



A CIRCLE OF PROGRESS

**MARCH
2018**

The Greater Pottstown Trails Feasibility Study

28.21 MILES
Multi-Use Trail

14.02 MILES
On-Road
Bike Facility

0.95 MILES
Multi-Use
Sidepath

0.61 MILES
Pedestrian Path





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Table of Contents

Executive Summary	1
Introduction	2
Study Goals	5
Regional Planning Context	6
Early Implementation Projects	9
Further Considerations for Implementation	10
Construction Phasing Recommendations	10
Partner Responsibilities	10
Recommendations for Additional Projects	11
Overview and Analysis of the Greater Pottstown Trails Network	11
Segment Labeling Explanation	11
Use of Aerials in Trail Maps	11
Trail Types	12
Trail Lengths and Steep Slopes	13
Coventry Trail	14
Coventry Trail Overview	14
Coventry Trail Alternatives	17
Coventry Trail Segments	18
Pottsgrove Trail	24
Pottsgrove Trail Overview	24
Pottsgrove Trail Alternatives	27
Pottsgrove Trail Segments	28
Manatawny Trail	38
Manatawny Trail Overview	38
Manatawny Trail Alternatives	41
Manatawny Trail Segments	42
Lower West Trail	52
Lower West Trail Overview	52
Lower West Trail Segments	52

Upper West Trail	55
Upper West Trail Overview.....	55
Upper West Trail Alternatives and Alignments.....	59
Upper West Trail Segments	62
Opinion of Probable Cost	74
Funding Sources for Implementation.....	85
The Study Development Process.....	87
Precedent Plans and Reports	87
Field Survey Schedule.....	87
Project Steering Committee Meetings	87
Public Meetings.....	88

Figures

● Figure 1: Greater Pottstown Trails Basemap	3
● Figure 2: Circuit Trails Network	6
● Figure 3: Primary Trail Network in Montgomery County	7
● Figure 4: Circuit Trails in Chester County	8
● Figure 5: Coventry Trail	15
● Figure 6: Pottsgrove Trail	25
● Figure 7: Pottsgrove Trail Map Detail: Sprogels Run and PA 663 Crossing.....	35
● Figure 8: Lower West and Manatawny Trails	39
● Figure 9: Upper West Trail	57

Tables

● Table 1: Coventry Trail Alternatives.....	17
● Table 2: Coventry Trail Segments	18
● Table 3: Pottsgrove Trail Alternatives.....	27
● Table 4: Pottsgrove Trail Segments.....	28
● Table 5: Manatawny Trail Alternatives.....	41
● Table 6: Manatawny Trail Segments	42

- **Table 7:** Lower West Trail Segments52
- **Table 8:** Upper West Trail Alternatives A and B.....59
- **Table 9:** Upper West Trail Alternatives C, D, and E.....60
- **Table 10:** Upper West Trail Alignments F and G61
- **Table 11:** Upper West Trail Segments62
- **Table 12:** Opinion of Probable Cost for the Greater Pottstown Trails Network.....75

Appendices

- Appendix A: Site Visit Schedule.....A-1**
- Appendix B: Public Meeting Minutes.....B-1**
- Appendix C: Aerial Maps of Coventry Trail, Manatawny Trail, and Lower West TrailC-1**

Executive Summary

This feasibility study examines the opportunities and challenges of constructing over 40 miles of trails and on-road bicycle facilities that will make up the Greater Pottstown Trails network when fully built. This planned network includes four trails that are shared between nine municipalities in Chester County, Montgomery County, and Berks County. The four trails are the **Coventry Trail**, the **Pottsgrove Trail**, the **Manatawny Trail**, and the **West Trail**, which is split into the **Lower West Trail** and the **Upper West Trail**.

The primary intent of this feasibility study is to formalize a network of bicycle infrastructure, with long, unbroken, off-road trail segments wherever possible, that cyclists with varying skill levels can comfortably use. This network will connect cyclists from the Greater Pottstown region to the Schuylkill River Trail, the Perkiomen Trail, and other planned and constructed trails that make up the region's Circuit Trails network. When completed, the Circuit will encompass 800 miles of trails in the Greater Philadelphia region.

This study also pursues the creation of bicycle and multi-use trail facilities to enable people of all abilities to travel for work or leisure on bicycle, on foot, and in some cases on horse, within the Greater Pottstown region. These non-motorized facilities are particularly important for those who cannot or do not drive cars.

To plan a network of trails and bicycle facilities that best achieves these goals, a Project Steering Committee of county and municipal officials and staff members, trail advocates and planners, business owners, and health professionals met periodically beginning in 2013. Over four years, this group worked together and with input from residents through public meetings. They created a list of important regional destinations that should be accessible by cyclists and pedestrians, such as parks, schools, and shopping centers. They identified a combination of on-road and off-road segments connecting residents to these destinations, considering property ownership, cost, safe traveling conditions, and other factors when determining the alignment of those segments.

This study summarizes these findings in a narrative that is organized by trail and segment, and it includes maps and cost estimates. To help move the project into the subsequent phases of design and implementation, the study also provides basic construction phasing guidelines and recommends priority segments in each of the four trails that should be the first to be moved into the design phase.

Introduction

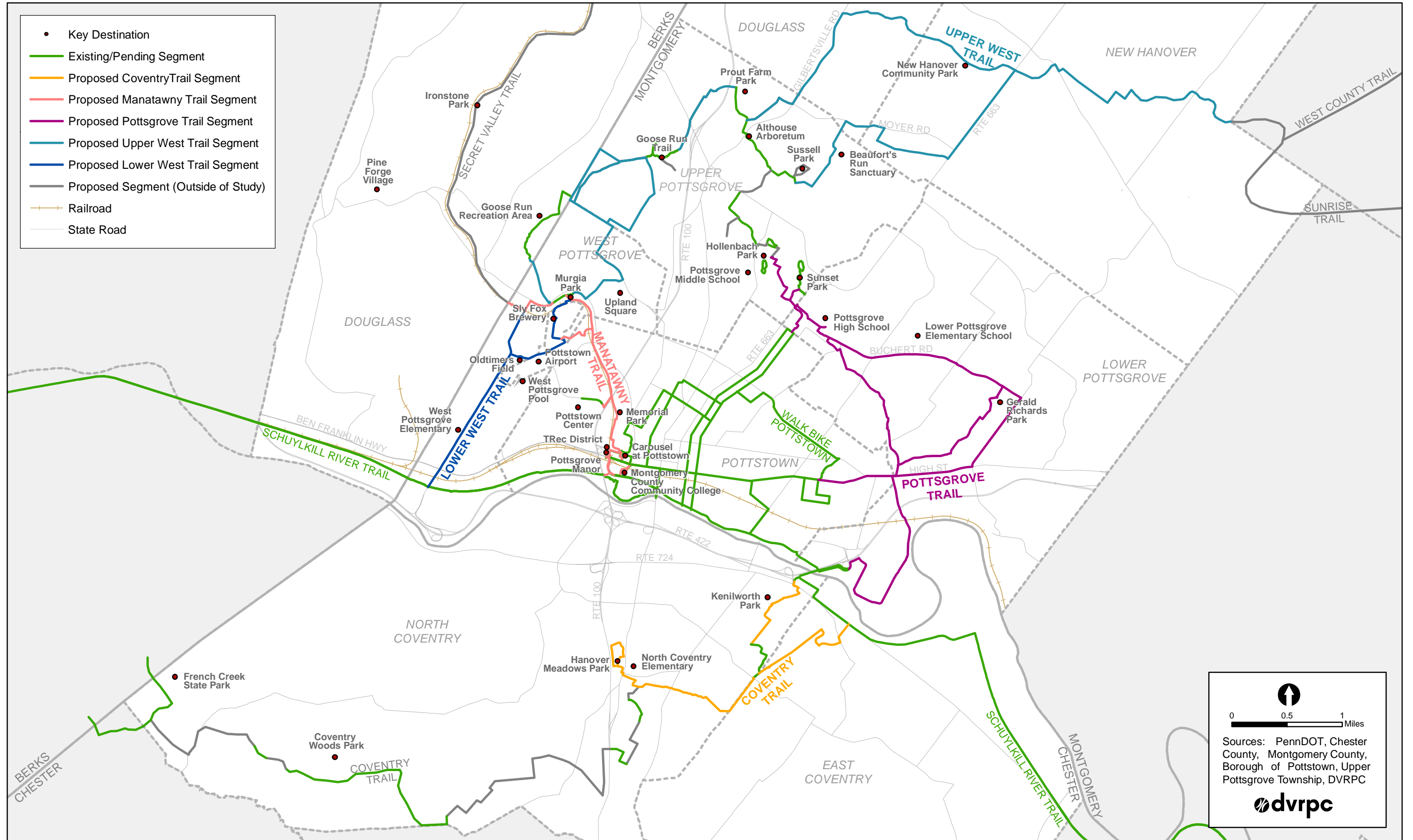
This feasibility study brings together years of work to create a multi-modal transportation network in the Greater Pottstown region. County and municipal officials and staff members, trails advocates and planners, local business owners, health professionals, and residents of this region strive to tie together the disparate trail segments and bicycle facilities that have already been constructed in the region. Their shared vision is a network of bicycle and pedestrian facilities that connects residents and visitors to important destinations in the region—specific institutional, recreational, and commercial places identified as needing multi-modal access—and to the growing Circuit Trails network, a planned 800 miles of trails running through Greater Philadelphia.

In 2013, municipal officials, staff, and residents in Upper Pottsgrove Township, West Pottsgrove Township, and Douglass Township (Berks County) decided to partner to plan trail connections within and between their communities. Montgomery County Planning Commission staff and the Pottstown Area Regional Recreation Coordinator, a circuit rider position created by the Pottstown Metropolitan Regional Planning Committee (PMRPC), helped by investigating site conditions for future trails in each municipality and mapping possible alignments. In 2015, the partnership developed into a Project Steering Committee composed of representatives from six additional municipalities in the Greater Pottstown area; the three counties in which the trails would be located; PA DCNR; the Pottsgrove School District; the Schuylkill River Greenway Association; the Pottstown Area Health and Wellness Foundation; and the Colebrookdale Railroad, a private recreational railroad.

The PMRPC then asked staff from the Delaware Valley Regional Planning Commission (DVRPC), the region's Metropolitan Planning Organization, to develop a study to examine trail and on-road bicycle facility alignments at the parcel scale and determine the opportunities and constraints associated with each.

The four trails in this study (see Figure 1) include the **Coventry Trail** in North Coventry Township and East Coventry Township; the **Pottsgrove Trail** in Upper Pottsgrove Township and Lower Pottsgrove Township; the **Manatawny Trail** in Pottstown Borough and West Pottsgrove Township; and the **West Trail**, which includes the **Lower West Trail** in Pottstown Borough and West Pottsgrove Township and the **Upper West Trail** in West Pottsgrove Township, Upper Pottsgrove Township, Douglass Township (Berks County), Douglass Township (Montgomery County), and New Hanover Township.

Figure 1: Greater Pottstown Trails Basemap



The DVRPC project team met with the Project Steering Committee in July 2015 to visit sites that could accommodate proposed alignments for the four trails. Following this site tour and discussions with the Project Steering Committee, the DVRPC project team developed an initial set of maps, which they adjusted with feedback from the Project Steering Committee during three meetings between October 2015 and March 2016. In April 2016, DVRPC and the Pottstown Area Regional Recreation Coordinator held a public meeting to hear residents' thoughts and concerns on the proposed alignments. Afterwards, the Pottstown Area Regional Recreation Coordinator held a month-long public review period for the study, and DVRPC created a map of the proposed trail system for municipalities to display for public review at important destinations within the region. After an iterative revision process between fall 2016 and summer 2017, the project team presented the final study and recommendations to the public on August 2, 2017. The study was further revised after an additional month-long public comment period.

Study Goals

Because the Greater Pottstown Trails network brings together many independently produced trail, bicycle, and greenway plans, and because the region's predominantly urban land uses and private property ownership offer limited space for long, uninterrupted trail segments, the network is a patchwork of different facilities: it includes multi-use trails, sidepaths, pedestrian paths, sidewalks, and on-road facilities like bicycle lanes and sharrows on low-volume residential streets.

The intent of this feasibility study is to knit existing plans together in order to construct:

- (1) unbroken segments containing bicycling facilities (as opposed to bicycle "routes," which by definition may or may not contain infrastructure for cyclists), complementing Pottstown Borough's existing bicycle network, that an adult cyclist of medium-to-high skill can use comfortably and with low stress;
- (2) neighborhood-focused multi-use trail networks made of shorter segments, with some bicycle facility segments when necessary, that provide a safe, low-stress environment for cyclists and pedestrians of all ages and abilities; and
- (3) opportunities for equestrian trails when land that can accommodate longer, wider sections of multi-use trail is available.

In consideration of the variety of people who might use this network, each segment in this network must be able to accommodate one of the following types of facility:

- (1) an off-road trail or sidepath, typically 10 feet in width, that is separated from vehicular traffic;
- (2) a striped and formally designated bicycle lane; or
- (3) clearly marked sharrows, ideally located only on low-volume, low-speed roads.

With these goals as a guide, this study determines the optimal location for trails, or for bicycle infrastructure where off-road trails are infeasible but a connection is necessary. This study recommends locations for each segment in the Coventry Trail, Pottsgrove Trail, Manatawny Trail, and West Trail; compares opportunities and constraints in an analysis of each segment; offers cost estimates and phasing recommendations; and recommends the first group of segments that should be prioritized for design by an engineer. The **Study Development Process** for this project is described in detail beginning on page 87 of this study.

