	BELROSE LANE		1	
Theft	3/11/2016	UNIT BLOCK OF	FAIRVIEW AV		1	
Theft	3/11/2016	500 BLOCK OF	HILAIRE RD		1	
Theft Theft	3/11/2016 3/11/2016	400 BLOCK OF 500 BLOCK OF	HUSTON RD MIDLAND CIR		1	
Theft	3/11/2016	300 BLOCK OF	PRINCETON CT		1	
Theft	3/12/2016	100 BLOCK OF	BROWNING LANE		1	
Theft	3/14/2016	600 BLOCK OF	CLYDE RD		1	
Theft Theft	3/14/2016 3/15/2016	100 BLOCK OF 100 BLOCK OF	QUAKER LANE GARRETT AV		1	
Theft	3/15/2016	100 BLOCK OF	WOODED LANE		1	
Theft	3/16/2016	300 BLOCK OF	HIGHLAND LANE		1	
Theft	3/18/2016	500 BLOCK OF	RAMBLEWOOD DRIVE		1	
Theft	3/22/2016 3/23/2016	400 BLOCK OF	S ITHAN AVENUE		1	
Theft Theft	3/25/2016	400 BLOCK OF 1000 BLOCK OF	WYLDHAVEN RD CONESTOGA RD		1	
Theft	3/25/2016	1000 BLOCK OF	CONESTOGA RD		1	
Theft	3/25/2016	100 BLOCK OF	CUMBERLAND PL		1	
Theft	3/25/2016	200 BLOCK OF	S ROBERTS RD		1	
Theft Theft	4/3/2016 4/3/2016	600 BLOCK OF 600 BLOCK OF	EARLES LANE EARLES LANE		1	
Theft	4/4/2016	100 BLOCK OF	BARCLADEN RD		1	
Theft	4/4/2016	700 BLOCK OF	EAGLE RD		1	
Theft	4/4/2016	900 BLOCK OF	WOOTTON RD		1	
Theft Theft	4/8/2016 4/14/2016	200 BLOCK OF 200 BLOCK OF	BERWIND RD HOTHORPE LANE		1	
Theft	4/14/2016	200 BLOCK OF	HOTHORPE LANE		1	
Theft	4/15/2016	UNIT BLOCK OF	MATLACK LANE		1	
Theft	4/15/2016	500 BLOCK OF	N WAYNE AVENUE		1	
Theft Theft	4/16/2016 4/16/2016	400 BLOCK OF UNIT BLOCK OF	GULPH CREEK RD WOODS LANE		1	
Theft	4/17/2016	800 BLOCK OF	CASTLEFINN LA		1	
Theft	4/17/2016	800 BLOCK OF	CASTLEFINN LA		1	
Theft	4/18/2016	200 BLOCK OF	S ROBERTS RD		1 1	
Theft Theft	4/19/2016 4/21/2016	100 BLOCK OF 200 BLOCK OF	MORNINGSIDE CI ATLEE RD		1	
Theft	4/21/2016	500 BLOCK OF	CHAUMONT DR		1	
Theft	4/22/2016	1000 BLOCK OF	CONESTOGA RD		1	
Theft Theft	4/23/2016 4/23/2016	700 BLOCK OF 200 BLOCK OF	CLYDE CI HARDWICKE LANE		1 1	
Theft	4/23/2016	400 BLOCK OF	N WAYNE AVENUE		1	
Theft	4/24/2016	300 BLOCK OF	OAK TER	Υ	1	1
Theft	4/26/2016	100 BLOCK OF	BANBURY WAY		1	
Theft	4/26/2016	200 BLOCK OF	S WAYNE AVENUE		1	
Theft Theft	4/27/2016 4/28/2016	100 BLOCK OF 300 BLOCK OF	WOODED LANE COUNTRYVIEW DRIVE		1 1	
Theft	4/28/2016	500 BLOCK OF	HUSTON RD		1	
Theft	4/28/2016	100 BLOCK OF	VALLEY FORGE TER		1	
Theft	5/2/2016	400 BLOCK OF	GULPH CREEK RD		1	
Theft Theft	5/3/2016 5/5/2016	100 BLOCK OF 500 BLOCK OF	GARRETT AV CRICKET LA		1 1	
Theft	5/8/2016	500 BLOCK OF	HILAIRE RD		1	
Theft	5/9/2016	200 BLOCK OF	IVEN AVENUE		1	
Theft	5/11/2016	UNIT BLOCK OF	ALDWYN LA		1	
Theft Theft	5/11/2016 5/11/2016	UNIT BLOCK OF	ALDWYN LA BROWNS LANE		1	
Theft	5/11/2016	SINII BLUCK UF	BROWNS LANE BROWNS LANE		1	
Theft	5/11/2016	100 BLOCK OF	MEREDITH AVENUE		1	
Theft	5/11/2016	200 BLOCK OF	S RADNOR CHESTER RD		1	
Theft	5/11/2016	200 BLOCK OF	S RADNOR CHESTER RD		1	
Theft Theft	5/11/2016 5/11/2016	200 BLOCK OF 200 BLOCK OF	S RADNOR CHESTER RD S RADNOR CHESTER RD		1	
Theft	5/11/2016	200 BLOCK OF	S RADNOR CHESTER RD		1	
Theft	5/11/2016	200 BLOCK OF	S RADNOR CHESTER RD		1	
Theft	5/11/2016	200 BLOCK OF	S RADNOR CHESTER RD		1	
Theft	5/11/2016	100 BLOCK OF	W WAYNE AVENUE		1	

				Adjacent to	Total	Count Adj
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Theft	5/13/2016	900 BLOCK OF	DREXEL LA		1	
Theft	5/13/2016	900 BLOCK OF	DREXEL LA		1	
Theft	5/14/2016	500 BLOCK OF	DAWN LANE		1	
Theft Theft	5/14/2016 5/14/2016	500 BLOCK OF 600 BLOCK OF	DAWN LANE PORTLEDGE DRIVE		1	
Theft	5/14/2016	600 BLOCK OF	PORTLEDGE DRIVE		1	
Theft	5/14/2016	700 BLOCK OF	WOODLEA RD		1	
Theft	5/16/2016	500 BLOCK OF	DAWN LANE		1	
Theft	5/18/2016	100 BLOCK OF	HICKORY LANE		1	
Theft	5/18/2016	100 BLOCK OF	WOODS LANE		1	
Theft	5/30/2016	800 BLOCK OF	MONTPARNASSE PL		1	
Theft Theft	5/31/2016 6/17/2016	500 BLOCK OF 200 BLOCK OF	DAWN LANE CORNELL DRIVE		1	
Theft	6/17/2016	500 BLOCK OF	ST DAVIDS AV		1	
Theft	6/18/2016		MORNINGSIDE CI		1	
Theft	6/20/2016	200 BLOCK OF	COMRIE DRIVE		1	
Theft	6/28/2016	800 BLOCK OF	MAPLE GLEN LANE		1	
Theft	6/28/2016	400 BLOCK OF	WOODLAND AVENUE		1	
Theft	6/29/2016	100 BLOCK OF	OAKFORD CI		1	
Theft	6/30/2016	100 BLOCK OF	LOCUST GROVE RD		1	
Theft Theft	7/6/2016 7/8/2016	200 BLOCK OF UNIT BLOCK OF	N ABERDEEN AVENUE WEST AVENUE		1	
Theft	7/14/2016	100 BLOCK OF	HICKORY LANE		1	
Theft	7/19/2016	800 BLOCK OF	BRIARWOOD RD		1	
Theft	7/19/2016	100 BLOCK OF	CORNWALL LANE		1	
Theft	7/20/2016	200 BLOCK OF	HERMITAGE DRIVE		1	
Theft	7/25/2016	100 BLOCK OF	WOODS LANE		1	
Theft	7/27/2016	200 BLOCK OF	W WAYNE AVENUE		1	
Theft Theft	8/3/2016 8/5/2016	200 BLOCK OF 200 BLOCK OF	ASHWOOD RD CORNELL DRIVE		1	
Theft	8/5/2016	100 BLOCK OF	WEST AVENUE		1	
Theft	8/7/2016	200 BLOCK OF	CORNELL DRIVE		1	
Theft	8/7/2016	700 BLOCK OF	EAGLE RD		1	
Theft	8/8/2016	UNIT BLOCK OF	ST DAVIDS RD		1	
Theft	8/10/2016	UNIT BLOCK OF	BROOKSIDE CIR		1	
Theft	8/11/2016	700 BLOCK OF	BROOK ST		1	
Theft Theft	8/15/2016 8/16/2016	400 BLOCK OF 200 BLOCK OF	VALLEY FORGE RD S ROBERTS RD		1	
Theft	8/17/2016	100 BLOCK OF	FAIRFIELD LANE		1	
Theft	8/19/2016	200 BLOCK OF	TRIANON LANE		1	
Theft	8/20/2016	200 BLOCK OF	LANDOVER RD		1	
Theft	8/23/2016	UNIT BLOCK OF	OAKFORD RD		1	
Theft	8/24/2016		DARTMOUTH RD		1	
Theft	8/24/2016	100 BLOCK OF	STRAFFORD AVENUE		1	
Theft	8/29/2016	UNIT BLOCK OF	ALDWYN LA		1	