Regional Planning Context

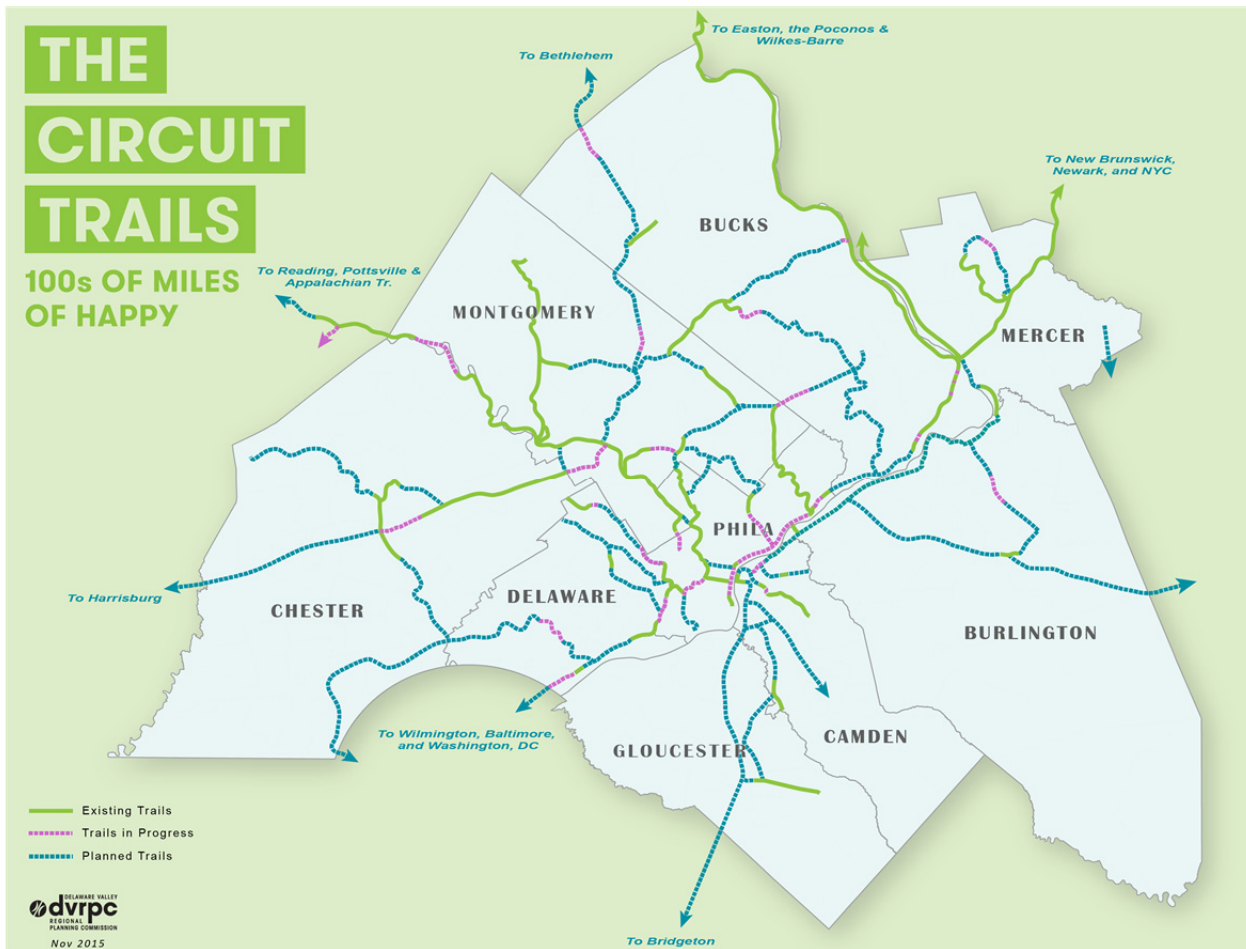
The Greater Pottstown Trails exist within the context of several large trail networks, including the Circuit Trails, Montgomery County’s trail system, and Chester County’s trail system.

The Circuit Trails

The Circuit Trails network includes approximately 800 miles of planned and completed trails within nine counties in the Greater Philadelphia region, which includes southeastern Pennsylvania and southern New Jersey (Figure 2). All trails in the Circuit are, or are ideally planned to be, off-road, multi-purpose, paved, and at least 10 feet wide. Any trails that are added to the Circuit Trails network must meet the minimum standards and connect to trails already designated as “Circuit trails.”

The trails in the Circuit are planned and constructed by a wide variety of mostly governmental trail-building sponsors, while the Circuit Coalition, a collaboration of non-profit organizations, foundations, and agencies working to complete the network, works on branding, funding, coordination, and the promotion of the system as a world-class recreation and commuting amenity.

Figure 2: Circuit Trails Network

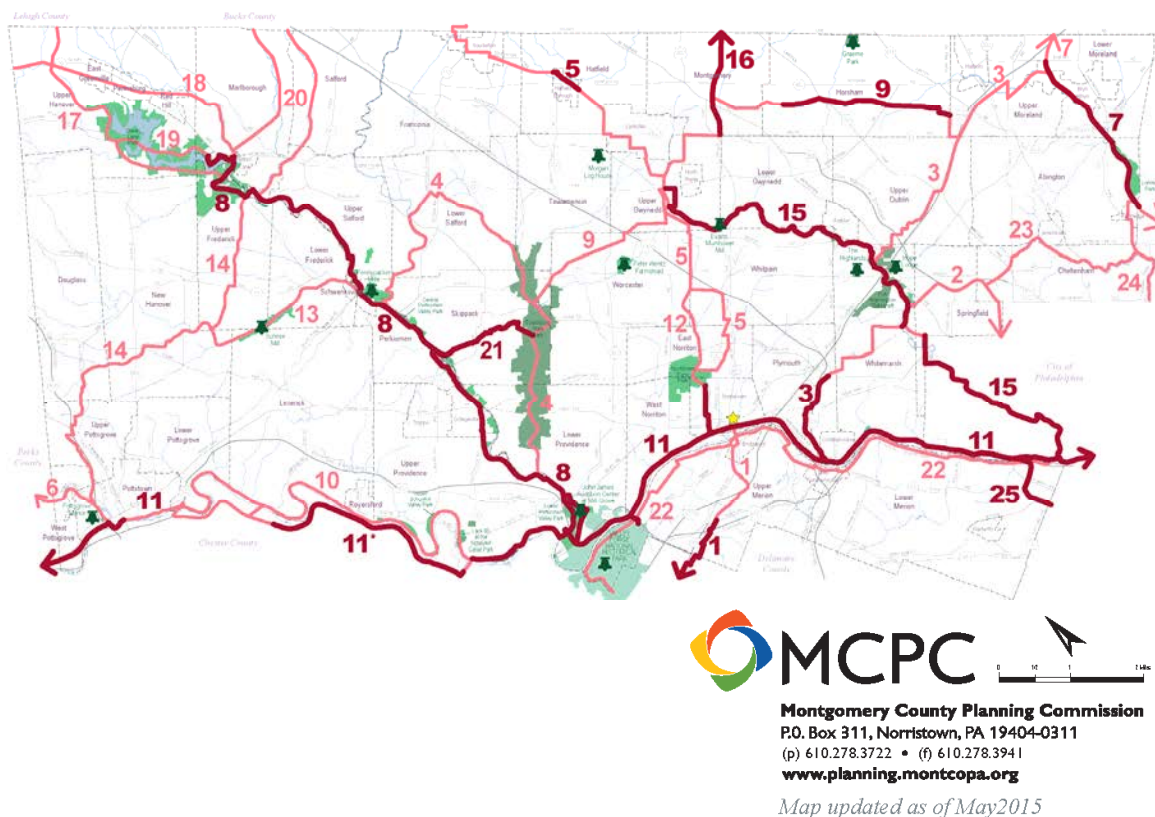


Source: DVRPC

Montgomery County

Montgomery County currently has over 92 miles of trails in its Primary Trail Network, which range from paved multi-purpose trails on the Schuylkill River Trail to long-distance, single-track hiking paths. Figure 3 illustrates the Primary Trail Network; completed trails are shown as red lines and proposed trails are shown as pink lines. The county's recent comprehensive plan, *Montco 2040: A Shared Vision*, proposes a county trail system totaling 257 miles. The county's highest-priority trails—those that the county wants to construct or see constructed in the next five to 10 years—include the Schuylkill River Trail along Pottstown Borough's waterfront.

Figure 3: Primary Trail Network in Montgomery County



Source: Montgomery County Planning Commission

The Pottstown Borough segment of the Schuylkill River Trail is important to the county because the trail as a whole is of regional significance. The main spine of the built Schuylkill River Trail runs along the Schuylkill River from Reading to Philadelphia, where the river meets the Delaware River. Much of the trail takes advantage of the presence of a right-of-way formerly owned by the Pennsylvania Railroad, and its width and asphalt surfacing enable it to accommodate a variety of users.

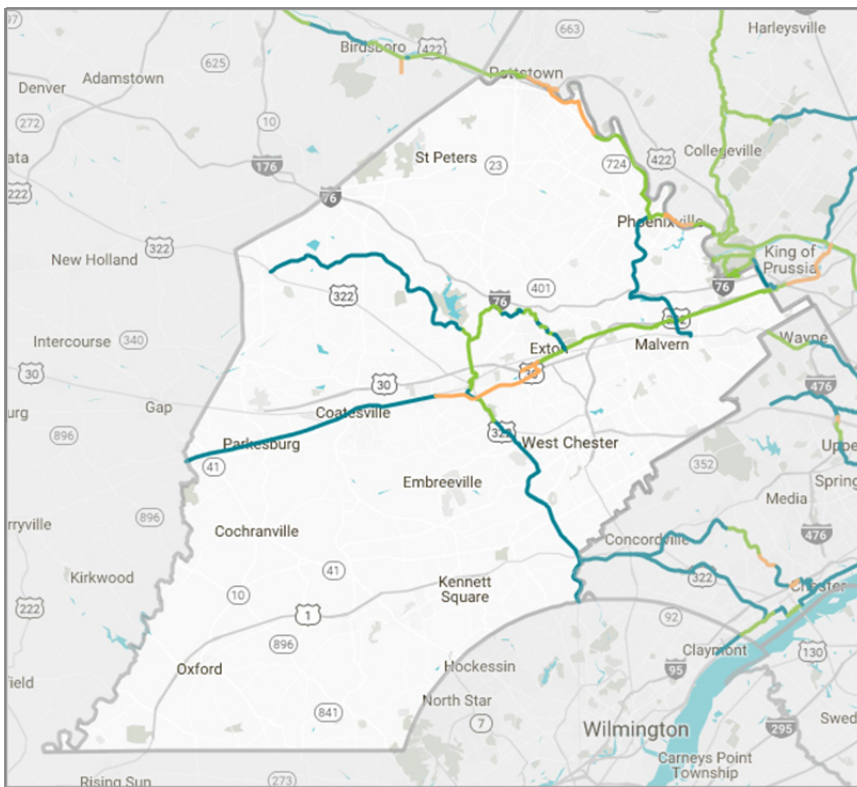
At the time of publication of this study, over 36 miles of the anticipated 43-mile trail from Pottstown to Philadelphia are completed, 18 of which pass through Montgomery County. When an additional approximately two miles of the Schuylkill River Trail are constructed in the Greater Pottstown region, Montgomery County's contribution to constructing the Schuylkill River Trail will be complete.

Chester County

Chester County currently manages over 20 miles of regional multi-use trails. The county's *Landscapes2* comprehensive plan includes eight policies to encourage the creation of regional trail and greenway networks in the county, including the creation of both a trail network and a bicycle network. The county's *Linking Landscapes* open space element indicates how these policies would work in practice. *Linking Landscapes* outlines 24 Regional Recreation Corridors that will link communities with each other and with parks and other recreational open spaces using a multi-municipal trail network that augments the trails construction undertaken by each municipality. The Schuylkill corridor is listed as one of the county's Regional Priority Trail Corridors.

Chester County's goals are to construct the Circuit Trails system within the county and facilitate connections to this regional trail network. The Coventry Trail described in this study, which provides pedestrian and cyclist access to the Schuylkill River Trail, is in alignment with these goals. Figure 4 shows the Circuit Trails that run through Chester County. Existing trails are marked by green lines, trails in progress (i.e., those being designed or built, as of the publication date of this study) are marked by orange lines, and trails in the planned phase are marked by blue lines.

Figure 4: Circuit Trails in Chester County



Source: The Circuit, www.dvrpc.org/webmaps/thecircuit

Early Implementation Projects

The planning process that this feasibility study describes is the first phase of the overall implementation project; subsequent phases include designing each segment in detail, constructing it, and maintaining it over time. The DVRPC project team reviewed segments from each of the four trails to recommend which ones the Project Steering Committee should prioritize for moving through design phase and into construction. The team considered the following criteria in making its recommendation:

- ease of construction;
- proximity to completed or soon-to-be completed trails;
- potential for coordination with other projects (mainly those managed by the Pennsylvania Department of Transportation [PennDOT]);
- construction cost, as determined by the **Opinion of Probable Cost** (page 74);
- quantity or degree of significant barriers to implementation (the number of private landowners who would need to provide easements; the number of road, railway, or waterway crossings needed; topographical characteristics);
- alignment type (with a preference toward multi-use over cyclist-only or pedestrian-only);
- length of uninterrupted multi-use trail;
- accessibility to users of varied abilities;
- proximity to denser neighborhoods, and therefore a larger number of potential users;
- proximity to important destinations in the Greater Pottstown region; and
- the ability to provide a scenic and varied trail experience to users.

The sets of segments that best met the above criteria include the following:

Coventry Trail: Alternative A

“Alternative A” includes segments CT-A-1, CT-A-2, CT-A-3, CT-A-4, and CT-A-5, and is a predominantly off-road multi-use trail with one sharrow segment. The segments’ combined length is 1.45 miles. Located in North Coventry Township, they connect to the Schuylkill River Trail and pass through Kenilworth Park. These segments are discussed in greater detail on pages 19–20.

Pottsgrove Trail: High School to Hollenbach Park

The “High School to Hollenbach Park” segments include PT-9, PT-10, PT-13, PT-14, PT-15, and PT-16, and are roughly equally divided between multi-use trail and on-road sharrows. The segments’ combined length is 1.26 miles. Shared between Lower Pottsgrove Township and Upper Pottsgrove Township, they connect Pottsgrove High School to Hollenbach Park across PA 663 (North Charlotte Street). These segments are discussed in greater detail on pages 33–37.

Manatawny Trail: Schuylkill River Trail through Memorial Park

The “Schuylkill River Trail through Memorial Park” segments include MT-1, MT-B-1, MT-B-2, MT-B-3, MT-B-4, MT-B-5, MT-2, and MT-3, and are mostly multi-use trail with two sharrows segments. Their combined length is 1.04 miles. Located in Pottstown Borough, they connect to the Schuylkill River Trail and pass through Montgomery County Community College, the Gateway Tourism and Recreation District (TRec District), and Memorial Park. These segments are discussed in greater detail on pages 43–47.

Lower West Trail: Oldtimers Field to Murgia Park

The “Oldtimers Field to Murgia Park” segments include LW-2, LW-3, LW-4, and LW-5, and are predominantly multi-use trail with one sharrows segment. Their combined length is 1.08 miles. Shared between West Pottsgrove Township and Pottsgrove Borough, they pass through Oldtimers Field and next to the amenities along Circle of Progress Drive. These segments are discussed in greater detail on pages 53–54.