Theft Theft	8/29/2016 9/1/2016	200 BLOCK OF 400 BLOCK OF	SPRUCE TREE RD BOXWOOD RD		1	
Theft	9/1/2016	100 BLOCK OF	CAMBRIA CT		1	
Theft	9/1/2016	500 BLOCK OF	S ROBERTS RD		1	
Theft	9/6/2016	600 BLOCK OF	BROOKSIDE AVENUE		1	
Theft	9/7/2016	300 BLOCK OF	GRANGE RD		1	
Theft	9/7/2016	200 BLOCK OF	PEMBROKE AVENUE		1	
Theft	9/7/2016 9/7/2016	300 BLOCK OF 300 BLOCK OF	S WAYNE AVENUE ST DAVIDS RD		1	
Theft Theft	9/7/2016	300 BLOCK OF	ST DAVIDS RD		1	
Theft	9/9/2016	200 BLOCK OF	S ABERDEEN AVENUE		1	
Theft	9/10/2016	600 BLOCK OF	EARLES LANE		1	
Theft	9/11/2016	200 BLOCK OF	SINKLER DRIVE		1	
Theft	9/15/2016		CRESTLINE RD		1	
Theft	9/15/2016	200 BLOCK OF	WOODLAND AVENUE		1	
Theft Theft	9/16/2016 9/19/2016	600 BLOCK OF 200 BLOCK OF	EARLES LANE TRIANON LANE		1	
Theft	9/20/2016	500 BLOCK OF	WOODLAND CT		1	
Theft	9/24/2016	200 BLOCK OF	N ABERDEEN AVENUE		1	
Theft	9/24/2016	200 BLOCK OF	POPLAR AVENUE		1	
Theft	9/26/2016	300 BLOCK OF	MORRIS CI		1	
Theft	9/27/2016	400 BLOCK OF	BOXWOOD RD		1	
Theft Theft	9/30/2016 10/3/2016	100 BLOCK OF	E BEECHTREE LANE IRONBARK CI		1	
Theft	10/6/2016	900 BLOCK OF 500 BLOCK OF	MAPLEWOOD AVENUE		1	
Theft	10/8/2016	700 BLOCK OF	APPLEGATE LANE		1	
Theft	10/9/2016	700 BLOCK OF	CLYDE CI		1	
Theft	10/10/2016	300 BLOCK OF	STRATHMORE RD		1	
Theft	10/13/2016	400 BLOCK OF	ST DAVIDS RD		1	
Theft	10/14/2016	300 BLOCK OF	PINE TREE RD		1	
Theft Theft	10/17/2016	200 BLOCK OF 400 BLOCK OF	CHAMOUNIX RD		1	
Theft Theft	10/20/2016 10/20/2016	400 BLOCK OF	EAGLE RD ROUNDHILL RD		1	
Theft	10/21/2016	600 BLOCK OF	GLENMARY RD		1	
Theft	10/21/2016	200 BLOCK OF	LANSDOWNE AVENUE		1	
Theft	10/23/2016	200 BLOCK OF	PINE TREE RD		1	
Theft	10/24/2016	200 BLOCK OF	MIDLAND AVENUE		1	
Theft	10/26/2016	100 BLOCK OF 700 BLOCK OF	LOCUST GROVE RD		1	
Theft Theft	10/27/2016 10/27/2016	700 BLOCK OF 100 BLOCK OF	KING OF PRUSSIA RD WOODS LANE		1	
Theft	10/28/2016	900 BLOCK OF	MILL RD		1	
Theft	10/28/2016	200 BLOCK OF	STRAFFORD AVENUE		1	
Theft	10/30/2016	700 BLOCK OF	STURBRIDGE DRIVE		1	
Theft	10/31/2016	100 BLOCK OF	CORNWALL LANE		1	
Theft	10/31/2016	500 BLOCK OF	COUNTY LINE RD		1	

Type of Crime Type of Arrest	Date	Address	Street	Adjacen Radnor T		Count Adj to Radnoi Trail
Theft	11/1/2016	600 BLOCK OF	CONESTOGA RD	Radiioi i	1	11011
Theft	11/2/2016	400 BLOCK OF	KING OF PRUSSIA RD		1	
Theft	11/4/2016	500 BLOCK OF	W BEECHTREE LA		1	
Theft	11/6/2016	400 BLOCK OF	VALLEY FORGE RD		1	
Theft	11/7/2016	500 BLOCK OF	ASKIN RD		1	
Theft Theft	11/14/2016	500 BLOCK OF	HILAIRE RD LOUELLA AVENUE		1	
Theft	11/14/2016 11/15/2016	300 BLOCK OF 200 BLOCK OF	BARCLADEN CI		1	
Theft	11/15/2016	400 BLOCK OF	UPPER GULPH RD		1	
Theft	11/16/2016	200 BLOCK OF	CONESTOGA RD		1	
Theft	11/16/2016	400 BLOCK OF	CONESTOGA RD	Υ	1	1
Theft	11/23/2016	100 BLOCK OF	ABRAHAMS LANE		1	
Theft	11/23/2016	400 BLOCK OF	INVERARAY RD		1	
Theft	11/23/2016	400 BLOCK OF	INVERARAY RD		1	
Theft Theft	11/25/2016	800 BLOCK OF 800 BLOCK OF	GOSHEN RD GODFREY RD		1	
Theft	11/26/2016 11/29/2016	1000 BLOCK OF	CONESTOGA RD		1	
Theft	12/5/2016	200 BLOCK OF	W BEECHTREE LA		1	
Theft	12/5/2016	500 BLOCK OF	W BEECHTREE LA		1	
Theft	12/7/2016	200 BLOCK OF	EAGLE RD		1	
Theft	12/10/2016	100 BLOCK OF	LAURIER PL		1	
Theft	12/10/2016	700 BLOCK OF	MILLER STREET		1	
Theft Theft	12/13/2016 12/15/2016	300 BLOCK OF 100 BLOCK OF	W LAURIER PL LOCUST GROVE RD		1	
Theft	12/15/2016	UNIT BLOCK OF	WEST AVENUE		1	
Theft	12/19/2016	100 BLOCK OF	BLOOMINGDALE AV		1	
Theft	12/20/2016	400 BLOCK OF	BARBARA LA		1	
Theft	12/20/2016	300 BLOCK OF	GRANGE RD		1	
Theft	12/21/2016	300 BLOCK OF	N WAYNE AVENUE		1	
Theft	12/23/2016	300 BLOCK OF	OVERHILL RD		1	
Theft	12/26/2016	300 BLOCK OF	EDGEHILL RD	Y	1	1
Theft Theft	12/28/2016 1/5/2017	900 BLOCK OF UNIT BLOCK OF	WOOTTON RD DEVONWOOD RD		1	
Theft	1/5/2017	300 BLOCK OF	WINDSOR AVENUE		1	
Theft	1/10/2017	400 BLOCK OF	EAGLE RD		1	
Theft	1/13/2017	100 BLOCK OF	BIDDULPH RD		1	
Theft	1/15/2017	500 BLOCK OF	LONGCHAMPS DRIVE		1	
Theft	1/15/2017	600 BLOCK OF	LONGCHAMPS DRIVE		1	
Theft	1/15/2017	UNIT BLOCK OF 100 BLOCK OF	WELWYN RD		1	
Theft Theft	1/18/2017 1/18/2017	500 BLOCK OF	EACHUS AVENUE W WAYNE AVENUE		1	
Theft	1/24/2017	700 BLOCK OF	DARBY PAOLI RD		1	
Theft	1/24/2017	200 BLOCK OF	TRIANON LANE		1	
Theft	1/28/2017	UNIT BLOCK OF	BLACK FRIAR RD		1	
Theft	2/4/2017	900 BLOCK OF	WOOTTON RD		1	
Theft	2/5/2017	UNIT BLOCK OF	WOODSTONE LA		1	
Theft	2/6/2017	UNIT BLOCK OF	ARTHUR RD		1	
Theft Theft	2/6/2017 2/7/2017	200 BLOCK OF UNIT BLOCK OF	W WAYNE AVENUE CLOVER LANE		1	
Theft	2/7/2017	100 BLOCK OF	CUMBERLAND PL		1	
Theft	2/8/2017	100 BLOCK OF	ABRAHAMS LANE		1	
Theft	2/10/2017	400 BLOCK OF	BRYN MAWR AV		1	
Theft	2/10/2017	200 BLOCK OF	IVEN AVENUE		1	
Theft	2/10/2017	300 BLOCK OF	W LAURIER PL		1	
Theft Theft	2/20/2017 2/24/2017	800 BLOCK OF 100 BLOCK OF	HUNT RD BROOKE FARM RD		1	
Theft	2/28/2017	100 BLOCK OF	BROOKLEA RD		1	
Theft	2/28/2017	100 BLOCK OF	BROWNING LANE		1	
Theft	2/28/2017	100 BLOCK OF	BROWNING LANE		1	
Theft	2/28/2017	400 BLOCK OF	BRYN MAWR AV		1	
Theft	2/28/2017	800 BLOCK OF	LEWIS LANE		1	
Theft	2/28/2017	300 BLOCK OF	ROCKINGHAM RD		1	
Theft Theft	2/28/2017 2/28/2017	300 BLOCK OF 300 BLOCK OF	ROCKINGHAM RD STRATHMORE RD		1	