Upper West Trail: Murgia Park through Goose Run Recreation Area

The “Murgia Park through Goose Run Recreation Area” segments include UW-A-1, UW-A-2, and UW-A-3, which are all multi-use trail. Their combined length is 1.40 miles. Shared between West Pottsgrove Township and Douglass Township (Berks County), they pass through the Goose Run Recreation Area. These segments are discussed in greater detail on pages 64–65.

Further Considerations for Implementation

Construction Phasing Recommendations

Besides recommending early implementation projects, this study also provides construction phasing guidelines for the four trails. Each trail section, found elsewhere in this study, contains a discussion of how its individual segments could be phased over time.

Because the development of each of the four trails is being managed by a different set of partners, each trail is considered independently of the other in terms of phasing. The Project Steering Committee and the Pottstown Area Regional Recreation Coordinator will make high-level phasing decisions as the project evolves.

Partner Responsibilities

As early as possible in implementing this study, the implementing partners should determine who should fill the following roles for each trail, especially whether these roles should be centralized or distributed to each participating municipality:

- the individual or group responsible for writing grants to fund the design, construction, and maintenance of each segment;
- the individual or group responsible for negotiating for easements or property acquisition;
- the individual or group responsible for writing requests for proposal for consultant and contractor work and managing the bidding process for that work;
- the individual or group who accepts liability for legal issues that arise in association with each segment; and
- the individual or group who maintains the segment after it is constructed.

These individuals or groups may be the same for all phases of a single trail’s development, but responsibilities for these tasks should be clear throughout. A single non-profit or nongovernmental entity that represents more than one municipality or county should always be engaged, as the PMRPC and Pottstown Area Regional Recreation Coordinator have been to date, to coordinate the long-term growth and maintenance of the Greater Pottstown Trails network.

Recommendations for Additional Projects

Pedestrian Circulation Plan

This study focuses primarily on the movement of cyclists through the region while also considering the needs of pedestrians. To supplement this study and examine pedestrian access and safety more fully, the authors recommend the creation of a regional pedestrian circulation plan that inventories the region's pedestrian facilities and determines improvements to existing sidewalks and locations for new sidewalks and crosswalks. This product would be a logical next step to ensure that the trail network is accessible to as many users as possible.

Signage and Emergency Markers Plan

The study authors also recommend that an additional plan be developed that indicates where signage, particularly wayfinding signage, and emergency markers should be located along the trail routes. This plan can help implementers better anticipate construction and maintenance costs and create a consistent appearance for what should ultimately be a network of installed elements that guide users clearly and safely through the Greater Pottstown Trails network, which is complex in its scale and variety of modes. Besides providing more information about trail alignments, trail signage can also be used to beautify public areas, promote local attractions, and educate visitors.

Overview and Analysis of the Greater Pottstown Trails Network

Segment Labeling Explanation

In order to analyze each of the four trails—the Coventry Trail, Pottsgrove Trail, Manatawny Trail, and West Trail—and estimate their cost, the study divides each of them into separate segments. Each segment has its own three-part label: for example, “CT-A-1.” The first part refers to the trail name. “CT” is the Coventry Trail, “PT” is the Pottsgrove Trail, and so on. The second part of the label refers to the segment alternative: if there is more than one possible path to get from one destination to another, each path is assigned a different letter. The third part of the label indicates the segment's numerical order, generally its distance away from the Schuylkill River Trail. The example “CT-A-1” then refers to the first segment in Alternative A of the Coventry Trail.

Use of Aerials in Trail Maps

Each of the four trails is mapped on 11”x17” sheets in this study. Each segment and spur is included, along with important destinations and other publicly owned or held properties, including municipal preserved open space and school district properties. Several maps, which are included in **Appendix C**, include aerials if the scale of the map is large enough to make the small details of an aerial photograph readable in a map. The maps in the body of the text have a white background regardless of scale.

Trail Types

Multi-Use Trails and Sidepaths

All segments described as “trails” in this feasibility study are off-road.

Asphalt Trails

The standard trail treatment recommended in this study is a 10-foot-wide asphalt trail (see photo to the right), the dimensions of which are based on American Association of State Highway and Transportation Officials (AASHTO) standards that are intended to provide a safe degree of separation between users on foot and on bicycle. Some multi-use sidepaths in this study are narrower than 10 feet. One reason is the street right-of-way used by certain segments cannot accommodate a 10-foot width, and that street was otherwise determined to be the best or only available alignment for the segment. However, the project team attempted to avoid that condition in choosing trail alignments. Another reason for the presence of trails narrower than 10 feet is some *existing* multi-use trails in the proposed trail network are less than 10 feet; however, the study recommends that these trails be expanded to 10 feet as part of the implementation process.

Ten-Foot-Wide Asphalt Multi-Use Trail (Schuylkill River Trail)



Source: DVRPC

Stone Dust Trails

For some segments in the Manatawny Trail and Upper West Trail, the study recommends a stone dust trail. This treatment is composed of gravel of different sizes, with finer stone dust used for the surface layers because it accommodates more users and offers a smoother walk or ride. While asphalt offers a smoother passage than stone, stone is used in some instances in order to match existing trail conditions or maintain a more natural appearance.

Equestrian Trails

Several trail segments in the Upper West Trail may be able to accommodate equestrian use. As mentioned previously in the study, the trails that meet these criteria have relatively wide rights-of-way and opportunities to construct longer distances of unbroken multi-use trail. For those segments, this study provides cost estimates for (1) a default asphalt trail treatment that includes only pedestrians and cyclists, and (2) a trail treatment that includes an eight-foot-wide stone dust trail with a three-foot-wide equestrian track.

On-Road Bicycle Facilities

Bicycle Lanes

The Pottsgrove and Manatawny trails both have proposed separated bicycle lanes that are located on wider roads. Segments within these two trails also connect to bicycle lanes that have already been constructed in Pottstown as part of its Walk and Bike Pottstown network. The creation of new bicycle lanes requires, at a minimum, restriping the existing road and applying bicycle markers (see photo to the right). On narrow, higher-volume roads in the Greater

Bicycle Lane



Pottstown region where the installation of on-road bicycle facilities is not currently feasible due to insufficient width, bicycle lanes should be incorporated into future road-widening projects in order to avoid the use of sharrows (see photo to the right), which in ideal circumstances should only be installed on lower-volume roads.

Sharrow Markers



Sharrows for Arterial Streets

This study used the Federal Highway Administration's average annual daily traffic count (AADT) for minor arterial streets in rural areas to determine which streets require a relatively high density of sharrows installed over a linear distance.¹ For streets with an AADT of 1,500 vehicles or greater, as determined using DVRPC's regional traffic counts dataset, sharrow markers (see photo to the right) are recommended to be placed every 100 feet.

Sharrows for Neighborhood Streets

Neighborhood streets have AADT counts of fewer than 1,500 vehicles. Because vehicles are moving more slowly, fewer sharrow markers (one every 200 feet) are required for this street classification.

Pedestrian Paths

The Manatawny and Upper West trails contain pedestrian path segments. These segments are not expected to receive high volumes of pedestrian traffic and are narrower than 10 feet because they need only accommodate pedestrians. The standard for this segment type in this study is a six-foot-wide stone dust or soft-surface trail (see photo to the right), although the width may vary from that standard for each individual segment.

Gravel Pedestrian Path



Trail Lengths and Steep Slopes

The calculated lengths for segments that travel over hills or other steep slopes include the linear feet needed for switchbacks that are intended to keep the slope of the trail at or below 10 percent, a standard upper limit for user comfort. The Opinion of Probable Cost (page 74) also accounts for these additional lengths.

The trail lengths listed in the text do not include bridge lengths, but bridge lengths are included in the Opinion of Probable Cost. Total bridge lengths, as a combined sum for all bridges in each trail, are approximately 75 feet on the Coventry Trail, 215 feet on the Pottsgrove Trail, 270 feet on the Manatawny Trail, and 300 feet on the Upper West Trail. The Lower West Trail does not have bridges.

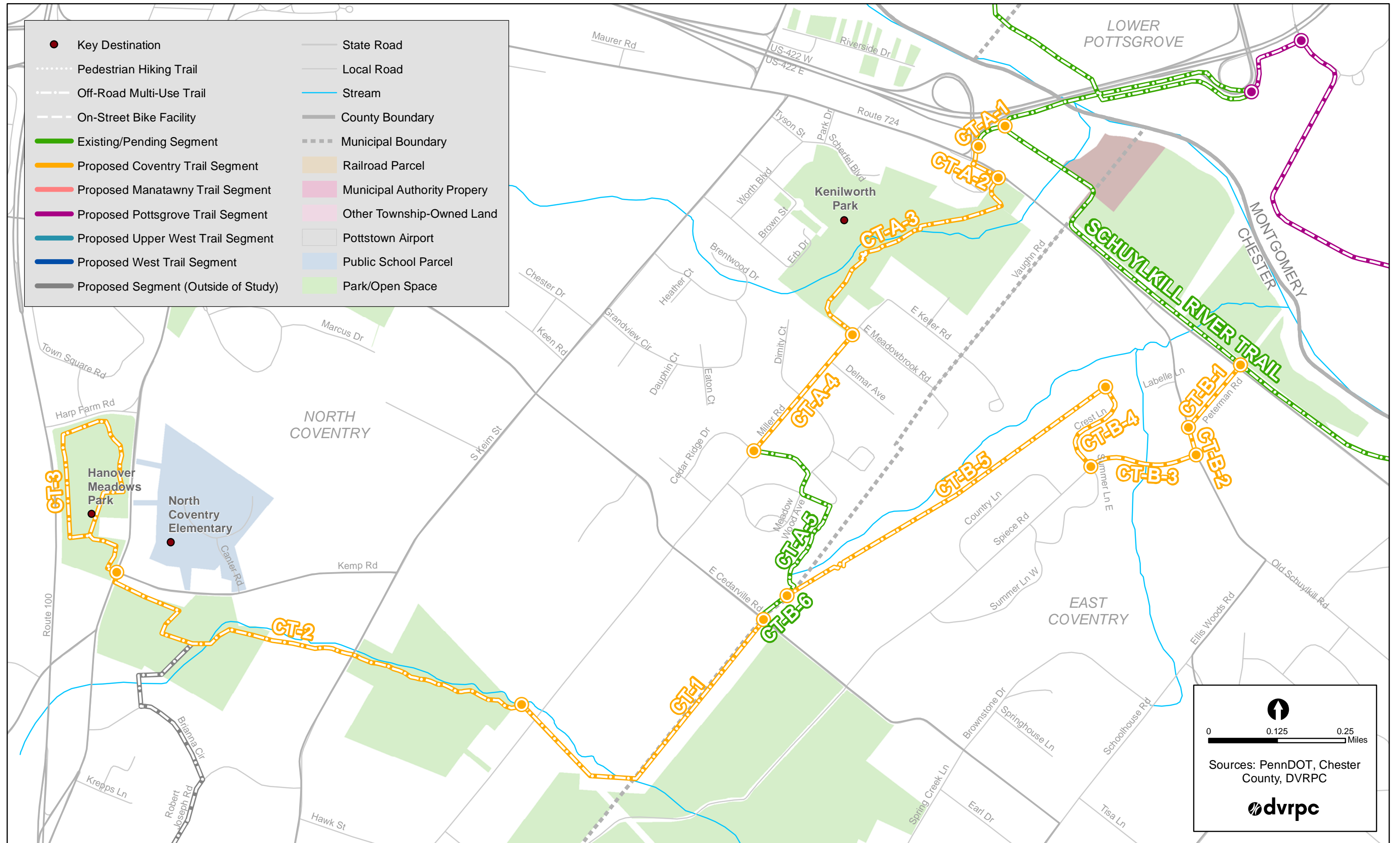
¹ Federal Highway Administration, *Highway Functional Classification Concepts, Criteria and Procedures*, 2013 edition, www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf (accessed October 18, 2017), 22.

Coventry Trail

Coventry Trail Overview

The Coventry Trail is shared between North Coventry Township and East Coventry Township in Chester County (see the list of segments in Table 2 and the map in Figure 5; an aerial map is located on Appendix page C-1). It connects neighborhoods in the two townships to the Schuylkill River Trail to the north and proposed trail networks to the west and south, with the ultimate goal of creating a connection to French Creek State Park to the southwest. Within North and East Coventry townships, the Coventry Trail connects cyclists and pedestrians to Kenilworth Park, to North Coventry Elementary School, and to Hanover Meadows Park. Between the forests in Kenilworth Park and the preserved farms to the south, the Coventry Trail offers residents opportunities for a scenic walk or ride.

Figure 5: Coventry Trail



Coventry Trail Alternatives

The Coventry Trail contains two alternative alignments for traveling between the Schuylkill River Trail and East Cedarville Road (Table 1). Alternative A takes advantage of the pending construction of a segment of the Schuylkill River Trail and a signalized crosswalk across PA 724 (East Schuylkill Road) at the PA 422 ramp. It then heads southwest through Kenilworth Park and the existing Coventry Trail. Alternative B uses a crosswalk that PennDOT plans to construct across PA 724 at Peterman Road, and travels along a PECO utility easement.

This study recommends constructing both alternatives in order to make the Coventry Trail available within both North Coventry Township, where Alternative A is located, and in East Coventry Township, where Alternative B is located. However, using the evaluation criteria listed on page 9, the study recommends Alternative A as a higher-priority set of segments and recommends that it be constructed first.