Theft	2/28/2017	300 BLOCK OF	WYLDHAVEN RD		1	
Theft	2/28/2017	300 BLOCK OF	YORKSHIRE RD		1	
Theft	3/1/2017	100 BLOCK OF	EACHUS AVENUE		1	
Theft	3/1/2017	400 BLOCK OF	GRANGE RD		1	
Theft	3/1/2017	300 BLOCK OF	STRATHMORE RD		1	
Theft	3/2/2017 3/2/2017	UNIT BLOCK OF	ALDWYN LA		1	
Theft Theft	3/2/2017	UNIT BLOCK OF 500 BLOCK OF	BROWNS LANE CONESTOGA RD		1	
Theft Theft	3/2/2017	200 BLOCK OF	TOWER RD		1	
Theft	3/4/2017	200 BLOCK OF	FITZWILLIAMS RD		1	
Theft	3/6/2017	UNIT BLOCK OF	MEADOWCREST LANE		1	
Theft	3/7/2017	400 BLOCK OF	CHESWICK RD		1	
Theft	3/11/2017	100 BLOCK OF	WOODSTOCK RD		1	
Theft	3/17/2017	400 BLOCK OF	N BELLEVUE AVENUE RAVENSCLIFF RD		1	
Theft Theft	3/17/2017 3/21/2017	200 BLOCK OF 100 BLOCK OF	BLOOMINGDALE AV		1	
Theft	3/21/2017	200 BLOCK OF	STRAFFORD AVENUE		1	
Theft	3/23/2017	300 BLOCK OF	MIDLAND AVENUE		1	
Theft	3/24/2017	200 BLOCK OF	PINE TREE RD		1	
Theft	3/24/2017	200 BLOCK OF	SPROUL RD		1	
Theft	4/2/2017	500 BLOCK OF	RAMBLEWOOD DRIVE		1	
Theft	4/3/2017	UNIT BLOCK OF	FARISTON RD		1	
Theft Theft	4/4/2017 4/6/2017	100 BLOCK OF 600 BLOCK OF	ROCK ROSE LANE PORTLEDGE DRIVE		1	
Theft	4/8/2017	100 BLOCK OF	RUNNYMEDE AV		1	
Theft	4/9/2017	UNIT BLOCK OF	WICKLOW CT		1	

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						Count Adj
				Adjacent to	Total	to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Theft	4/10/2017	200 BLOCK OF	RAVENSCLIFF RD		1	
Theft	4/11/2017	UNIT BLOCK OF	ABERDEEN TE		1	
Theft Theft	4/17/2017	200 BLOCK OF	N ABERDEEN AVENUE		1	
Theft	4/23/2017 4/25/2017	100 BLOCK OF 700 BLOCK OF	DRAKES DRUM DRIVE S VALLEY RD		1	
Theft	4/27/2017	200 BLOCK OF	HILLDALE RD		1	
Theft	4/27/2017	300 BLOCK OF	PRINCETON CT		1	
Theft	4/28/2017	UNIT BLOCK OF	MEADOWOOD RD		1	
Theft	5/1/2017	500 BLOCK OF	DAWN LANE		1	
Theft	5/1/2017	200 BLOCK OF	WILLOW AVENUE		1	
Theft	5/2/2017	100 BLOCK OF	WOODS LANE		1	
Theft	5/4/2017	100 BLOCK OF	BRAEBANK LANE		1	
Theft	5/8/2017	500 BLOCK OF	CHANDLER LANE		1	
Theft	5/8/2017	500 BLOCK OF	FOX RUN LANE		1	
Theft	5/8/2017	300 BLOCK OF	LIBERTY LANE	Y	1	1
Theft	5/8/2017	800 BLOCK OF	MILMAR RD		1	
Theft	5/8/2017	200 BLOCK OF	W WAYNE AVENUE		1	_
Theft	5/10/2017	UNIT BLOCK OF	GREYTHORNE WOODS CIR	Υ	1	1
Theft	5/10/2017	300 BLOCK OF	MILL RD		1	
Theft Theft	5/10/2017 5/11/2017	300 BLOCK OF 100 BLOCK OF	OAK LANE BRAEBANK LANE		1 1	
Theft	5/13/2017	500 BLOCK OF	COUNTY LINE RD		1	
Theft	5/13/2017	UNIT BLOCK OF	OAKFORD RD		1	
Theft	5/22/2017	UNIT BLOCK OF	GOOD SHEPHERD TE		1	
Theft	5/25/2017	200 BLOCK OF	RAVENSCLIFF RD		1	
Theft	5/25/2017	200 BLOCK OF	WILLIAMS RD		1	
Theft	5/27/2017	200 BLOCK OF	BAILEY RD		1	
Theft	5/27/2017	UNIT BLOCK OF	BARLEY CONE LA		1	
Theft	5/27/2017	UNIT BLOCK OF	BLACK FRIAR RD		1	
Theft	5/27/2017	UNIT BLOCK OF	BLACK FRIAR RD		1	
Theft	5/27/2017	UNIT BLOCK OF	BLACK FRIAR RD		1	
Theft	5/27/2017	100 BLOCK OF	BUCKINGHAM DRIVE		1	
Theft	5/27/2017	100 BLOCK OF	BUCKINGHAM DRIVE		1	
Theft	5/27/2017	UNIT BLOCK OF	HAWTHORNE LANE		1	
Theft Theft	5/27/2017 5/27/2017	900 BLOCK OF 200 BLOCK OF	LEWIS LANE ROCKINGHAM RD		1	
Theft	5/27/2017	300 BLOCK OF	ROCKINGHAM RD		1	
Theft	5/27/2017	300 BLOCK OF	STRATHMORE RD		1	
Theft	5/27/2017	100 BLOCK OF	SUMMIT TER		1	
Theft	5/27/2017	UNIT BLOCK OF	WENTWORTH LANE		1	
Theft	5/27/2017	UNIT BLOCK OF	WENTWORTH LANE		1	
Theft	5/27/2017	300 BLOCK OF	WILLIAMS RD		1	
Theft	5/28/2017	200 BLOCK OF	LOWRYS LANE		1	
Theft	5/28/2017	200 BLOCK OF	WILLIAMS RD		1	
Theft	5/30/2017	200 BLOCK OF	BLOOMINGDALE AV		1	
Theft	5/31/2017	300 BLOCK OF	LIBERTY LANE	Υ	1	1
Theft	5/31/2017	100 BLOCK OF	MOSCIA LANE		1	
Theft Theft	5/31/2017	400 BLOCK OF	N WAYNE AVENUE W BEECHTREE LA		1	
Theft	6/3/2017 6/12/2017	400 BLOCK OF 200 BLOCK OF	LENOIR AVENUE		1	
Theft	6/29/2017	100 BLOCK OF	CUMBERLAND PL		1	
Theft	7/1/2017	200 BLOCK OF	UPPER GULPH RD		1	
Theft	7/3/2017	900 BLOCK OF	LOCUST GROVE TERR		1	
Theft	7/5/2017	600 BLOCK OF	BROOKSIDE AVENUE		1	
Theft	7/5/2017	600 BLOCK OF	RADNOR VALLEY DRIVE		1	
Theft	7/7/2017	800 BLOCK OF	VAUCLAIN LANE		1	
Theft	7/10/2017	400 BLOCK OF	CHESWICK RD		1	
Theft	7/11/2017	600 BLOCK OF	S DEVON AVENUE		1	
Theft	7/12/2017	UNIT BLOCK OF	FIELDSTONE LANE		1	
Theft	7/14/2017	600 BLOCK OF	NEWTOWN RD		1	
Theft Theft	7/14/2017	300 BLOCK OF	OVERHILL RD WOOTTON RD		1	
Theft Theft	7/14/2017 7/20/2017	900 BLOCK OF UNIT BLOCK OF	WOOTTON RD VILLANOVA RD		1 1	
Theft	7/20/2017	600 BLOCK OF	RADNOR VALLEY DRIVE		1	
Theft	7/25/2017	600 BLOCK OF	GLENWYD RD		1	
Theft	7/26/2017	200 BLOCK OF	COMRIE DRIVE		1	
Theft	7/26/2017	200 BLOCK OF	COMRIE DRIVE		1	
Theft	7/26/2017	600 BLOCK OF	CONESTOGA RD		1	
Theft	7/26/2017	300 BLOCK OF	DURHAM DRIVE		1	
Theft	7/26/2017	200 BLOCK OF	EDENTON PL		1	
Theft	7/26/2017	200 BLOCK OF	EDENTON PL		1	
Theft	7/26/2017	200 BLOCK OF	HARDWICKE LANE		1	
Theft	7/26/2017	300 BLOCK OF	MORRIS RD	Υ	1	1
Theft	7/26/2017	100 BLOCK OF	RADNOR AVENUE		1	
Theft	7/26/2017	100 BLOCK OF	RADNOR AVENUE		1	
Theft Theft	7/26/2017 7/26/2017	100 BLOCK OF 100 BLOCK OF	S SPRING MILL RD S SPRING MILL RD		1 1	
Theft	7/26/2017	100 BLOCK OF	S SPRING MILL RD		1	
Theft	7/26/2017	100 BLOCK OF	S SPRING MILL RD		1	
Theft	7/26/2017	200 BLOCK OF	S SPRING MILL RD		1	
Theft	7/26/2017	200 BLOCK OF	S SPRING MILL RD		1	
Theft	7/26/2017	100 BLOCK OF	WOODSTOCK RD		1	
Theft	7/27/2017	400 BLOCK OF	INVERARAY RD		1	
Theft	7/27/2017	UNIT BLOCK OF	OAKFORD RD		1	
Theft	7/28/2017	UNIT BLOCK OF	ARTHUR RD		1	
Theft	7/28/2017	600 BLOCK OF	KNOX RD		1	
Theft	7/31/2017	600 BLOCK OF	KIRSCH AVENUE		1	
Theft Theft	7/31/2017 7/31/2017	600 BLOCK OF 600 BLOCK OF	LANMORE AVENUE  LANMORE AVENUE		1 1	
Theft	7/31/2017	100 BLOCK OF	MORNINGSIDE CI		1	
	,,'				-	

				Adjacent to	Total	Count Adj to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Theft	7/31/2017	100 BLOCK OF	MORNINGSIDE CI		1	
Theft Theft	7/31/2017 7/31/2017	100 BLOCK OF 100 BLOCK OF	MORNINGSIDE CI MORNINGSIDE CI		1	
Theft	7/31/2017	100 BLOCK OF	MORNINGSIDE CI		1	
Theft	7/31/2017	100 BLOCK OF	MORNINGSIDE CI		1	
Theft	8/1/2017	300 BLOCK OF	WYLDHAVEN RD		1	
Theft	8/3/2017	300 BLOCK OF	STRATHMORE RD		1	
Theft Theft	8/4/2017 8/4/2017	UNIT BLOCK OF 700 BLOCK OF	HAWTHORNE LANE SOUTHWINDS DRIVE		1	
Theft	8/10/2017	400 BLOCK OF	MAPLEWOOD AVENUE	Υ	1	1
Theft	8/11/2017	600 BLOCK OF	BROOKSIDE AVENUE	•	1	=
Theft	8/11/2017	200 BLOCK OF	HARDWICKE LANE		1	
Theft	8/12/2017	400 BLOCK OF	STRAFFORD AVENUE		1	
Theft Theft	8/16/2017 8/17/2017	UNIT BLOCK OF 600 BLOCK OF	BRAXTON RD		1	
Theft	8/19/2017	UNIT BLOCK OF	EARLES LANE ITHAN WOODS LANE		1	
Theft	8/20/2017	100 BLOCK OF	WOODED LANE		1	
Theft	8/21/2017	100 BLOCK OF	ABERDEEN TE		1	
Theft	8/21/2017	500 BLOCK OF	ATTERBURY RD		1	
Theft Theft	8/21/2017 8/22/2017	700 BLOCK OF UNIT BLOCK OF	WOODCREST RD SUMMIT DRIVE		1	
Theft	8/22/2017	UNIT BLOCK OF	SUMMIT DRIVE		1	
Theft	8/22/2017	UNIT BLOCK OF	SUMMIT DRIVE		1	
Theft	8/22/2017	UNIT BLOCK OF	SUMMIT DRIVE		1	
Theft	8/22/2017	UNIT BLOCK OF	SUMMIT DRIVE		1	
Theft Theft	8/22/2017 8/23/2017	UNIT BLOCK OF 100 BLOCK OF	SUMMIT DRIVE S LOWRYS LANE		1	
Theft	8/26/2017	900 BLOCK OF	S HUNT RD		1	
Theft	8/28/2017	200 BLOCK OF	BIDDULPH RD		1	
Theft	8/28/2017	400 BLOCK OF	MAPLEWOOD AVENUE	Y	1	1
Theft	8/28/2017	400 BLOCK OF	MAPLEWOOD AVENUE	Υ	1	1
Theft Theft	8/28/2017 8/28/2017	200 BLOCK OF 100 BLOCK OF	ORCHARD WAY RADNOR AVENUE		1	
Theft	8/31/2017	500 BLOCK OF	ATTERBURY RD		1	
Theft	9/1/2017	800 BLOCK OF	GOSHEN RD		1	
Theft	9/1/2017	300 BLOCK OF	MIDLAND AVENUE		1	
Theft	9/1/2017	300 BLOCK OF	MIDLAND AVENUE		1	
Theft Theft	9/1/2017 9/1/2017	300 BLOCK OF 300 BLOCK OF	MIDLAND AVENUE PEMBROKE AVENUE		1	
Theft	9/1/2017	800 BLOCK OF	S ITHAN AVENUE		1	
Theft	9/7/2017	UNIT BLOCK OF	MATLACK LANE		1	
Theft	9/8/2017	UNIT BLOCK OF	FOREST RD		1	
Theft	9/8/2017	600 BLOCK OF	MALIN RD		1	
Theft Theft	9/9/2017 9/12/2017	200 BLOCK OF	WYNDOM LANE BROOKSIDE AVENUE		1	
Theft	9/13/2017	400 BLOCK OF	INVERARAY RD		1	
Theft	9/13/2017	400 BLOCK OF	INVERARAY RD		1	
Theft	9/13/2017	900 BLOCK OF	S HUNT RD		1	
Theft Theft	9/17/2017 9/18/2017	800 BLOCK OF 200 BLOCK OF	GALER RD BROOKSIDE AVENUE		1	
Theft	9/18/2017	400 BLOCK OF	CHESWICK RD		1	
Theft	9/18/2017	200 BLOCK OF	IVEN AVENUE		1	
Theft	9/23/2017	200 BLOCK OF	S SPRING MILL RD		1	
Theft	9/26/2017	200 BLOCK OF	S WAYNE AVENUE		1	
Theft Theft	10/2/2017 10/2/2017	200 BLOCK OF 200 BLOCK OF	CONESTOGA RD S ABERDEEN AVENUE		1	
Theft	10/6/2017	400 BLOCK OF	WYNTRE LEA DRIVE		1	
Theft	10/9/2017	300 BLOCK OF	ROCKINGHAM RD		1	
Theft	10/9/2017	400 BLOCK OF	W BEECHTREE LA		1	
Theft	10/10/2017	800 BLOCK OF	BRIARWOOD RD MEREDITH AVENUE		1	
Theft Theft	10/10/2017 10/16/2017	100 BLOCK OF 100 BLOCK OF	BUCKINGHAM DRIVE		1	
Theft	10/18/2017	400 BLOCK OF	N BELLEVUE AVENUE		1	
Theft	10/19/2017	100 BLOCK OF	TINDALL LANE		1	
Theft	10/20/2017	700 BLOCK OF	CORNERSTONE LANE		1	
Theft Theft	11/8/2017	400 BLOCK OF	W WAYNE AVENUE CALVARESE LA		1	
Theft	11/10/2017 11/13/2017	100 BLOCK OF 200 BLOCK OF	ARDEN RD		1	
Theft	11/17/2017	400 BLOCK OF	CHESWICK RD		1	
Theft	11/22/2017	500 BLOCK OF	CONESTOGA RD		1	
Theft	11/25/2017	300 BLOCK OF	CONESTOGA RD	Y	1	1
Theft	11/26/2017 11/26/2017	300 BLOCK OF	CAMBRIA CT E BEECHTREE LANE		1	
Theft Theft	11/26/2017	200 BLOCK OF 200 BLOCK OF	MIDLAND AVENUE		1	
Theft	11/27/2017	100 BLOCK OF	CAMBRIA CT		1	
Theft	11/27/2017	100 BLOCK OF	CAMBRIA CT		1	
Theft	11/27/2017	200 BLOCK OF	MIDLAND AVENUE		1	
Theft Theft	11/27/2017 11/27/2017	300 BLOCK OF 200 BLOCK OF	MIDLAND AVENUE N ABERDEEN AVENUE		1	
Theft	11/28/2017	100 BLOCK OF	N ABERDEEN AVENUE CALVARESE LA		1	
Theft	11/29/2017	200 BLOCK OF	ST DAVIDS CT		1	
Theft	12/1/2017	100 BLOCK OF	CUMBERLAND PL		1	
Theft	12/4/2017		IRON WORKS WAY		1	
Theft Theft	12/6/2017	700 BLOCK OF	BROOKE RD MEADOWRROOK CIR		1	
Theft Theft	12/8/2017 12/9/2017	500 BLOCK OF 500 BLOCK OF	MEADOWBROOK CIR MEADOWBROOK CIR		1	
Theft	12/15/2017	600 BLOCK OF	CHURCH RD	Υ	1	1
Theft	12/20/2017	100 BLOCK OF	ROCK ROSE LANE		1	
Theft	12/22/2017	UNIT BLOCK OF	LONGWOOD DRIVE		1	
Theft	12/22/2017	UNIT BLOCK OF	LONGWOOD DRIVE		1	

				Adjacent to	Total	Count Adj to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Theft	12/26/2017	500 BLOCK OF	ATTERBURY RD		1	
Theft Theft	1/1/2018	800 BLOCK OF 800 BLOCK OF	MAPLE GLEN LANE BRIARWOOD RD		1	
Theft	1/2/2018 1/2/2018	400 BLOCK OF	WEST AVENUE		1	
Theft	1/3/2018	200 BLOCK OF	RAVENSCLIFF RD		1	
Theft	1/17/2018	500 BLOCK OF	W BEECHTREE LA		1	