Coventry Trail Alignment Alternatives Comparison Table

Table 1: Coventry Trail Alternatives

Factors	Alternative A	Alternative B
Accessibility to Varied Users (Poor, Fair, Good, Excellent; i.e., Poor–Excellent)	Excellent (contains multi-use trails; Miller Road can be used by cyclists of most abilities)	Good (cyclists of medium to high ability will be able to travel from the Schuylkill River Trail to the PECO easement)
Level of Connectivity to Residential, Commercial, and Recreational Areas (Poor–Excellent)	Excellent (Schuylkill River Trail, Kenilworth Park, existing Coventry Trail, moderately dense residential neighborhood)	Excellent (Schuylkill River Trail, existing Coventry Trail)
Overall Quality of User Experience (Poor–Excellent)	Good (off-road segments, views of Kenilworth Park)	Good (off-road segments, views of riparian corridor)
Cost Savings through Project Coordination	Alternative A can use a pending Schuylkill River Trail stub and signalized crossing project at PA 724 and PA 422	Alternative B can use a planned signalized crossing project at PA 724 and Peterman Road
Property Ownership	Three easements required	Two easements required
Water Crossings	One bridge required	None
Road or Railroad Crossings	One signalized crossing required	One signalized crossing required
Topography (Few, Moderate, or Significant Elevation Changes)	Moderate elevation changes	Moderate elevation changes
PennDOT Partnership	PennDOT coordination required	PennDOT coordination required
Cost (See Opinion of Probable Cost on p. 74 for more information)	\$483,026	\$328,535
Cost per Linear Foot (LF)	\$63.17/LF	\$44.77/LF

Coventry Trail Segments

Table 2: Coventry Trail Segments

Segment	Segment Description	Segment Length (LF)
CT-A-1	Schuylkill River Trail Stub	357
CT-A-2	Schuylkill River Trail to Kenilworth Park Trailhead	465
CT-A-3	Kenilworth Park	2,873
CT-A-4	Miller Road	1,485
CT-A-5	Coventry Trail (Existing)	2,466
CT-B-1	Schuylkill River Trail to Old Schuylkill Road	786
CT-B-2	Old Schuylkill Road	373
CT-B-3	Spiece Road	1,065
CT-B-4	Crest Lane	1,040
CT-B-5	PECO Easement–North	3,742
CT-B-6	Coventry Trail (Existing)	331
CT-1	PECO Easement–South	3,390
CT-2	Riparian Corridor from PECO Easement to South Hanover Street	4,729
CT-3	Hanover Meadows Park	3,610
TOTAL: Alternative A		7,646 (1.45 miles)
TOTAL: Alternative B		7,338 (1.39 miles)
TOTAL: Segments 1–3		11,730 (4.96 miles)

Coventry Trail Construction Phasing Outline

- Phase 1: Alternative A, Segments CT-A-1 through CT-A-5;
- Phase 2: Alternative B, Segments CT-B-1 through CT-B-6;
- Phase 3 PECO Easement–South, Segment CT-1;
- Phase 4: Hanover Meadows Park, Segment CT-3; and
- Phase 5: Riparian Corridor from PECO Easement to South Hanover Street, Segment CT-2.



CT-A-1: Schuylkill River Trail Stub

Length: 357 feet (0.068 miles)

Type: 10-foot-wide multi-use asphalt sidepath

Construction phasing recommendation: Phase 1 of 5

The first segment of Alternative A is a pending “stub,” a small length of trail coming off of a segment of the Schuylkill River Trail. This stub connects the rest of the Coventry Trail to the Schuylkill River Trail and Pottsgrove Trail. PennDOT will be constructing this stub and its associated segment of the Schuylkill River Trail as part of a bridge project on PA 422 in North Coventry Township and Lower Pottsgrove Township. Because PennDOT is responsible for this project, no additional funds are required for this segment. At the time of publication of this study, the project is still in design phase, and the alignment of this segment may change from how it is rendered on the trail map (Figure 5 and Appendix C-1).



CT-A-2: Schuylkill River Trail to Kenilworth Park Trailhead

Length: 465 feet (0.088 miles)

Type: 10-foot-wide multi-use asphalt sidepath

Construction phasing recommendation: Phase 1 of 5

This segment proceeds as a sidepath along a pending on-ramp to PA 422, and then along the eastbound side of PA 724. PennDOT is constructing a signalized crossing where PA 724 meets the on-ramp, but North Coventry Township or other partners are responsible for the remainder of the segment.

The width of the shoulder along the eastbound side of PA 724 is less than four feet along part of this segment, and the bank at these locations will have to be cut and signs and posts moved to accommodate the 10-foot recommended trail width. A grading easement and a construction easement from two private property owners will also be required in order to construct the trail.

Important Destination: Kenilworth Park

Kenilworth Park is a passive and active recreation park in North Coventry Township. The park has its own trail network that connects residents to baseball, softball, and soccer fields, tennis courts, a basketball court, a playground, a picnic pavilion, and a lake that is open to fishing. The Coventry Trail will extend into the park from the north and south, but the multi-use trails that are part of the Greater Pottstown Trails network will be separated as much as possible from the existing trails at Kenilworth Park in order to maintain a tranquil environment for fishing, walking, and contemplating nature.



The construction of this segment requires an easement from PennDOT and additional coordination with the agency. A highway occupancy permit is required from PennDOT, and North Coventry Township and other implementing partners should continue to communicate with PennDOT to ensure that the crossing over PA 724 is sufficiently wide to accommodate cyclists and pedestrians.



CT-A-3: Kenilworth Park

Length: 2,873 feet (0.54 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 1 of 5

This segment passes around North Coventry Township’s proposed parking lot at the pending Kenilworth Park trailhead, and then travels through forested land in Kenilworth Park along a utility easement and in a riparian corridor. The entire segment is on land owned by North Coventry Township.

To reduce the likelihood of crashes between cyclists and visitors fishing or walking along the existing trails in Kenilworth Park, Project Steering Committee members recommended keeping the Coventry Trail and the existing Kenilworth Park trails separate. Segment A-3 therefore avoids existing trails and the Frisbee golf course in the southeast corner of the park.

The segment requires one bridge for a stream crossing. The hilly topography through the park may require the construction of some small switchbacks and retaining walls.



CT-A-4: Miller Road

Length: 1,485 feet (0.28 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 1 of 5

After leaving Kenilworth Park at its southern border, the Coventry Trail becomes a section with sharrows on Miller Road. Miller Road is a low-volume local road with a listed speed of 35 miles per hour, making sharrows rather than bicycle lanes an acceptable option for cyclists of most abilities.



CT-A-5: Coventry Trail (Existing)

Length: 2,466 feet (0.47 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 1 of 5

This segment is the end of Alternative A. It is an existing five-foot-wide trail that passes through a public access easement at Cedar Mill Crossing, which is a residential development managed by a homeowner’s association (HOA). The trail ends on East Cedarville Road. It currently serves the community well as a pedestrian trail, but in order to safely accommodate cyclists and pedestrians together, it should be widened to 10 feet.



CT-B-1: Schuylkill River Trail to Old Schuylkill Road

Length: 786 feet (0.15 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 2 of 5

This segment is the beginning of Alternative B. PennDOT plans to construct a signalized crossing at PA 724 and Peterman Road to create an additional connection to the Schuylkill River Trail, and Alternative B takes advantage of this project. After crossing PA 724, the segment will be marked with sharrows, as Peterman Road is a short and straight local road with low volume that does not require the construction of additional bicycle infrastructure. East Coventry Township also plans to construct a sidewalk along this road in the near future.



CT-B-2: Old Schuylkill Road

Length: 373 feet (0.071 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 2 of 5

Alternative B continues for a short distance along Old Schuylkill Road as an on-road bicycle facility with sharrows. The short distance and low volume of this segment make sharrows a reasonable option.



CT-B-3: Spiece Road

Length: 1,065 feet (0.20 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 2 of 5

Cyclists continue onto Spiece Road, which is another street with low traffic volumes. Sharrows for cyclists are recommended for this segment. Spiece Road has a sidewalk for pedestrian use.



CT-B-4: Crest Lane

Length: 1,040 feet (0.20 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 2 of 5

Cyclists turn from Spiece Road onto Crest Lane. Crest Lane is a cul-de-sac street with minimal traffic, and sharrows are an appropriate treatment. Pedestrians can use existing sidewalks.



CT-B-5: PECO Easement–North

Length: 3,742 feet (0.71 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2 of 5

This segment makes use of an existing utility corridor owned by PECO, a utility company. The segment requires the creation of two easements: (1) an easement from a homeowner along Crest Lane to connect the on-road facility on Crest Lane to the multi-use trail proposed through the PECO easement, and (2) the easement from PECO for trail access through the utility corridor. PECO has previously allowed trail access along its utility corridors, which is a positive indication that this segment can be developed. The topography of this parcel along a riparian corridor may necessitate the construction of some small switchbacks and retaining walls.



CT-B-6: Coventry Trail (Existing)

Length: 331 feet (0.063 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2 of 5

This segment is the end of Alternative B. After traveling through the PECO easement, cyclists and pedestrians use a portion of the existing Coventry Trail, which, as mentioned previously, is located within the Cedar Mill Crossing residential development (an HOA) and should be widened to 10 feet in order to safely accommodate bidirectional cyclist and pedestrian travel.



CT-1: PECO Easement–South

Length: 3,390 feet (0.64 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 3 of 5

After traveling either through Alternative A or B, users reach a multi-use trail in another PECO utility corridor. As mentioned previously, PECO has previously allowed trail access along its utility corridors, which is a positive indication that this segment can be developed. The segment requires one bridge for a stream crossing and two unsignalized road crossings at East Cedarville Road and Miller Road. There may be some minor retaining walls and switchbacks required to accommodate a few elevation changes within the riparian corridor.

While this segment is as feasible as the PECO easement in CT-B-5 above, it is phased after Alternative B because it extends the Coventry Trail farther away from the Schuylkill River Trail, where there is currently more construction activity and regional interest.



CT-2: Riparian Corridor from PECO Easement to South Hanover Street

Length: 4,729 feet (0.90 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 5 of 5

Property ownership is a particular challenge for this segment. To be fully constructed, nine property owners need to be amenable to the creation of trail easements through their land. Of these nine properties, six are preserved farms, and owners of these farms may not be able to add a trail easement to their deed if their existing easement is part of the Pennsylvania Agricultural Easement Purchase Program. If any of the farms are eased through this program, the possibility of constructing this segment is a long-term goal that could only

be achieved through removal of the trail easement restriction from the Agricultural Easement Purchase Program. Pennsylvania State Representative Marcie Toepel (District 147) has been working to amend the language in this regulation to enable trails to be added alongside farmland with the landowner's permission.

This segment is phased last in the Coventry Trail in recognition of these constraints. In the short term, North Coventry Township and Chester County can support the segment and give it legitimacy by incorporating it into their trails plans or official maps.

The segment requires one bridge for a stream crossing and one unsignalized road crossing at the intersection of South Hanover Street and Kemp Road. North Coventry Township is coordinating with PennDOT to integrate a longer culvert into a planned culvert replacement project under Hanover Street so that the trail can run within the road right-of-way for as long as possible rather than be diverted onto private property.

This segment may also require some minor retaining walls and switchbacks to accommodate elevation changes within the riparian corridor.



CT-3: Hanover Meadows Park

Length: 3,610 feet (0.68 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 4 of 5

Hanover Meadows Park is owned by North Coventry Township. With ownership secure, this segment can be constructed in an earlier phase. The township plans to construct a trail through the park that brings cyclists and pedestrians from Kemp Road to Harp Farm Road. The trail will be constructed at the same time as other pending improvements to the park.

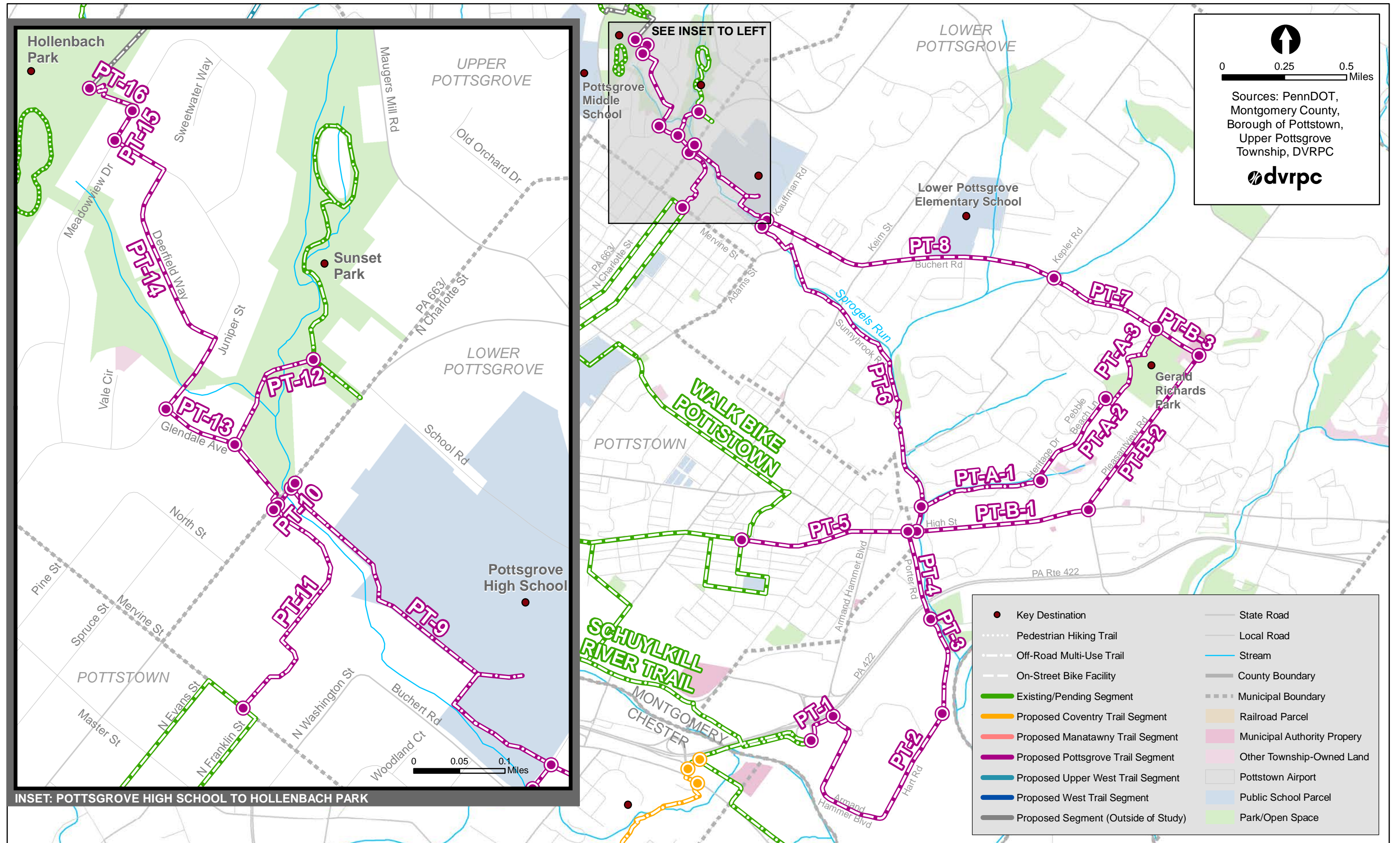
Pottsgrove Trail

Pottsgrove Trail Overview

The Pottsgrove Trail (see the list of segments in Table 4 and the map in Figure 6) is shared between Lower Pottsgrove Township, Upper Pottsgrove Township, and Pottstown Borough in Montgomery County. It connects these municipalities to the Schuylkill River Trail, as well as to Pottstown’s growing bicycle and pedestrian network, Walk and Bike Pottstown. Within these three municipalities, cyclists and pedestrians will have improved access to local schools and to the parks and trails that Upper and Lower Pottsgrove have been acquiring and developing over the past decades. Upper Pottsgrove Township is on a particularly ambitious trail development streak and has planned a series of parks and trails that connect Upper Pottsgrove residents with Lower Pottsgrove Township to the east, Douglass Township (Montgomery County) to the north, and Douglass Township (Berks County) to the west.