Theft	1/19/2018	300 BLOCK OF	STRATHMORE RD		1	
Theft Theft	1/19/2018 1/20/2018	200 BLOCK OF 400 BLOCK OF	WOODSTOCK RD MIDLAND AVENUE		1 1	
Theft	1/24/2018	200 BLOCK OF	COMRIE DRIVE		1	
Theft	1/24/2018	400 BLOCK OF	WOODLAND AVENUE		1	
Theft	1/24/2018	400 BLOCK OF	WOODLAND AVENUE		1	
Theft	1/26/2018	600 BLOCK OF	CONESTOGA RD		1	
Theft Theft	1/30/2018 1/30/2018	200 BLOCK OF 1000 BLOCK OF	ATLEE RD CONESTOGA RD		1	
Theft	1/30/2018	100 BLOCK OF	WALNUT AVENUE		1	
Theft	2/2/2018	100 BLOCK OF	CAMBRIA CT		1	
Theft	2/5/2018	200 BLOCK OF	BERWIND CI		1	
Theft	2/6/2018	100 BLOCK OF	CONESTOGA RD		1	
Theft Theft	2/8/2018 2/9/2018	100 BLOCK OF 200 BLOCK OF	WOODS LANE ABRAHAMS LANE		1 1	
Theft	2/13/2018	400 BLOCK OF	WOODLAND AVENUE		1	
Theft	2/16/2018	400 BLOCK OF	GLENMARY LANE		1	
Theft	2/16/2018	400 BLOCK OF	ROUNDHILL RD		1	
Theft	2/17/2018	200 BLOCK OF	UPLAND WA		1	
Theft Theft	2/20/2018 2/22/2018	UNIT BLOCK OF 700 BLOCK OF	CONESTOGA RD MOORE AVENUE		1	
Theft Theft	2/22/2018 2/22/2018	400 BLOCK OF	ROUNDHILL RD		1	
Theft	2/23/2018	100 BLOCK OF	W WAYNE AVENUE		1	
Theft	3/2/2018	900 BLOCK OF	GLENBROOK AVENUE		1	
Theft	3/17/2018	100 BLOCK OF	EATON DRIVE		1	
Theft	3/19/2018	300 BLOCK OF	CHAMOUNIX RD		1	
Theft Theft	3/19/2018 3/20/2018	100 BLOCK OF 100 BLOCK OF	PINE TREE RD FAIRFAX RD		1	
Theft	3/21/2018	600 BLOCK OF	DARBY PAOLI RD		1	
Theft	3/29/2018	400 BLOCK OF	GRANGE RD		1	
Theft	3/29/2018	700 BLOCK OF	KING OF PRUSSIA RD		1	
Theft Theft	4/3/2018 4/6/2018	700 BLOCK OF 700 BLOCK OF	CLYDE CI WOODLEA RD		1	
Theft	4/6/2018	700 BLOCK OF	WOODLEA RD		1	
Theft	4/7/2018	300 BLOCK OF	SUGARTOWN RD		1	
Theft	5/2/2018	400 BLOCK OF	ROUNDHILL RD		1	
Theft	5/5/2018	100 BLOCK OF	HILLSIDE CI		1	
Theft Theft	5/7/2018 5/9/2018	100 BLOCK OF UNIT BLOCK OF	BIDDULPH RD OLD OAKS RD		1 1	
Theft	5/14/2018	300 BLOCK OF	MORRIS RD	Υ	1	1
Theft	5/15/2018	500 BLOCK OF	MEADOWBROOK AVENUE		1	
Theft	5/18/2018	100 BLOCK OF	BROWNING LANE		1	
Theft	5/19/2018	400 BLOCK OF	ST DAVIDS RD		1	
Theft Theft	5/22/2018 5/22/2018	500 BLOCK OF 100 BLOCK OF	CHANDLER LA RUNNYMEDE AV		1	
Theft	5/24/2018	100 BLOCK OF	BANBURY WAY		1	
Theft	5/24/2018	700 BLOCK OF	ROBINHOOD RD		1	
Theft	5/29/2018	400 BLOCK OF	CHESWICK RD		1	
Theft Theft	5/29/2018 6/6/2018	400 BLOCK OF 600 BLOCK OF	W BEECHTREE LA DARBY PAOLI RD		1	
Theft	6/6/2018	800 BLOCK OF	GODFREY RD		1	
Theft	6/6/2018	800 BLOCK OF	S VALLEY FORGE RD		1	
Theft	6/11/2018	400 BLOCK OF	OAK LANE		1	
Theft	6/13/2018	UNIT BLOCK OF	ALDWYN LA		1	
Theft Theft	6/16/2018 6/19/2018	400 BLOCK OF 400 BLOCK OF	WYLDHAVEN RD CHESWICK RD		1 1	
Theft	6/19/2018	600 BLOCK OF	EARLES LANE		1	
Theft	6/24/2018	900 BLOCK OF	WOOTTON RD		1	
Theft	6/28/2018	100 BLOCK OF	WOODSTOCK RD		1	
Theft Theft	7/6/2018 7/10/2018	600 BLOCK OF 300 BLOCK OF	CONESTOGA RD W LAURIER PL		1 1	
Theft	7/10/2018	300 BLOCK OF	W LAURIER PL		1	
Theft	7/11/2018	UNIT BLOCK OF	GREYTHORNE WOODS CIR	Υ	1	1
Theft	7/11/2018	300 BLOCK OF	W LAURIER PL		1	
Theft	7/11/2018	300 BLOCK OF	W LAURIER PL		1	
Theft Theft	7/11/2018 7/31/2018	300 BLOCK OF UNIT BLOCK OF	W LAURIER PL NORTHWOODS RD		1	
Theft	8/2/2018	UNIT BLOCK OF	ALDWYN LA		1	
Theft	8/2/2018	800 BLOCK OF	SPROUL RD		1	
Theft	8/3/2018	600 BLOCK OF	PORTLEDGE DRIVE		1	
Theft	8/7/2018	100 BLOCK OF	WOODSTOCK RD		1	
Theft Theft	8/9/2018 8/12/2018	200 BLOCK OF 800 BLOCK OF	CONESTOGA RD MILL RD		1	
Theft	8/12/2018 8/12/2018	400 BLOCK OF	MILL RD UPPER GULPH RD		1	
Theft	8/16/2018	800 BLOCK OF	HUNT RD		1	
Theft	8/19/2018	100 BLOCK OF	BARCLADEN RD		1	
Theft	8/21/2018	UNIT BLOCK OF	NORTHWOODS RD		1	
Theft	8/22/2018	300 BLOCK OF	OAK TER	Υ	1	1
Theft Theft	8/27/2018 8/28/2018	200 BLOCK OF 100 BLOCK OF	RAVENSCLIFF RD WOODS LANE		1	
Theft	8/31/2018	500 BLOCK OF	RAMBLEWOOD DRIVE		1	
Theft	8/31/2018	200 BLOCK OF	SINKLER DRIVE		1	
Theft	9/1/2018	400 BLOCK OF	W WAYNE AVENUE		1	
Theft	9/3/2018	300 BLOCK OF	S DEVON AVENUE		1	

				Adjacent to	Total	Count Adj to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Theft	9/4/2018	UNIT BLOCK OF	MATLACK LANE		1	
Theft Theft	9/10/2018 9/15/2018	100 BLOCK OF 600 BLOCK OF	WENTWORTH LANE HUSTON RD		1	
Theft	9/15/2018	200 BLOCK OF	N ABERDEEN AVENUE		1	
Theft	9/15/2018	400 BLOCK OF	ST DAVIDS AV		1	
Theft Theft	9/15/2018 9/15/2018	400 BLOCK OF 400 BLOCK OF	ST DAVIDS AV ST DAVIDS AV		1 1	
Theft	9/15/2018	400 BLOCK OF	ST DAVIDS RD		1	
Theft	9/25/2018	600 BLOCK OF	DARBY PAOLI RD		1	
Theft Theft	9/26/2018 9/28/2018	800 BLOCK OF 300 BLOCK OF	PARKES RUN LANE WALNUT AVENUE	Y	1 1	1
Theft	10/2/2018	900 BLOCK OF	S HUNT RD		1	
Theft	10/2/2018	900 BLOCK OF	S HUNT RD		1	
Theft	10/2/2018 10/3/2018	300 BLOCK OF 900 BLOCK OF	SUGARTOWN RD		1	
Theft Theft	10/4/2018	500 BLOCK OF	WELDON LANE WATCH HILL RD		1	
Theft	10/10/2018	700 BLOCK OF	CAMPWOODS RD		1	
Theft Theft	10/10/2018 10/10/2018	700 BLOCK OF UNIT BLOCK OF	CAMPWOODS RD DEVONWOOD RD		1	
Theft	10/10/2018	700 BLOCK OF	STURBRIDGE DRIVE		1	
Theft	10/10/2018	700 BLOCK OF	STURBRIDGE DRIVE		1	
Theft	10/10/2018	700 BLOCK OF	WOODLEA RD		1	
Theft Theft	10/14/2018 10/15/2018	700 BLOCK OF 700 BLOCK OF	GODFREY RD LARCHWOOD LANE		1 1	
Theft	10/19/2018	100 BLOCK OF	MORNINGSIDE CI		1	
Theft	10/21/2018	UNIT BLOCK OF	GREYTHORNE WOODS CIR	Υ	1	1