Within Upper Pottsgrove, the Pottsgrove Trail connects cyclists and pedestrians to Hollenbach Park and Sunset Park. Within Lower Pottsgrove, the trail connects cyclists and pedestrians to the Schuylkill River Trail, Pottsgrove High School, Pottsgrove Elementary School, and Gerald Richards Park. The Pottsgrove Trail will further these municipalities’ ambitious plans within their communities and integrate them with the Circuit Trails network through connections to the Schuylkill River Trail.

Figure 6: Pottsgrove Trail



Pottsgrove Trail Alternatives

Two alternative sets of segments (Table 3) enable people of different abilities to travel from High Street to Gerald Richards Park. Alternative A is a lower-stress bicycle facility that accommodates lower-skilled groups of cyclists, such as children and adults not comfortable riding in mixed traffic; it uses an existing HOA trail and the low-volume streets of Heritage Drive and Pebble Beach Lane to reach Gerald Richards Park. Alternative B is for higher-skilled cyclists, and consists of sharrows on High Street, Pleasantview Road, and a portion of Buchert Road. The study recommends the construction of Alternative A first.

Pottsgrove Trail Alignment Alternatives Comparison Table

Table 3: Pottsgrove Trail Alternatives

Factors	Alternative A	Alternative B
Accessibility to Varied Users (Poor, Fair, Good, Excellent; i.e., Poor–Excellent)	Excellent (these segments use trails and low-volume roads)	Good (these segments are for cyclists of high ability; a sidewalk is available for pedestrian use)
Level of Connectivity to Residential, Commercial, and Recreational Areas (Poor–Excellent)	Good (Gerald Richards Park)	Good (Gerald Richards Park)
Overall Quality of User Experience (Poor–Excellent)	Good (off-road segments, segment through park)	Fair (on-road segments)
Cost Savings through Project Coordination	None	None
Property Ownership	No easements required	No easements required
Water Crossings	None	None
Road or Railroad Crossings	One signalized crossing and one unsignalized crossing required	None
Topography (Few, Moderate, or Significant Elevation Changes)	Few elevation changes	Few elevation changes
PennDOT Partnership	None needed	PennDOT coordination required
Cost (See Opinion of Probable Cost on p. 74 for more information)	\$368,064	\$11,031
Cost per Linear Foot (LF)	\$53.02/LF	\$1.25/LF

Pottsgrove Trail Segments

Table 4: Pottsgrove Trail Segments

Segment	Segment Description	Segment Length (LF)
PT-1	Schuylkill River Trail to Armand Hammer Boulevard	830
PT-2	Armand Hammer Boulevard/Hart Road	5,861
PT-3	Paper Road/Utility Corridor Trail	2,392
PT-4	Porter Road	1,928
PT-5	High Street to Walk and Bike Pottstown	1,903
PT-6	Sprogels Run Trail	8,188
PT-A-1	Sunnyside Farm/Artenstine Development Trail (Existing)	2,362
PT-A-2	Heritage Drive/Pebble Beach Lane	2,290
PT-A-3	Gerald Richards Park (Partially Constructed)	2,291
PT-B-1	High Street to Pleasantview Road	3,683
PT-B-2	Pleasantview Road	4,053
PT-B-3	Buchert Road to Gerald Richards Park	1,089
PT-7	Sidepath along Buchert Road	2,488
PT-8	Buchert Road to Pottsgrove High School	6,404
PT-9	Pottsgrove High School	2,734
PT-10	PA 663 to Glendale Avenue	196
PT-11	PA 663 to Mervine Street	1,590
PT-12	Sunset Park	735
PT-13	Glendale Avenue	913
PT-14	Juniper Street/Deerfield Way	2,225
PT-15	Meadowview Drive	231
PT-16	Hollenbach Park	416
TOTAL: Alternative A		6,942 (1.31 miles)
TOTAL: Alternative B		8,825 (1.67 miles)
TOTAL: Segments 1–16		39,038 (7.39 miles)

Pottsgrove Trail Construction Phasing Outline

- Phase 1: Pottsgrove High School to Hollenbach Park, Segments PT-9, PT-10, PT-13 through PT-16;
- Phase 2: Pottsgrove High School to Mervine Street and Walk and Bike Pottstown Network, Segment PT-11;
- Phase 3: Sunset Park, Segment PT-12;
- Phase 4: High Street to Walk and Bike Pottstown, Segment PT-5;
- Phase 5: Schuylkill River Trail to High Street, Segments PT-1 through PT-4;
- Phase 6: Sunnybrook Road to Gerald Richards Park, Segments PT-A-1 through PT-A-3;
- Phase 7: High Street to Gerald Richards Park, Segments PT-B-1 through PT-B-3;
- Phase 8: Gerald Richards Park to Pottsgrove High School, Segments PT-7 and PT-8; and
- Phase 9: Sprogels Run Trail, Segment PT-6.



PT-1: Schuylkill River Trail to Armand Hammer Boulevard

Length: 830 feet (0.16 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 5 of 9

This segment will proceed through forested property adjacent to PA 422. It connects the Pottsgrove Trail to a segment of the Schuylkill River Trail that is currently being constructed as part of the PA Route 422 bridge construction project mentioned in the Coventry Trail section of the study. Cyclists using the Pottsgrove Trail will also have access to the Coventry Trail farther south via the Schuylkill River Trail.

The property on which this segment is located is owned by PennDOT, and communication will be required with PennDOT to construct this segment and ensure that it is coordinated with the Schuylkill River Trail segment under construction. A few small elevation changes on the property through which this segment passes may require some switchbacks and retaining walls.



PT-2: Armand Hammer Boulevard/Hart Road

Length: 5,865 feet (1.11 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 5 of 9

The trail becomes on-road at Armand Hammer Boulevard. This road, which becomes Hart Road to the northeast, enables cyclists to cross two unused rail lines and loop around the Service Partners East facility. Because of low traffic volumes, sharrows are an appropriate treatment on these roads.



PT-3: Paper Road/Utility Corridor Trail

Length: 2,392 feet (0.45 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 5 of 9

Cyclists will next enter a trail segment that is constructed through an easement along a paper road and utility corridor. This segment passes along the Schuylkill River and may afford scenic views of the river. The

segment may require several sections of switchbacks and retaining walls to enable cyclists to travel over a railroad berm. It will also require a signalized crossing to cross the same railroad tracks. Easements will be required in order to cross the railroad property, as well as to use the paper road/utility corridor.



PT-4: Porter Road

Length: 1,928 feet (0.37 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 5 of 9

Cyclists will enter Porter Road at its intersection with Sanatoga Station Road. This on-road segment connects to (and ends at) High Street in Pottstown, enabling access to the northern segments of the Pottsgrove Trail, as well as to the bicycle facilities in Pottstown. The segment also provides access to two open space parcels owned by Lower Pottsgrove Township that will be converted into recreational parkland. This road is a lower-volume road with a posted speed of 35 miles per hour that maintains minimal connections to busier roads, so sharrows are a reasonable option.



PT-5: High Street to Walk and Bike Pottstown

Length: 1,903 feet (0.36 miles)

Type: Bicycle lanes

Construction phasing recommendation: Phase 4 of 9

To implement its Walk and Bike Pottstown plan, Pottstown Borough has installed bicycle lanes on the northbound and southbound sides of High Street between the TRec District near PA 100 and Madison Street. The borough then intends to extend these bicycle lanes to Roland Street. Segment PT-5 is an extension of the lanes farther east to Sunnybrook Road. This extension will enable cyclists using the Schuylkill River Trail and Pottstown's bicycle lanes to connect to the rest of the Pottsgrove Trail network.

Because the PT-5 section of High Street is generally narrower than the section that has already been striped with bicycle lanes, it may only be feasible to construct one bicycle lane, but the cost estimate assumes that bidirectional lanes can be constructed.

High Street is a state-owned road, so Pottstown Borough would need to coordinate with PennDOT before making any changes to the road.



PT-6: Sprogels Run Trail

Length: 8,188 feet (1.55 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 9 of 9

This segment, known as the Sprogels Run Trail in Lower Pottsgrove Township's 2005 *Open Space Plan Update*, is listed as a "trail opportunity" in that plan. Cyclists and pedestrians will be able to use this trail, which is located within the riparian corridor along Sprogels Run, to connect the many neighborhoods adjacent to the waterway to downtown Pottstown and to Pottsgrove High School.

Because Sprogels Run passes through primarily residential land, it has the potential to become accessible to many residents and offers a fairly direct path between Pottstown’s downtown and the Pottsgrove High School. It is phased last, however, because it has multiple constraints. Its development requires the creation of easements on as many as 21 properties. The steep slopes along Sprogels Run may require the construction of retaining walls to avoid erosion, although few trail switchbacks are needed. Up to four bridges may be required to traverse Sprogels Run, as well as three signalized road crossings. Because this segment crosses Keim Street and Adams Street, which are both state roads, Lower Pottsgrove would need to coordinate with PennDOT before making any changes to the road right-of-way.



PT-A-1: Sunnyside Farm/Artenstine Development Trail (Existing)

Length: 2,362 feet (0.45 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 6 of 9

This segment is the first in Alternative A, which enables lower-skilled cyclists and pedestrians—including children, teenagers, families, elderly residents, and the occasional adult cyclist—to travel to Gerald Richards Park in a lower-stress environment than Alternative B. Because this alternative is not directly connected to regional trails, it will see relatively little traffic from cyclists and pedestrians. In this segment, visitors will use an existing six-foot-wide paved trail that passes between two residential developments. While the existing trail is currently an appropriate width for pedestrian use, the trail should eventually be expanded to 10 feet wide to safely accommodate cyclists and pedestrians moving in both directions. One signalized crossing will be required to enable cyclists and pedestrians to cross Sunnybrook Road, and one unsignalized crossing will be required for crossing Creekside Drive.



PT-A-2: Heritage Drive/Pebble Beach Lane

Length: 2,290 feet (0.43 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 6 of 9

Heritage Drive, which becomes Pebble Beach Lane after intersecting with Sunnyside Avenue, is a residential street with a sufficiently low volume to accommodate sharrows. Pedestrians can use the sidewalks located on the northbound and southbound sides of the street.



PT-A-3: Gerald Richards Park (Partially Constructed)

Length: 2,291 feet (0.43 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 6 of 9

Cyclists and pedestrians will leave Pebble Beach Lane and enter Gerald Richards Park, an important regional destination. The park has an existing eight-foot-wide trail, but a trailhead or gateway at Pebble Beach Lane and a new trail extension are needed to connect this existing trail to Pebble Beach Lane. The existing trail and the trail extension should both be 10 feet wide. The cost estimation for this segment accounts for both the costs of the new trail extension and the widening of existing park trails from eight feet to 10 feet.



PT-B-1: High Street to Pleasantview Road

Length: 3,683 feet (0.70 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 7 of 9

This segment is the first of Alternative B, which will enable high-skilled cyclists to move from High Street in Pottstown to Gerald Richards Park. This segment is designated as an on-road bicycle route in Lower Pottsgrove's 2005 *Open Space Plan Update*, and Lower Pottsgrove Township has constructed sidewalks on this segment so it can accommodate pedestrians. High Street has high volumes of traffic for the region, but in its present condition, this portion of High Street is too narrow to consistently accommodate a bicycle lane along the length of this segment, so it will likely be usable to high-skilled cyclists. In the long term, this portion of High Street could be reconstructed to accommodate a separated bicycle lane, but in the meantime, sharrows are the only feasible option.

As High Street is a state-owned road, Lower Pottsgrove Township would need to coordinate with PennDOT before making any changes to the road.



PT-B-2: Pleasantview Road

Length: 4,053 feet (0.77 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 7 of 9

From High Street, cyclists will turn northeast onto Pleasantview Road. Lower Pottsgrove Township lists this segment as a potential bicycle route in its 2005 *Open Space Plan Update*. As with PT-B-1, Lower Pottsgrove has constructed a sidewalk for pedestrian use. Pleasantview Road may be able to accommodate a single separated bicycle lane if the vehicle cartway is narrowed, but as with segment PT-B-1, this road reconstruction is a long-term aspiration. In the meantime, sharrows are the only feasible treatment for Pleasantview Road, and given its relatively heavy traffic volume, this segment is for high-skilled cyclists.

As Pleasantview Road is a state-owned road, Lower Pottsgrove Township would need to coordinate with PennDOT before making any changes to the road.



PT-B-3: Buchert Road to Gerald Richards Park

Length: 1,089 feet (0.21 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 7 of 9

From Pleasantview Road, cyclists will turn onto Buchert Road for a short period before being able to transfer to a sidepath (PT-7). Lower Pottsgrove Township lists Buchert Road as a potential bicycle route in its 2005 *Open Space Plan Update*, and the township's long-term aspiration is to construct a sidepath along the road, enabling students and their families to walk or bike from developments along Buchert Road to the Lower Pottsgrove Elementary School and Pottsgrove High School. However, as with High Street and Pleasantview Road, Buchert Road in its current form is limited to high-skilled cyclists. Adding protective formal bike

facilities will likely be a longer-term goal because the road has a high traffic volume, a narrow right-of-way, and many adjacent private property owners who will have to grant easements for the project to proceed. In the meantime, this road is considered a secondary bicycle route; and sharrows will indicate to drivers that cyclists will be using the road.

As Buchert Road is a state-owned road, Lower Pottsgrove Township would need to coordinate with PennDOT before making any changes to the road.



PT-7: Sidepath along Buchert Road

Length: 2,488 feet (0.47 miles)

Type: 10-foot-wide asphalt sidepath

Construction phasing recommendation: Phase 8 of 9

This segment has two purposes: it enables residents from two subdivisions along Buchert Road to safely gain access to Gerald Richards Park, and it attempts to reduce the time that cyclists spend on Buchert Road as they travel between the park and the next off-road trail segment at Pottsgrove High School. This segment requires three easements from private property owners; however, two of the easements would be from the managers of the subdivisions or HOAs and may be easier to secure.



PT-8: Buchert Road to Pottsgrove High School

Length: 6,404 feet (1.21 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 8 of 9

Buchert Road is the last on-road segment before the Pottsgrove Trail returns to being a multi-use trail at Pottsgrove High School. It also provides access to Lower Pottsgrove Elementary School. As was mentioned in the description of segment PT-B-3, Buchert Road is narrow and cannot accommodate separated bicycle facilities, which is the preferable option given the road's high traffic volume. Lower Pottsgrove Township aspires in the long-term to construct a sidepath along the road to enable students and their families to travel to the local elementary school and high school. In the meantime, this road is considered a secondary bicycle route; sharrows will indicate to drivers that cyclists will be using the road, but the vehicle volume and length of this segment make it appropriate for high-skilled cyclists.

As Buchert Road is a state-owned road, Lower Pottsgrove Township would need to coordinate with PennDOT before making any changes to the road right-of-way. This segment is phased as one of the last because of the extensive preparatory work required to make it usable for most residents.



PT-9: Pottsgrove High School

Length: 2,734 feet (0.52 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 1 of 9

This segment is the first of the priority set of segments for the Pottsgrove Trail. These segments run from the Pottsgrove High School across PA 663 to Hollenbach Park.

Segment PT-9 runs through the Pottsgrove High School property, linking Buchert Road with PA 663. It also includes a small spur to the closest building on the high school property. The segment passes through a wooded area along Sprogels Run, which is owned by the Pottsgrove School District, and then through the Brookside Family Restaurant property. The school district is amenable to the creation of a trail through the high school property, but additional permission from the owners of the Brookside Family Restaurant is necessary to create a trail easement through that property. The trail would likely be separated from the restaurant parking lot by a fence that would extend across the Brookside Family Restaurant property to PA 663.



PT-10: PA 663 to Glendale Avenue

Length: 196 feet (0.037 miles)

Type: Bicycle lane with reflector barrier

Construction phasing recommendation: Phase 1 of 9

This segment (Figure 7) is an on-road segment that enables cyclists and pedestrians using the Pottsgrove Trail to safely cross PA 663 and Sprogels Run in order to reach Upper Pottsgrove Township’s park system, Lower Pottsgrove High School, and the Walk and Bike Pottstown bicycle network. It also connects pedestrians to an existing sidewalk along the northbound side of PA 663. As a connection point to all of these destinations, the segment is a high priority for Upper Pottsgrove Township, in which many of these connections are located.

It is expected that this segment will receive more bicycle and pedestrian traffic than much of the rest of the Pottsgrove Trail. As the segment is located on a busy state road, it also requires additional safety considerations. For these reasons, this segment is a two-way bicycle lane in the northbound lane of PA 663 that is separated from traffic using reflective delineated posts. While designated as a bicycle lane, it will also be constructed to accommodate pedestrians.

Because PA 663 is located on the border between Lower Pottsgrove Township and Upper Pottsgrove Township, the two municipalities will need to determine who will construct and maintain the segment. At least one municipality will also need to design and install signage and marker posts along the road and restripe it. As PA 663 is a state-owned road, one or both townships will need to coordinate with PennDOT before making any changes to the road.

The cost estimates for this segment do not include the cost of a structural analysis of the PA 663 bridge over Sprogels Run to determine if it can hold the additional concrete sidewalk planned for this trail segment. It also does not include the cost of modifying two culverts in the road at this location.

The description of segment PT-13 contains more information on the mid-block crossing at the intersection of PA 663 and Glendale Avenue.



PT-11: PA 663 to Mervine Street

Length: 1,590 feet (0.30 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2 of 9

After examining multiple on-road and off-road options for connecting the Pottsgrove Trail to the Walk and Bike Pottstown network, it was determined that routing the trail behind the North End Shopping Center was the safest option for cyclists and pedestrians. The trail runs through a strip of open space adjacent to the mall's rear driveway. The property owner would need to give permission to create a trail easement.

Figure 7: Pottsgrove Trail Map Detail: Sprogels Run and PA 663 Crossing



Sources: DVRPC (2015 aerials), PennDOT

An alternative, more cost-effective method of creating the segment is to use the existing driveway from Mervine Street north to the parking lot, restriping it to indicate separation for cyclists and pedestrians. However, this is a feasible option only if the implementing team determines that vehicle traffic using the driveway could interact safely with cyclists and pedestrians. Though more expensive, the trail may prove the ideal option because it establishes more space between trail users and vehicles. The cost estimate provides the more conservative value of a new trail rather than a restriped on-road segment.



PT-12: Sunset Park

Length: 735 feet (0.14 miles)

Type: 10-foot-wide stone dust multi-use trail

Construction phasing recommendation: Phase 3 of 9

This segment connects Glendale Avenue to Sunset Park, one of Upper Pottsgrove Township’s recently acquired publicly owned parks. The proposed trail runs entirely through publicly owned land. The trail requires the construction of two small bridges to pass over Sprogels Run and a tributary of Sprogels Run. It also requires the construction of an unsignalized crossing to enable pedestrians to travel from the sidewalk on the southbound side of Glendale Avenue to the park entrance.



PT-13: Glendale Avenue

Length: 913 feet (0.17 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 1 of 9

Besides connecting pedestrians to Sunset Park, Glendale Avenue also enables cyclists and pedestrians to connect to Hollenbach Park via Juniper Street, Deerfield Way, and Meadowview Drive to the northwest. Hollenbach Park is owned by Upper Pottsgrove Township, contains athletic fields, and is an important regional destination.

Glendale Avenue is a low-volume local road, making sharrows an acceptable option. However, to account for the high traffic volume and driver visibility issues along PA 663, the segment will also include a signalized mid-block crossing at its intersection with PA 663. The crossing will be installed to lead into the northbound lane of Glendale Avenue and will connect to Segment PT-10.

PennDOT coordination will be required for the construction of the mid-block crossing and all other changes on and along PA 663.



PT-14: Juniper Street/Deerfield Way

Length: 2,225 feet (0.42 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 1 of 9

Important Destination: Sunset Park

Sunset Park is a multi-use park with a small fitness station, a half-mile loop trail, ponds, pavilion, and a horseshoe-toss setup. Visitors will be able to use new facilities on the Pottsgrove Trail to walk safely from the Pottsgrove High School to the park.



Cyclists and pedestrians will turn from Glendale Avenue onto Juniper Street, then turn onto Deerfield Way, and then back to Juniper Street for a brief stretch in order to approach Hollenbach Park. Both Juniper Street and Deerfield Way are low-volume local roads, making sharrows rather than bicycle lanes an acceptable option. Using Deerfield Way in combination with Juniper Street, rather than Juniper Street alone, makes the ascent to Meadowview Drive in the next segment less steep.



PT-15: Meadowview Drive

Length: 231 feet (0.044 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 1 of 9

From Juniper Street, cyclists and pedestrians will turn onto Meadowview Drive. Like Juniper Street, Meadowview Drive is a low-volume local road, making sharrows rather than bicycle lanes a reasonable option.



PT-16: Hollenbach Park

Length: 416 feet (0.079 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 1 of 9

Hollenbach Park abuts Meadowview Drive, enabling access between the road network and the park, which is the northernmost point in the Pottsgrove Trail. This trail will need to traverse a steep hill and may require the construction of retaining walls and switchbacks to prevent erosion of the hillside and enable trail users to climb the hill more easily. The implementers of the Pottsgrove Trail are considering constructing a trailhead at Meadowview Drive with amenities for visitors.

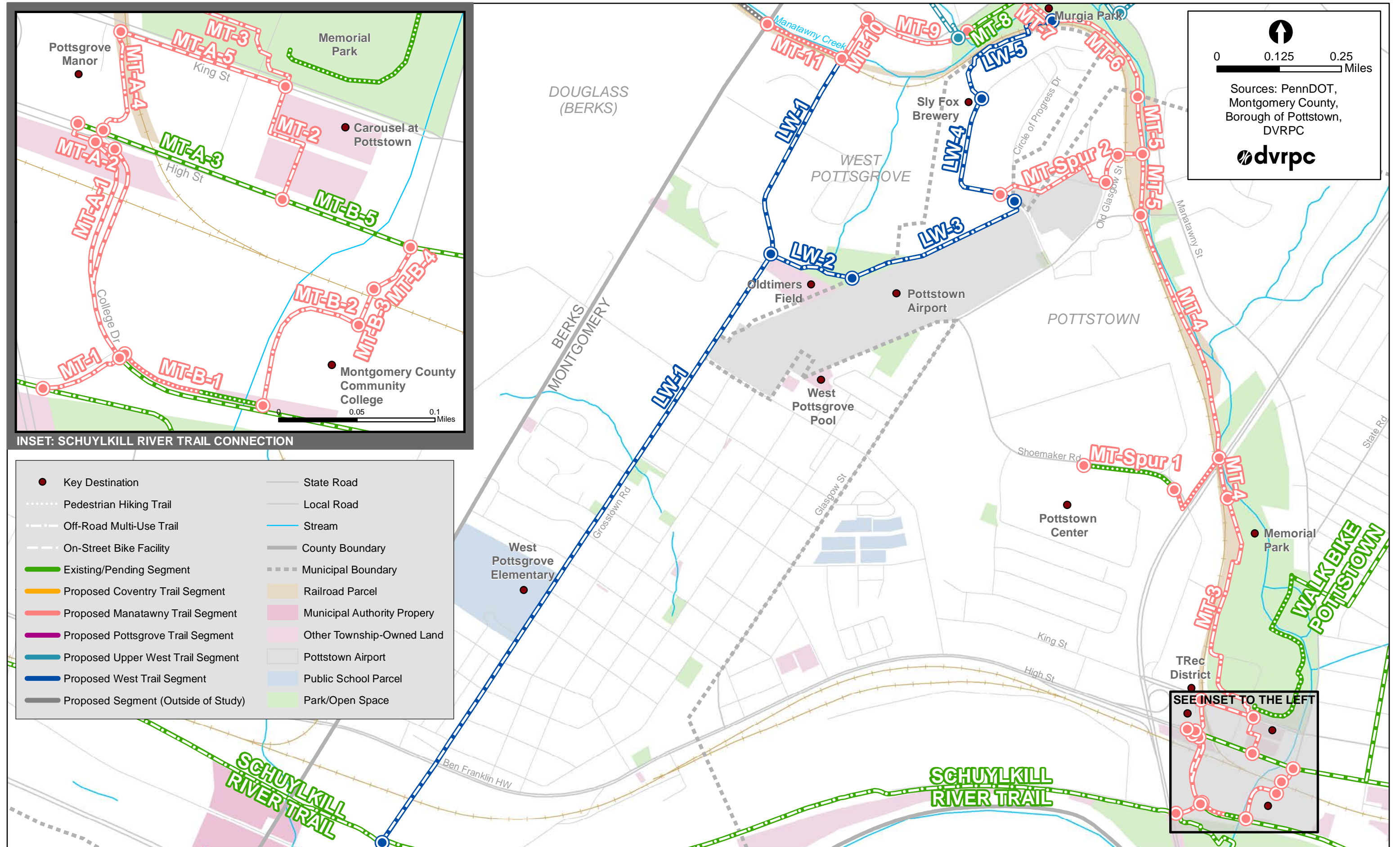
Manatawny Trail

Manatawny Trail Overview

The Manatawny Trail runs through Pottstown Borough and West Pottsgrove Township (see the list of segments in Table 6 and the map in Figure 8; an aerial map is located in Appendix C-2). It is an official trail in Montgomery County's 2040 comprehensive plan, *Montco 2040: A Shared Vision*. The trail provides a regional connection to the Schuylkill River Trail to the south; a connection to Pottstown's bicycle and pedestrian network, Walk and Bike Pottstown, to the east; and a pedestrian connection on the proposed Secret Valley Trail into Boyertown. It is also connected to the Lower and Upper West trails at multiple points.

The Manatawny Trail offers cyclists and pedestrians direct access to varied recreational, institutional, cultural, and commercial amenities. Cyclists and pedestrians will be able to reach Montgomery County Community College; the historic Pottsgrove Manor; entertainment in Pottstown's TRec District, as well as on the Colebrookdale Railroad line; shopping at Pottstown Shopping Center; and two parks, Murgia Park and Memorial Park.

Figure 8: Lower West and Manatawny Trails



Manatawny Trail Alternatives

The Manatawny Trail offers two options for traveling from the Schuylkill River Trail at College Drive to the TRec District and to Memorial Park (Table 5). Because they are anticipated to accommodate different types of users, the alternatives complement each other rather than serve as substitutions for each other.

Alternative A begins as an on-road alignment, consisting of sharrows on College Drive. College Drive is a moderate-volume road with four-foot shoulders for part of its length and a low-shoulder environment for another part. As such, overall it is most appropriate for more experienced cyclists. The northern part of Alternative A better accommodates a wider range of cyclists and includes an existing bicycle lane on High Street, a multi-use trail alongside Pottsgrove Manor, and another bicycle lane on King Street prior to reaching Memorial Park.

Alternative B is a better route than Alternative A for users of all abilities. As with Alternative A, it includes a portion of College Drive. The Alternative B alignment makes use of existing infrastructure on College Drive and High Street and also includes a proposed multi-use trail through the Montgomery County Community College campus, the TRec District, and along a subgrade railroad crossing. Alternative B is part of the study's priority trail segments for the Manatawny Trail, and the study recommends that Alternative B be constructed before Alternative A.