Theft Theft	10/21/2018 10/22/2018	700 BLOCK OF 700 BLOCK OF	MILLER STREET CORNERSTONE LANE		1	
Theft	10/24/2018	UNIT BLOCK OF	ALDWYN LA		1	
Theft	10/24/2018	600 BLOCK OF	GLENMARY RD		1	
Theft Theft	10/24/2018 10/24/2018	500 BLOCK OF 600 BLOCK OF	HILAIRE RD ROSE GLEN DRIVE		1 1	
Theft	10/27/2018	100 BLOCK OF	WOODED LANE		1	
Theft	10/30/2018	UNIT BLOCK OF	GOOD SHEPHERD TE		1	
Theft Theft	10/30/2018 11/3/2018	100 BLOCK OF 100 BLOCK OF	MORNINGSIDE CI LANTOGA RD		1 1	
Theft	11/3/2018	UNIT BLOCK OF	WEST AVENUE		1	
Theft	11/5/2018	700 BLOCK OF	CLYDE CI		1	
Theft Theft	11/5/2018 11/6/2018	1500 BLOCK OF UNIT BLOCK OF	COUNTY LINE RD ST DAVIDS RD		1 1	
Theft	11/8/2018	600 BLOCK OF	RADNOR VALLEY DRIVE		1	
Theft	11/9/2018	200 BLOCK OF	IVEN AVENUE		1	
Theft	11/15/2018	200 BLOCK OF	HILLDALE RD		1	
Theft Theft	11/15/2018 11/15/2018	500 BLOCK OF 100 BLOCK OF	RAMBLEWOOD DRIVE S SPRING MILL RD		1 1	
Theft	11/19/2018	700 BLOCK OF	SOUTHWINDS DRIVE		1	
Theft Theft	11/20/2018 11/23/2018	200 BLOCK OF 300 BLOCK OF	S ROBERTS RD CHAMOUNIX RD		1 1	
Theft	11/23/2018	200 BLOCK OF	S WAYNE AVENUE		1	
Theft	11/23/2018	300 BLOCK OF	W LAURIER PL		1	
Theft Theft	11/26/2018	700 BLOCK OF 100 BLOCK OF	CLYDE CI BUCKINGHAM DRIVE		1	
Theft	11/27/2018 11/28/2018	200 BLOCK OF	ASHWOOD RD		1	
Theft	11/28/2018	400 BLOCK OF	BARBARA LA		1	
Theft Theft	11/28/2018	500 BLOCK OF	CRICKET LA		1 1	
Theft	11/28/2018 11/28/2018	800 BLOCK OF 300 BLOCK OF	EAGLE RD SUGARTOWN RD		1	
Theft	11/28/2018	100 BLOCK OF	WALNUT AVENUE		1	
Theft	11/30/2018	1000 BLOCK OF	CONESTOGA RD		1	
Theft Theft	11/30/2018 12/3/2018	500 BLOCK OF 400 BLOCK OF	HUSTON RD KING OF PRUSSIA RD		1 1	
Theft	12/4/2018		RAVENSCLIFF RD		1	
Theft	12/4/2018	200 BLOCK OF	S RADNOR CHESTER RD		1	
Theft Theft	12/7/2018 12/8/2018	200 BLOCK OF 600 BLOCK OF	UPPER GULPH RD MALIN RD		1 1	
Theft	12/9/2018	100 BLOCK OF	WOODED LANE		1	
Theft	12/12/2018	300 BLOCK OF	BAILEY RD		1	
Theft Theft	12/14/2018 12/18/2018	200 BLOCK OF UNIT BLOCK OF	N ABERDEEN AVENUE HAYMARKET LA		1 1	
Theft	12/18/2018	300 BLOCK OF	LAURIER PL		1	
Theft	12/21/2018	600 BLOCK OF	KIRSCH AVENUE		1	
Theft Theft	1/1/2019 1/1/2019	100 BLOCK OF UNIT BLOCK OF	DRAKES DRUM DRIVE RADNOR WAY		1 1	
Theft	1/2/2019	500 BLOCK OF	MAPLEWOOD AVENUE		1	
Theft	1/6/2019	400 BLOCK OF	MARLBRIDGE RD		1	
Theft Theft	1/9/2019 1/11/2019	900 BLOCK OF 900 BLOCK OF	ACADEMY LA ACADEMY LA		1 1	
Theft	1/11/2019	500 BLOCK OF	MAPLEWOOD AVENUE		1	
Theft	1/11/2019	800 BLOCK OF	MILMAR RD		1	
Theft Theft	1/11/2019 1/12/2019	200 BLOCK OF 500 BLOCK OF	RAWLES RUN LANE CRICKET LA		1	
Theft	1/17/2019	700 BLOCK OF	GOVERNOR CI		1	
Theft	1/18/2019	100 BLOCK OF	BIDDULPH RD		1	
Theft Theft	1/18/2019 1/28/2019	100 BLOCK OF 500 BLOCK OF	W BEECHTREE LA LOUELLA AVENUE		1 1	
Theft	1/29/2019	300 BLOCK OF	OAK TER	Υ	1	1
Theft	1/30/2019	400 BLOCK OF	ROLLING RD		1	
Theft Theft	1/30/2019 1/31/2019	700 BLOCK OF 1000 BLOCK OF	STURBRIDGE DRIVE CONESTOGA RD		1 1	
Theft	2/25/2019	UNIT BLOCK OF	LOUELLA CT		1	

				Adjacent to	Total	Count Adj to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Theft	3/4/2019	UNIT BLOCK OF	FORREST LANE		1	
Theft Theft	3/5/2019	100 BLOCK OF	QUAKER LANE		1	
Theft	3/5/2019 3/8/2019	100 BLOCK OF 300 BLOCK OF	QUAKER LANE STRATHMORE RD		1	
Theft	3/9/2019	100 BLOCK OF	TRIANON LANE		1	
Theft	3/9/2019	100 BLOCK OF	TRIANON LANE		1	
Theft	3/25/2019	100 BLOCK OF	WHEELER LANE		1	
Theft	3/27/2019	500 BLOCK OF	FOX RUN LANE		1	
Theft	3/27/2019	700 BLOCK OF	HAVILAND DRIVE		1	
Theft	3/29/2019	500 BLOCK OF	W BEECHTREE LA		1	
Theft Theft	4/3/2019 4/6/2019	300 BLOCK OF 200 BLOCK OF	N WAYNE AVENUE IVEN AVENUE		1	
Theft	4/8/2019	100 BLOCK OF	BLOOMINGDALE AV		1	
Theft	4/9/2019	100 BLOCK OF	DRAKES DRUM DRIVE		1	
Theft	4/9/2019	100 BLOCK OF	TRIANON LANE		1	
Theft	4/10/2019	600 BLOCK OF	CHURCH RD	Υ	1	1
Theft	4/12/2019	100 BLOCK OF	EACHUS AVENUE		1	
Theft	4/17/2019	UNIT BLOCK OF	FARISTON RD		1	
Theft Theft	5/30/2019 5/31/2019	UNIT BLOCK OF 700 BLOCK OF	ALDWYN LA MOORE AVENUE		1	
Theft	6/11/2019	200 BLOCK OF	EDENTON PL		1	
Theft	6/12/2019	200 BLOCK OF	BLOOMINGDALE AV		1	
Theft	6/14/2019	300 BLOCK OF	S BRYN MAWR AVENUE		1	
Theft	6/15/2019	100 BLOCK OF	GARRETT AV		1	
Theft	7/9/2019	UNIT BLOCK OF	LONGWOOD DRIVE		1	
Theft	7/9/2019		LONGWOOD DRIVE		1	
Theft	7/10/2019	700 BLOCK OF	S VALLEY FORGE RD		1	
Theft	7/10/2019	700 BLOCK OF	S VALLEY FORGE RD		1	
Theft Theft	7/11/2019 7/11/2019	400 BLOCK OF 400 BLOCK OF	OAK LANE OAK LANE		1	
Theft	7/13/2019	700 BLOCK OF	CORNERSTONE LANE		1	
Theft	7/13/2019	700 BLOCK OF	CORNERSTONE LANE		1	
Theft	7/17/2019	200 BLOCK OF	CALLANAN AV		1	
Theft	7/18/2019	100 BLOCK OF	STATION RD		1	
Theft	7/23/2019	800 BLOCK OF	BRIARWOOD RD		1	
Theft	7/23/2019	700 BLOCK OF	BROOKE RD		1	
Theft Theft	7/23/2019 7/24/2019	300 BLOCK OF 400 BLOCK OF	LIBERTY LANE ST DAVIDS AV	Υ	1	1
Theft	7/25/2019	500 BLOCK OF	CHANDLER LANE		1	
Theft	7/27/2019	100 BLOCK OF	ASHWOOD RD		1	
Theft	7/27/2019	100 BLOCK OF	ASHWOOD RD		1	
Theft	7/28/2019	100 BLOCK OF	WOODS LANE		1	
Theft	7/30/2019	200 BLOCK OF	BAILEY RD		1	
Theft	7/31/2019	100 BLOCK OF	BLOOMINGDALE AV		1	
Theft	8/2/2019	100 BLOCK OF	GALLAGHER RD	Y	1	1