Manatawny Trail Alignment Alternatives Comparison Table

Table 5: Manatawny Trail Alternatives

Factors	Alternative A	Alternative B
Accessibility to Varied Users (Poor, Fair, Good, Excellent; i.e., Poor–Excellent)	Good (most cyclists will be able to travel on High and King streets; high-skilled cyclists will be able to travel on College Drive, but this alignment is not pedestrian accessible).	Excellent (cyclists and pedestrians will be able to travel on this alignment)
Level of Connectivity to Residential, Commercial, and Recreational Areas (Poor–Excellent)	Excellent (Schuylkill River Trail, Pottsgrove Manor, TRec District, Memorial Park)	Excellent (Schuylkill River Trail, Montgomery County Community College, TRec District, Memorial Park)
Overall Quality of User Experience (Poor–Excellent)	Fair (on-road segments, one off-road segment)	Good (more off-road segments)
Cost Savings through Project Coordination	None	None
Property Ownership	One easement required	Four easements required
Water Crossings	None	None
Road or Railroad Crossings	One signalized crossing required	One signalized crossing required

Factors	Alternative A	Alternative B
Topography (Few, Moderate, or Significant Elevation Changes)	Few elevation changes	Few elevation changes
PennDOT Partnership	PennDOT coordination required	None
Cost (See Opinion of Probable Cost on p. 74 for more information)	\$94,949	\$75,361
Cost per Linear Foot (LF)	\$41.06/LF	\$40.10/LF

Manatawny Trail Segments

Table 6: Manatawny Trail Segments

Segment	Segment Description	Segment Length (LF)
MT-1	Schuylkill River Trail to College Drive	308
MT-A-1	College Drive to High Street	1,053
MT-A-2	High Street to Pottsgrove Manor Property	187
MT-A-3	High Street to TRec District (Existing)	89
MT-A-4	High Street to King Street	396
MT-A-5	King Street	587
MT-B-1	College Drive to Montgomery County Community College	509
MT-B-2	Montgomery County Community College	567
MT-B-3	Tunnel under Train Tracks	133
MT-B-4	Train Tracks to High Street	200
MT-B-5	High Street to TRec District (Existing)	472
MT-2	TRec District to Memorial Park	484
MT-3	Memorial Park	2,809
MT-4	Berks County Redevelopment Authority	3,173
MT-5	Colebrookdale Property to Murgia Park	1,259
MT-6	Murgia Park to Bridge over Manatawny Creek	1,390
MT-7	Colebrookdale Railroad to Murgia Park	203

Segment	Segment Description	Segment Length (LF)
MT-8	Murgia Park Trail (Existing)	1,053
MT-9	Murgia Park to Grosstown Road	1,027
MT-10	Grosstown Road	499
MT-11	Secret Valley Trail Segment	891
MT-Spur 1-1	PA 100	1,014
MT-Spur 1-2	Shoemaker Road (Partially Existing)	1,028
MT-Spur 2-1	Colebrookdale Property to Old Glasgow Street	264
MT-Spur 2-2	Old Glasgow Street	335
MT-Spur 2-3	Pottstown Airport–East	1,597
TOTAL: Alternative A		2,313 (0.44 miles)
TOTAL: Alternative B		1,879 (0.36 miles)
TOTAL: Segments 1–11 and Trail Spurs		17,333 (3.28 miles)

Manatawny Trail Construction Phasing Outline

- Phase 1: Memorial Park, Segment MT-3;
- Phase 2: Schuylkill River Trail to TRec District, Segments MT-1, MT-B-1 through MT-B-5;
- Phase 3: Schuylkill River Trail to Memorial Park, Segments MT-A-1 through MT-A-5;
- Phase 4: TRec District through Memorial Park, Segment MT-2;
- Phase 5: Colebrookdale Railroad Property and Spur 1, Segments MT-5, MT-Spur 1-1, and MT-Spur 1-2;
- Phase 6: Berks County Redevelopment Authority Property, Segment MT-4;
- Phase 7: Murgia Park, Segments MT-6 through MT-8;
- Phase 8: Spur 2, Segments MT-Spur 2-1, MT-Spur 2-2, and MT-Spur 2-3; and
- Phase 9: Connection to Secret Valley Trail, Segments MT-9 through MT-11.



MT-1: Schuylkill River Trail to College Drive

Length: 308 feet (0.058 miles)

Type: 10-foot-wide multi-use asphalt sidepath

Construction phasing recommendation: Phase 2 of 9

Schuylkill River Heritage Area's *South Loop Trail Improvements* plan proposes a five-foot-wide asphalt trail extending from the Schuylkill River Trail to a crosswalk at College Drive. This study proposes that this trail be increased to a width of 10 feet to provide access to cyclists and pedestrians, which will further facilitate multi-

modal access from the Schuylkill River Trail up into the rest of the Manatawny Trail. An easement from Conrail, the property owner, will be required to widen the trail. The segment also requires a mid-block unsignalized crossing on College Drive to enable cyclists and pedestrians to continue on to Alternatives A and B.



MT-A-1: College Drive to High Street

Length: 1,053 feet (0.20 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 3 of 9

This segment is the beginning of Alternative A, which provides direct access to downtown Pottstown for high-skilled cyclists. This segment in particular would be a comfortable riding experience for high-skilled cyclists. It includes sharrows on both the northbound and southbound lanes of College Drive, as College Drive in this location is too narrow to adequately accommodate bicycle lanes or sidewalks for pedestrians. College Drive has a posted speed of 25 miles per hour, so sharrows are an acceptable treatment.



MT-A-2: High Street to Pottsgrove Manor Property

Length: 187 feet (0.035 miles)

Type: Bicycle lane

Construction phasing recommendation: Phase 3 of 9

This short segment, which has been drawn to an engineering level of detail by Traffic, Planning, and Design, Inc., enables cyclists to travel along and then cross High Street. A signalized crossing is required to cross High Street.



MT-A-3: High Street to TRec District (Existing)

Length: 89 feet (0.017 miles)

Type: Bicycle lane

Construction phasing recommendation: Phase 3 of 9

This segment makes use of an existing bicycle lane on High Street after cyclists cross to the westbound side of the street.



MT-A-4: High Street to King Street

Length: 396 feet (0.075 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 3 of 9

Cyclists and pedestrians will use this segment to cross between High Street and King Street and to gain access to Pottsgrove Manor, which is on an adjacent parcel to the west. The proposed trail alignment is located within the rail right-of-way owned by the Colebrookdale Railroad and would require an easement from Colebrookdale Railroad to be constructed.



MT-A-5: King Street

Length: 587 feet (0.11 miles)

Type: Bicycle lane

Construction phasing recommendation: Phase 3 of 9

This segment marks the end of Alternative A. It consists of a bicycle lane along the eastbound and westbound sides of King Street, and enables cyclists to travel to Memorial Park.



MT-B-1: College Drive to Montgomery County Community College

Length: 509 feet (0.096 miles)

Type: On-road sharrows (existing) and sidewalk extension

Construction phasing recommendation: Phase 2 of 9

This segment is the beginning of Alternative B, which serves cyclists of all abilities, as well as pedestrians. Heading east from the Schuylkill River Trail and toward Montgomery County Community College, College Drive contains sharrows that were constructed by Montgomery County. There is also a sidewalk along the bridge over the Manatawny Creek to the college, which should be extended to the intersection of College Drive and Keystone Boulevard to connect pedestrians between the Schuylkill River Trail and the college. This recommendation follows the recommendations in the *South Loop* plan, but the additional sidewalk length in this study will provide pedestrians with a means to gain access to the rest of the Manatawny Trail and its amenities since Alternative A cannot provide access into Pottstown for this group of people.

The linear cost per foot used for this segment in the Opinion of Probable Cost (page 74) accounts for approximately 295 feet of sidewalk extension at \$100 per linear foot, and approximately 213 feet of existing sidewalk where no new construction is required. The sidewalk extension would also require an easement from a private property owner, Conrail.



MT-B-2: Montgomery County Community College

Length: 567 feet (0.11 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2 of 9

Using a segment included in the *South Loop* plan, cyclists and pedestrians cross through Montgomery County Community College property on a multi-use trail that begins between the college's westernmost parking lot and the Manatawny Creek. It proceeds in a curve around the college parking lot and down an access ramp until it reaches train tracks owned by the Reading Company. This study recommends expanding the sidewalk to a width of eight feet at minimum to meet AASHTO guidelines for bidirectional shared use paths.²

The construction of this segment requires a formal access agreement and easement with the college and is therefore dependent on the support of the college. Striping and signage are also required in order to indicate that the trail is separate from the parking lot.

² AASHTO, *Guide for the Development of Bicycle Facilities*, 4th ed. (Washington, DC: American Association of State Highway and Transportation Officials, 2012), 5-3.



MT-B-3: Tunnel under Train Tracks

Length: 133 feet (0.025 miles)

Type: Existing sidewalk through tunnel

Construction phasing recommendation: Phase 2 of 9

This segment makes use of a sidewalk through an existing tunnel that will enable cyclists and pedestrians to cross under the train tracks owned by the Reading Company. The segment is at its most narrow at the ramp from the sidewalk north into the tunnel (five feet), so cyclists may need to be directed to walk their bicycles at that point. However, the tunnel has a greater capacity: the width of the tunnel is 11 feet, and the lowest clear vertical point is 7.5 feet at both sides of the tunnel. It can be used by both cyclists and pedestrians.



MT-B-4: Train Tracks to High Street

Length: 200 feet (0.038 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 2 of 9

On this segment, cyclists use a small street between Montgomery County Community College properties that will be marked with sharrows. As this street is a dead end that only receives visitors to the college parking lot, sharrows are an appropriate treatment.



MT-B-5: High Street to TRec District (Existing)

Length: 472 feet (0.089 miles)

Type: Bicycle lane

Construction phasing recommendation: Phase 2 of 9

Cyclists use existing separated bicycle lanes on either side of High Street to travel along High Street between Montgomery County Community College and the TRec District.



MT-2: TRec District to Memorial Park

Length: 484 feet (0.092 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 4 of 9

Important Destination: TRec District

Pottstown's TRec District is an important recreation hub. Once trail segments are constructed to enable access to this district, cyclists and pedestrians from the borough and region will be able to spend an afternoon at the Pottstown Carousel and Manatawny Green, a mini-golf course and café.



This study recommends including cyclists in a pedestrian connection proposed by the *South Loop* plan through the Carousel at Pottstown property owned by Pottstown Borough. Cyclists and pedestrians enter the site along a gravel driveway that passes the Citgo gas station, turn left and pass along a paper street, and then pass to the west of the Carousel at Pottstown's parking lot.



MT-3: Memorial Park

Length: 2,809 feet (0.53 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 1 of 9

This segment is the first segment in the set of priority segments for the Manatawny Trail. It brings cyclists and pedestrians from High Street through Memorial Park. Visitors travel through the park's main entrance and along the park's westernmost driveway, which becomes gravel and ends north of the park's dirt bike course. The trail then proceeds north through wooded open space until it reaches the upper end of the park and the railroad property owned by the Berks County Redevelopment Authority.

As of the time of publication of this study, a recommended signalized mid-block crossing across King Street was funded and pending for construction by Pottstown Borough, with coordination with PennDOT.



MT-4: Berks County Redevelopment Authority

Length: 3,173 feet (0.60 miles)

Type: Eight-foot-wide multi-use stone dust trail with post-and-rail fence

Construction phasing recommendation: Phase 6 of 9

This segment, located within the Berks County Redevelopment Authority's rail property, has sufficient space for a trail alongside the rail line operated by the Colebrookdale Railroad, a recreational railroad that travels between Pottstown and Boyertown. Pedestrians and cyclists travel along the rail line and the Manatawny Creek between Memorial Park and Murgia Park, crossing under PA 100. After examining other alternatives, including along Shoemaker Road/Circle of Progress Drive and Manatawny Street, it was determined that this path is the most direct and safest means of moving between the two parks.

Because it is located along the Manatawny Creek, this segment contains some steep slopes and may require some retaining walls and fencing. The segment will also require an easement from the Berks County Redevelopment Authority, which is on record as being opposed to the addition of trails to its rail line (see Appendix B). There is concern that adding a multi-use trail alongside the railroad would be a safety risk, but there are numerous examples nationwide of successful railways with adjacent trails. The Rails-to-Trails Conservancy published a report in 2013 that comprehensively examines the issues surrounding rails-to-trails projects.³ To enhance the safety of trail users, this study recommends constructing a barrier between the tracks and the trail for this segment and the others along the Colebrookdale Railroad.

Because the trail segment travels under the PA 100 Bridge, communication with PennDOT is also necessary. An initial topic of discussion with PennDOT is whether a right-of-way easement from PennDOT is required in order to construct under the PA 100 Bridge.

³ Rails-to-Trails Conservancy, *America's Rails-with-Trails: A Resource for Planners, Agencies and Advocates on Trails Along Active Railroad Corridors*, September 2013, <https://www.railstotrails.org/resourcehandler.ashx?id=2982>.

Spur 1, which enables pedestrians to travel to the shops at Pottstown Shopping Center, connects to this segment. Cyclists and pedestrians traveling from the trail to the shopping center will cross from the east side of the Colebrookdale Railroad train tracks to the west side. Spur 1 is discussed in greater detail later in this section of the study.



MT-5: Colebrookdale Property to Murgia Park

Length: 1,259 feet (0.24 miles)

Type: Eight-foot-wide multi-use stone dust trail

Construction phasing recommendation: Phase 5 of 9

On this segment, cyclists and pedestrians continue alongside the Colebrookdale railway. The parcel through which this segment runs is owned by the Colebrookdale Railroad. An easement is required from the Colebrookdale Railroad, and as with the previous segment, retaining walls may be needed for the steep slopes along the Manatawny Creek.

This segment also forms the beginning of Spur 2 along Glasgow Street, which enables cyclists and pedestrians to travel to the Lower West Trail and retail within the Circle of Progress. As with Spur 1, cyclists and pedestrians will cross from the east side of the Colebrookdale Railroad train tracks to the west side in order to gain access to the Spur 2 segment. Spur 2 is discussed in greater detail later in this section.



MT-6: Murgia Park to Bridge over Manatawny Creek

Length: 1,390 feet (0.26 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 7 of 9

In this segment, cyclists and pedestrians continue alongside the railway, within the West Pottsgrove Township-owned property of Murgia Park. Retaining walls may be required to manage additional steep slopes along the Manatawny Creek.



MT-7: Colebrookdale Railroad to Murgia Park

Length: 203 feet (0.038 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 7 of 9

This segment includes a bridge that enables cyclists and pedestrians to cross the Manatawny Creek. The bridge will enable access to the northern half of Murgia Park, the proposed Upper West Trail, and, for pedestrians, the proposed Secret Valley Trail to Boyertown.



MT-8: Murgia Park Trail (Existing)

Length: 1,053 feet (0.20 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 7 of 9

The path through Murgia Park is currently constructed with crushed stone with a stone fine surface. It should be widened and paved to serve as a multi-use trail to provide cyclists and pedestrians with access to the Upper West Trail.



MT-9: Murgia Park to Grosstown Road

Length: 1,027 feet (0.19 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 9 of 9

Because Manatawny Street is narrow and hazardous for bicycle and pedestrian use, this segment consists of a multi-use trail that extends a trail in Murgia Park west, passes over Goose Creek via a proposed bridge, and then parallels the eastbound side of Manatawny Street until it intersects with Grosstown Road. A trail easement is required from one private property owner.