Theft Theft	8/7/2019 8/9/2019	100 BLOCK OF 100 BLOCK OF	W WAYNE AVENUE GALLAGHER RD	Υ	1	1
Theft	8/12/2019	100 BLOCK OF	UPPER GULPH RD		1	1
Theft	8/17/2019	UNIT BLOCK OF	WOODSWORTH CT		1	
Theft	8/19/2019	400 BLOCK OF	GRANGE RD		1	
Theft	8/20/2019	100 BLOCK OF	BRAEBANK LANE		1	
Theft	8/23/2019	100 BLOCK OF	DRAKES DRUM DRIVE		1	
Theft	8/23/2019	200 BLOCK OF	LANDOVER RD		1	
Theft	8/24/2019	100 BLOCK OF	MEREDITH AVENUE		1	
Theft Theft	8/26/2019 8/27/2019	700 BLOCK OF	IVY LANE LARCHWOOD LANE		1	
Theft	8/27/2019	300 BLOCK OF	W LAURIER PL		1	
Theft	8/27/2019	100 BLOCK OF	WALNUT AVENUE		1	
Theft	8/31/2019	200 BLOCK OF	CALLANAN AV		1	
Theft	9/2/2019	800 BLOCK OF	NEWTOWN RD		1	
Theft	9/3/2019	600 BLOCK OF	GLENMARY RD		1	
Theft	9/3/2019	100 BLOCK OF	PATTON LANE		1	
Theft Theft	9/3/2019 9/4/2019	100 BLOCK OF UNIT BLOCK OF	PATTON LANE IVY LANE		1	
Theft	9/5/2019	400 BLOCK OF	CONESTOGA RD	Υ	1	1
Theft	9/5/2019	300 BLOCK OF	EDGEHILL RD	Y	1	1
Theft	9/5/2019	300 BLOCK OF	EDGEHILL RD	Υ	1	1
Theft	9/5/2019	300 BLOCK OF	EDGEHILL RD	Υ	1	1
Theft	9/5/2019	300 BLOCK OF	EDGEHILL RD	Y	1	1
Theft	9/5/2019	300 BLOCK OF	EDGEHILL RD	Y	1	1
Theft	9/6/2019 9/7/2019	500 BLOCK OF	CHAUMONT DR		1	
Theft Theft	9/7/2019	100 BLOCK OF 100 BLOCK OF	ABRAHAMS LANE ABRAHAMS LANE		1	
Theft	9/7/2019	600 BLOCK OF	CHURCH RD	Υ	1	1
Theft	9/7/2019	300 BLOCK OF	CONESTOGA RD	Υ	1	1
Theft	9/7/2019	400 BLOCK OF	CONESTOGA RD	Υ	1	1
Theft	9/7/2019	200 BLOCK OF	S RADNOR CHESTER RD		1	
Theft	9/9/2019	400 BLOCK OF	AUDUBON AV		1	
Theft	9/13/2019	100 BLOCK OF	BIRCHES LANE		1	
Theft Theft	9/13/2019 9/13/2019	800 BLOCK OF 300 BLOCK OF	CASTLEFINN LA LANDOVER RD		1	
Theft	9/13/2019	800 BLOCK OF	VAUCLAIN LANE		1	
Theft	9/13/2019	900 BLOCK OF	WELDON LANE		1	
Theft	9/13/2019	900 BLOCK OF	WELDON LANE		1	
Theft	9/15/2019	200 BLOCK OF	LANDOVER RD		1	
Theft	9/18/2019	200 BLOCK OF	CALLANAN AV		1	
Theft	9/19/2019	700 BLOCK OF	SOUTHWINDS DRIVE		1	
Theft	9/23/2019	600 BLOCK OF	FOX FIELDS RD		1	
Theft Theft	9/23/2019 9/27/2019	200 BLOCK OF 300 BLOCK OF	LENOIR AVENUE COUNTRYVIEW DRIVE		1	
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Type of Crime Type of Arrest	Date	Address	Street	Adjacent to Radnor Trail	Total Count	Count Adj to Radnoi Trail
Theft	9/28/2019	700 BLOCK OF	MOORE AVENUE	naunor riun	1	
Theft	10/2/2019	100 BLOCK OF	BROOKE FARM RD		1	
Theft	10/4/2019	UNIT BLOCK OF	BARLEY CONE LA		1	
Theft	10/6/2019	300 BLOCK OF	EAGLE RD		1	
Theft	10/7/2019	UNIT BLOCK OF	BRAXTON RD		1	
Theft	10/7/2019	UNIT BLOCK OF	HIGHFIELD LANE		1	
Theft	10/8/2019	200 BLOCK OF	HERMITAGE DRIVE		1	
Theft Theft	10/9/2019 10/9/2019	300 BLOCK OF 1000 BLOCK OF	BAILEY RD CONESTOGA RD		1 1	
Theft	10/9/2019	100 BLOCK OF	SUMMIT TER		1	
Theft	10/9/2019	300 BLOCK OF	WILLIAMS RD		1	
Theft	10/9/2019	300 BLOCK OF	WILLIAMS RD		1	
Theft	10/9/2019	200 BLOCK OF	WOODLAND AVENUE		1	
Theft	10/11/2019	UNIT BLOCK OF	GREYTHORNE WOODS CIR	Y	1	1
Theft	10/15/2019	400 BLOCK OF	ST DAVIDS AV		1	
Theft	10/17/2019	100 BLOCK OF	WOODED LANE		1	
Vandalism	1/22/2016	200 BLOCK OF	IVEN AVENUE		1	
Vandalism Vandalism	2/11/2016 2/27/2016	100 BLOCK OF 500 BLOCK OF	WOODS LANE BROOKSIDE AVENUE		1	
Vandalism	2/27/2016	100 BLOCK OF	RADNOR RD		1	
Vandalism	3/5/2016	300 BLOCK OF	MIDLAND AVENUE		1	
Vandalism	3/13/2016	400 BLOCK OF	BOXWOOD RD		1	
Vandalism	3/18/2016	500 BLOCK OF	MEADOWBROOK CIR		1	
Vandalism	3/24/2016	400 BLOCK OF	KING OF PRUSSIA RD		1	
Vandalism	4/5/2016	UNIT BLOCK OF	ALDWYN LA		1	
Vandalism	4/5/2016	UNIT BLOCK OF	ALDWYN LA		1	
Vandalism	4/5/2016	100 BLOCK OF	LOCUST GROVE RD		1	
Vandalism	4/6/2016	400 BLOCK OF	ST DAVIDS AV		1	
Vandalism	4/14/2016	500 BLOCK OF	MEADOWBROOK CIR		1	
Vandalism	4/21/2016	100 BLOCK OF	ARBOR PL		1	
Vandalism Vandalism	4/22/2016 5/9/2016	100 BLOCK OF 400 BLOCK OF	BANBURY WAY WYLDHAVEN RD		1	
Vandalism	5/18/2016	400 BLOCK OF	KING OF PRUSSIA RD		1	
Vandalism	6/4/2016	400 020 010 01	CLYDE RD		1	
Vandalism	6/11/2016	200 BLOCK OF	S ABERDEEN AVENUE		1	
Vandalism	6/13/2016	600 BLOCK OF	BROOKSIDE AVENUE		1	
Vandalism	6/23/2016	UNIT BLOCK OF	WEST AVENUE		1	
Vandalism	6/24/2016	400 BLOCK OF	W BEECHTREE LA		1	
Vandalism	7/17/2016	800 BLOCK OF	PARKES RUN LANE	Y	1	1
Vandalism	7/27/2016	600 BLOCK OF	S DEVON AVENUE		1	
Vandalism	8/2/2016	200 BLOCK OF	WEST AVENUE		1	
Vandalism Vandalism	8/11/2016 8/12/2016	300 BLOCK OF UNIT BLOCK OF	S DEVON AVENUE OAKFORD RD		1	
Vandalism	8/22/2016	200 BLOCK OF	E LAURIER PL		1	
Vandalism	8/24/2016	UNIT BLOCK OF	S LOWRYS LANE		1	
Vandalism	9/5/2016	200 BLOCK OF	WALNUT AVENUE		1	
Vandalism	9/11/2016	900 BLOCK OF	MILL RD		1	
Vandalism	9/21/2016	UNIT BLOCK OF	MEADOWOOD RD		1	
Vandalism	9/21/2016	100 BLOCK OF	PINE TREE RD		1	
Vandalism	9/21/2016	200 BLOCK OF	SPRUCE TREE RD N WAYNE AVENUE		1	
Vandalism Vandalism	10/2/2016 10/9/2016	300 BLOCK OF 500 BLOCK OF	BROOKSIDE AVENUE		1	
Vandalism	10/16/2016	300 BLOCK OF	N WAYNE AVENUE		1	
Vandalism	10/24/2016	400 BLOCK OF	WYNTRE LEA DRIVE		1	
Vandalism	10/31/2016		MEADOWOOD RD		1	
Vandalism	11/10/2016	500 BLOCK OF	VAN LEARS RUN		1	
Vandalism	11/12/2016	200 BLOCK OF	TOWER RD		1	
Vandalism	11/14/2016		NEWTOWN RD		1	
Vandalism	11/19/2016	500 BLOCK OF	HILAIRE RD		1	
Vandalism	12/5/2016	500 BLOCK OF	VAN LEARS RUN		1	
Vandalism	12/18/2016	300 BLOCK OF	EAGLE RD		1	
Vandalism Vandalism	12/21/2016 1/1/2017	200 BLOCK OF 200 BLOCK OF	WEST AVENUE BERWIND RD		1	
Vandalism	1/1/2017	200 BLOCK OF	BERWIND RD		1	
Vandalism	1/2/2017	800 BLOCK OF	NORTHWINDS DRIVE		1	
Vandalism	1/3/2017	400 BLOCK OF	FAIRVIEW RD		1	
Vandalism	1/12/2017	600 BLOCK OF	MALIN RD		1	
Vandalism	1/29/2017	200 BLOCK OF	BAILEY RD		1	
Vandalism	1/29/2017	UNIT BLOCK OF	RODNEY RD		1	
Vandalism	2/10/2017		GOSHEN RD		1	
Vandalism	4/6/2017	UNIT BLOCK OF	LOUELLACT		1	
Vandalism Vandalism	4/7/2017 4/14/2017	100 BLOCK OF UNIT BLOCK OF	GALLAGHER RD LOUELLA CT	Y	1	1
Vandalism	5/8/2017	UNIT BLUCK OF	BLOOMINGDALE AV		1	
Vandalism	5/9/2017	200 BLOCK OF	W WAYNE AVENUE		1	
Vandalism	5/12/2017	300 BLOCK OF	S DEVON AVENUE		1	
Vandalism	5/24/2017	100 BLOCK OF	BLOOMINGDALE AV		1	
Vandalism	5/26/2017	200 BLOCK OF	CONESTOGA RD		1	
Vandalism	7/14/2017	UNIT BLOCK OF	BRAXTON RD		1	
Vandalism	7/30/2017	100 BLOCK OF	FAIRFAX RD		1	
Vandalism	8/11/2017	100 BLOCK OF	S ABERDEEN AVENUE		1	
Vandalism	8/12/2017	700 BLOCK OF	BRYN MAWR AV		1	
Vandalism Vandalism	8/12/2017 8/12/2017	700 BLOCK OF 800 BLOCK OF	BRYN MAWR AV BRYN MAWR AV		1	
vandalism Vandalism	8/12/2017 8/12/2017	800 BLOCK OF	DARBY PAOLI RD		1	
Vandalism	8/12/2017	800 BLOCK OF	DARBY PAOLI RD		1	
Vandalism	8/12/2017	800 BLOCK OF	DARBY PAOLI RD		1	
Vandalism	8/12/2017	800 BLOCK OF	DARBY PAOLI RD		1	
Vandalism	8/18/2017	800 BLOCK OF	CHURCH RD		1	
Vandalism	8/28/2017	700 BLOCK OF	COUNTY LINE RD		1	

						Count Adj
T (60) T (60)			<b>6</b> 1	Adjacent to	Total	to Radnor
Type of Crime Type of Arrest	Date	Address	Street	Radnor Trail	Count	Trail
Vandalism Vandalism	8/31/2017 8/31/2017	500 BLOCK OF 100 BLOCK OF	CHANDLER LANE RADNOR AVENUE		1 1	
Vandalism	9/14/2017	100 BLOCK OF	SOUTHWINDS DRIVE		1	
Vandalism	9/28/2017		PEMBROKE AVENUE		1	
Vandalism	11/12/2017	400 BLOCK OF	BRYN MAWR AV		1	
Vandalism	11/12/2017	100 BLOCK OF	MEREDITH AVENUE		1	
Vandalism	11/19/2017		ALDWYN LA		1	
Vandalism	11/21/2017	1000 BLOCK OF	CONESTOGA RD		1	
Vandalism	11/22/2017	UNIT BLOCK OF	MATLACK LANE		1	
Vandalism	11/25/2017	200 BLOCK OF	CONESTOGA RD		1	
Vandalism	11/27/2017	100 BLOCK OF 100 BLOCK OF	RADNOR AVENUE		1	
Vandalism Vandalism	12/2/2017 12/2/2017	100 BLOCK OF	BUCKINGHAM DRIVE BUCKINGHAM DRIVE		1 1	
Vandalism	12/2/2017	100 BLOCK OF	HAWTHORNE RD		1	
Vandalism	12/13/2017		ALDWYN LA		1	
Vandalism	12/27/2017		DEBARAN LANE		1	
Vandalism	1/16/2018	1000 BLOCK OF	CONESTOGA RD		1	
Vandalism	1/27/2018	300 BLOCK OF	UPPER GULPH RD		1	
Vandalism	1/28/2018	100 BLOCK OF	WOODSTOCK RD		1	
Vandalism	1/31/2018	200 BLOCK OF	RADNOR RD		1	
Vandalism	2/20/2018		E BEECHTREE LANE		1	
Vandalism	3/1/2018	100 BLOCK OF	LANDOVER RD		1	
Vandalism Vandalism	4/3/2018 4/3/2018		BARLEY CONE LA BARLEY CONE LA		1 1	
Vandalism	4/3/2018	1500 BLOCK OF	COUNTY LINE RD		1	
Vandalism	4/3/2018	1500 BLOCK OF	COUNTY LINE RD		1	
Vandalism	4/6/2018	400 BLOCK OF	GULPH CREEK RD		1	
Vandalism	4/6/2018	400 BLOCK OF	GULPH CREEK RD		1	
Vandalism	5/5/2018	100 BLOCK OF	RADNOR AVENUE		1	
Vandalism	5/9/2018	1000 BLOCK OF	CONESTOGA RD		1	
Vandalism	5/29/2018	300 BLOCK OF	STRATHMORE RD		1	
Vandalism	5/29/2018	100 BLOCK OF	WENTWORTH LANE		1	
Vandalism	6/6/2018	800 BLOCK OF	GODFREY RD		1	1
Vandalism Vandalism	8/14/2018 8/15/2018	400 BLOCK OF 100 BLOCK OF	MAPLEWOOD AVENUE MORNINGSIDE CI	Y	1 1	1
Vandalism	8/17/2018	100 BLOCK OF	BLOOMINGDALE AV		1	
Vandalism	8/29/2018	500 BLOCK OF	CHANDLER LA		1	
Vandalism	8/30/2018	UNIT BLOCK OF	WEIRWOOD RD		1	
Vandalism	10/1/2018	500 BLOCK OF	COUNTY LINE RD		1	
Vandalism	10/24/2018	600 BLOCK OF	NEWTOWN RD		1	
Vandalism	10/29/2018	800 BLOCK OF	BRYN MAWR AV		1	
Vandalism	10/30/2018	100 BLOCK OF	POPLAR AVENUE		1	
Vandalism	10/30/2018	200 BLOCK OF	S ABERDEEN AVENUE		1	
Vandalism	10/30/2018	400 BLOCK OF	ST DAVIDS RD		1	
Vandalism Vandalism	10/31/2018 10/31/2018	200 BLOCK OF 200 BLOCK OF	E BEECHTREE LANE E BEECHTREE LANE		1 1	
Vandalism	10/31/2018	100 BLOCK OF	POPLAR AVENUE		1	
Vandalism	11/8/2018	100 BLOCK OF	POPLAR AVENUE		1	
Vandalism	11/10/2018		POPLAR AVENUE		1	
Vandalism	11/16/2018	UNIT BLOCK OF	LOUELLA CT		1	
Vandalism	11/16/2018	100 BLOCK OF	W WAYNE AVENUE		1	
Vandalism	11/21/2018	100 BLOCK OF	WAYNEWOOD AVENUE		1	
Vandalism	12/3/2018	UNIT BLOCK OF	ALDWYN LA		1	
Vandalism	12/3/2018	300 BLOCK OF	CONESTOGA RD	Υ	1	1
Vandalism Vandalism	12/3/2018 12/21/2018	400 BLOCK OF 400 BLOCK OF	FAIRVIEW RD BARBARA LA		1 1	
vandalism Vandalism	12/21/2018	UNIT BLOCK OF	LOUELLA CT		1	
Vandalism	1/27/2019	200 BLOCK OF	WILLOW AVENUE		1	
Vandalism	4/15/2019	200 BLOCK OF	ASHWOOD RD		1	
Vandalism	5/30/2019	600 BLOCK OF	GLENMARY RD		1	
Vandalism	5/31/2019	200 BLOCK OF	WILLIAMS RD		1	
Vandalism	7/29/2019	UNIT BLOCK OF	BARLEY CONE LA		1	
Vandalism	8/12/2019	100 BLOCK OF	FAIRFIELD LANE		1	
Vandalism	9/3/2019	600 BLOCK OF	GLENMARY RD		1	
Vandalism	9/4/2019		CLYDE RD		1	
Vandalism	9/5/2019	300 BLOCK OF	CONESTOGA RD	Y	1	1
Vandalism	9/5/2019	UNIT BLOCK OF	KINTERRA RD	Υ	1 1	1
Vandalism Vandalism	9/13/2019 9/30/2019	500 BLOCK OF 400 BLOCK OF	LONGCHAMPS DRIVE EAGLE RD		1	
Vandalism	9/30/2019	200 BLOCK OF	POPLAR AVENUE		1	
	3,30,2013	200 020011 01			-	