MT-10: Grosstown Road

Length: 499 feet (0.094 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 9 of 9

This segment is intended for intermediate and advanced cyclists to move between the Lower West Trail and Manatawny Trail. Sharrows in combination with speed cushions are recommended: Grosstown Road is too narrow to adequately accommodate bicycle lanes, particularly while passing under the railroad, and it also has a high volume of traffic. Though not included in the project cost estimate, each speed cushion costs between \$3,000 and \$3,500 to construct.⁴

As a state-owned road, any proposed changes to Grosstown Road will require coordination with PennDOT. Although this segment contains a narrow sidewalk on the bridge over the Manatawny Creek, it will need more expanded pedestrian access once the Secret Valley Trail is more fully planned.



MT-11: Secret Valley Trail Segment

Length: 891 feet (0.17 miles)

Type: Three- to six-foot-wide soft-surface pedestrian hiking trail

Construction phasing recommendation: Phase 9 of 9

This segment is part of the Secret Valley Trail, a proposed pedestrian-only trail that is planned to extend to Boyertown. The constructed width of the segment can accommodate some variation, which may range between three and six feet depending on localized site conditions and available funding. An easement from the Berks County Redevelopment Authority is needed to construct the path. Retaining walls for steep slopes along the Manatawny Creek may also be needed.

⁴ Jim Saksa, "Why the Gaps in Philly's New 'Speed Cushions'?", *Philadelphia Inquirer*, June 1, 2015, http://www.philly.com/philly/news/Why_the_gaps_in_Phillys_new_speed_cushions.html.



MT-Spur 1-1: PA 100

Length: 1,014 feet (0.19 miles)

Type: Concrete sidewalk

Construction phasing recommendation: Phase 5 of 9

This segment is the beginning of Spur 1, which enables pedestrians to travel along a sidewalk from the Manatawny Trail to retail at Pottstown Shopping Center. Pedestrians will be required to cross from the east side of the Colebrookdale Railroad train tracks to the west side in order to travel along PA 100, which will require an unsignalized crossing at the train tracks. Retaining walls may be required to prevent erosion as the sidewalk traverses a sloped area along PA 100.

The construction of the sidewalk would require easements from three private property owners and the Berks County Redevelopment Authority.



MT-Spur 1-2: Shoemaker Road (Partially Existing)

Length: 1,028 feet (0.20 miles)

Type: Sidewalk

Construction phasing recommendation: Phase 5 of 9

After passing along PA 100, pedestrians travel down a curb ramp and cross Shoemaker Road to its westbound side at an existing signalized crosswalk. Pottstown Borough should add approximately 230 feet of sidewalk along Shoemaker Road heading west past its intersection with PA 100 in order to complete the pedestrian connection to Pottstown Shopping Center.



MT-Spur 2-1: Colebrookdale Property to Old Glasgow Street

Length: 264 feet (0.050 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 8 of 9

This segment is the beginning of Spur 2 on the Manatawny Trail, which connects the main spine of the trail along the Colebrookdale Railroad rail line with the Lower West Trail and retail in the Circle of Progress. Cyclists and pedestrians cross the train tracks on Colebrookdale Railroad property to head west, so this segment requires an at-grade unsignalized crossing. Retaining walls may be needed for some steep slopes on this property, as is an easement from Colebrookdale Railroad.



MT-Spur 2-2: Old Glasgow Street

Length: 335 feet (0.063 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 8 of 9

Old Glasgow Street is an infrequently used dead-end road, and as such, sharrows are appropriate.



MT-Spur 2-3: Pottstown Airport–East

Length: 1,597 feet (0.30 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 8 of 9

About halfway down Old Glasgow Road, cyclists and pedestrians head off-road and onto a multi-use trail running through Pottstown Municipal Airport property. The property extends from Old Glasgow Road to Circle of Progress Drive. The property contains many steep slope areas, which may require retaining walls. Since the Pottstown Municipal Airport is owned by the Borough of Pottstown, no easement is required.

Lower West Trail

Lower West Trail Overview

The Lower West Trail runs through West Pottsgrove Township and Pottstown Borough (see the list of segments in Table 7 and the map in Figure 8; an additional aerial map is located in Appendix C-2). As with the Manatawny Trail, the Lower West Trail is an official trail in Montgomery County’s 2040 comprehensive plan, *Montco 2040: A Shared Vision*. The Lower West Trail provides a regional connection to the Schuylkill River Trail to the south and connections to the Manatawny Trail (and the Upper West Trail beyond) at three points to the north. It offers cyclists and pedestrians access to recreational, institutional, and commercial amenities. Cyclists and pedestrians will be able to reach West Pottsgrove Elementary School, Oldtimers Field, West Pottsgrove Pool, Pottstown Municipal Airport, Sly Fox Brewery and other retail in the Circle of Progress, the Colebrookdale Railroad, and Murgia Park.

Lower West Trail Segments

Table 7: Lower West Trail Segments

Segment	Segment Description	Length (LF)
LW-1	Schuylkill River Trail to Manatawny Trail via Grosstown Road	9,778
LW-2	Oldtimers Field	919
LW-3	Pottstown Airport–West	2,025
LW-4	Circle of Progress	1,549
LW-5	Sly Fox Brewery to Murgia Park	1,197
TOTAL		15,467 (2.93 miles)

Lower West Trail Construction Phasing Outline

- Phase 1: Schuylkill River Trail to Oldtimers Field, Segment LW-1 (Partial);
- Phase 2: Oldtimers Field to Sly Fox Brewery, Segments LW-2 through LW-4;
- Phase 3: Sly Fox Brewery to Murgia Park, Segment LW-5; and
- Phase 4: Grosstown Road North of Oldtimers Field, Segment LW-1 (Partial).



LW-1: Schuylkill River Trail to Manatawny Trail via Grosstown Road

Length: 9,778 feet (1.85 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 1 of 4 south of Oldtimers Field; Phase 4 of 4 north of Oldtimers Field

This segment is the first segment in the set of priority segments for the Lower West Trail, and it connects to one of the existing Schuylkill River Trail trailheads in the Pottstown area. Grosstown Road was determined to be the best option for this segment of several parallel alignments, as it is the most direct means of traveling

from the Schuylkill River Trail toward the Manatawny Trail. Sharrows are an acceptable treatment for this road: the posted speed limit of 35 miles per hour provides a reasonably comfortable bicycling experience for most cyclists, Grosstown Road is too narrow to adequately accommodate bicycle lanes on both sides of the street for its entire length, and developing a sidepath in place of an existing sidewalk would be costly. Speed cushions, however, are recommended for the segment. Speed cushions are not included in the project cost estimate; each one costs between \$3,000 and \$3,500 to construct.⁵

As a state-owned road, any proposed changes to Grosstown Road will require coordination with PennDOT.



LW-2: Oldtimers Field

Length: 919 feet (0.17 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2 of 4

After leaving Grosstown Road, the alignment becomes a multi-use trail at Oldtimers Field, a park owned by West Pottsgrove Township and located behind its municipal building. This trail is planned to begin north of the parking lot and will extend along the parking lot and behind the baseball diamond before passing through a wooded area north of the Pottstown Municipal Airport. This wooded area contains some steep slopes, and some retaining walls may be required to prevent erosion along the trail.



LW-3: Pottstown Airport–West

Length: 2,025 feet (0.38 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2 of 4

The trail continues as multi-use trail along the edge of the Pottstown Municipal Airport property. Although more coordination is required with Pottstown Borough for the Pottstown Municipal Airport to give cyclists and pedestrians access along the edge of the property, the ideal alignment for the trail is along the north edge of the

Important Destination: Pottstown Municipal Airport

Operating as an airport since 1948, the Pottstown Municipal Airport is a 63-acre public airport with facilities for businesses and recreational pilots. It offers aerial photography, aerial tours, aircraft parking, rentals, fuel, and flight training services.



⁵ Jim Saksa, "Why the Gaps in Philly's New 'Speed Cushions'?"

site, parallel to the runway, until reaching Circle of Progress Drive. The Pottstown Municipal Airport has indicated some support of the trail project and would likely be willing to consider establishing a trail easement.



LW-4: Circle of Progress

Length: 1,549 feet (0.29 miles)

Type: On-road sharrows

Construction phasing recommendation: Phase 2 of 4

The trail then becomes an on-road bicycle facility along Circle of Progress Drive (which is also known as “Circle of Progress”), enabling cyclists—and pedestrians along the sidewalk—to reach retail in the Circle of Progress, including Manatawny Still Works and Sly Fox Brewery. This segment also facilitates a connection to the Manatawny Trail Spur 2, which comes in from the Pottstown Municipal Airport property to the east of Circle of Progress Drive. Circle of Progress Drive is not wide enough to allow for a separated bike lane; however, as a loop road in a light industrial park, it contains low volumes of traffic, and sharrows are an appropriate treatment that can accommodate cyclists of most skill levels.



LW-5: Sly Fox Brewery to Murgia Park

Length: 1,197 feet (0.23 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 3 of 4

The alignment returns to multi-use trail conditions at the Sly Fox Brewery property, where it extends along the Manatawny Creek before reaching the south bank of Murgia Park, leading to the Manatawny Trail and the Upper West Trail. This segment takes advantage of the Colebrookdale Railroad’s plans to construct a railroad stop alongside the Circle of Progress, which would be accessible by a staircase down from parcels along Circle of Progress Drive. With the railroad stop and trail constructed, visitors will be able to bicycle or walk to Manatawny Still Works or Sly Fox Brewery and then take a Colebrookdale Railroad train into Pottstown’s TRec District or to Boyertown to the north.

This segment requires coordination with Sly Fox Brewery and three additional private property owners to create trail easements. Because the trail is planned along the steep slopes leading down to Manatawny Creek, some retaining walls may be required. In addition, a signalized crossing at the train tracks and a bridge over Manatawny Creek would be required in order to reach Murgia Park.

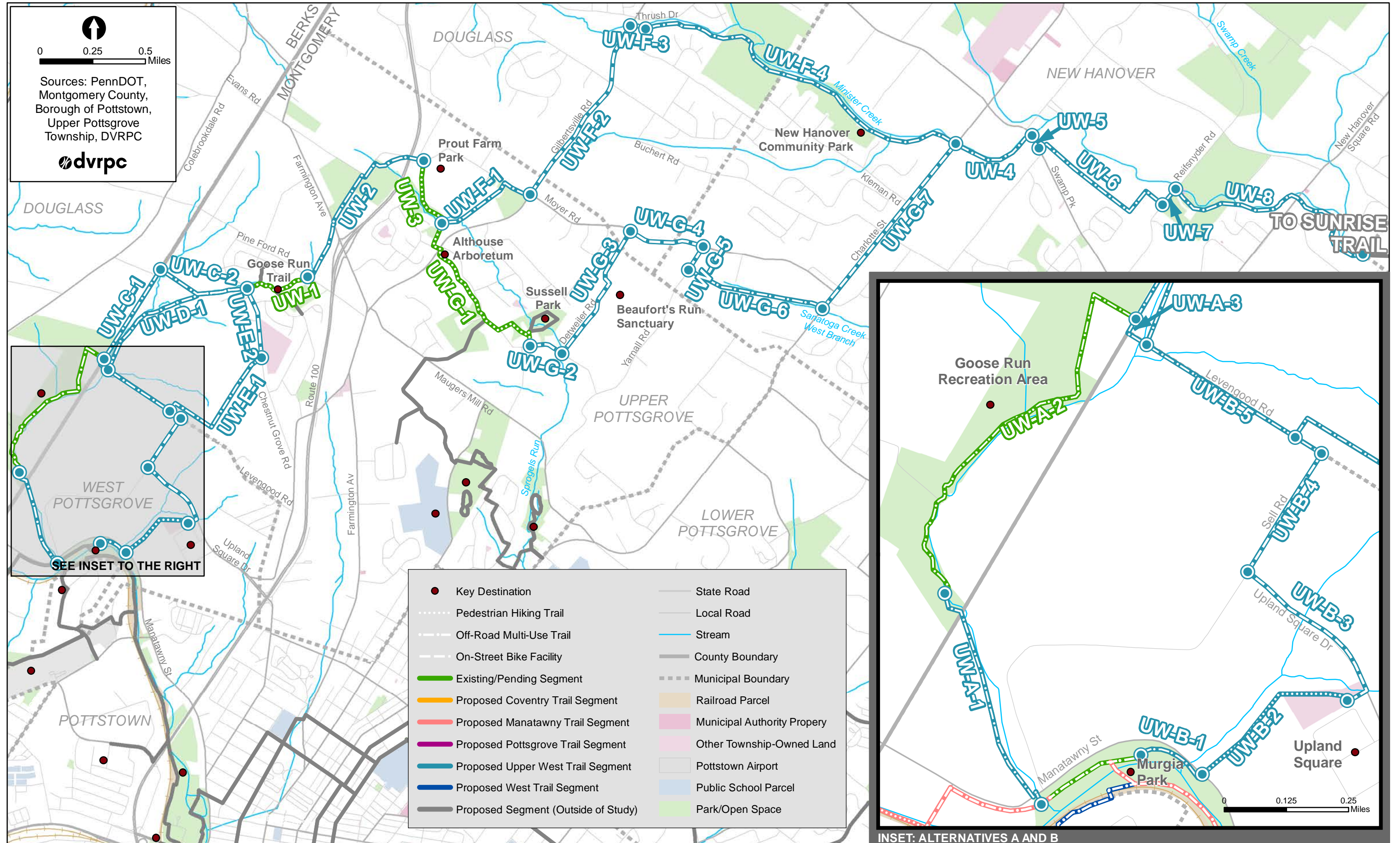
Upper West Trail

Upper West Trail Overview

The Upper West Trail is the northern and longer section of the West Trail (see the list of segments in Table 11 and the map in Figure 9). From southwest to northeast, it runs through West Pottsgrove Township, Douglass Township (Berks County), Upper Pottsgrove Township, Douglass Township (Montgomery County), and New Hanover Township. It provides a regional connection to the proposed Sunrise Trail and West County Trail to the northeast and connections to the Lower West Trail and the Manatawny Trail to the south. When completed, the Upper West Trail will offer cyclists and pedestrians access to recreational and commercial amenities. Cyclists and pedestrians will be able to reach the Upland Square Mall, Murgia Park, Goose Run Recreation Area, Goose Run Trail, Prout Farm Park, Althouse Arboretum, Sussell Park, Beaufort's Run Sanctuary, and New Hanover Community Park.

Because the Upper West Trail runs through an area with many small private properties, the alignment of the trail could change significantly over its planning process. Particularly in the northern part of Upper Pottsgrove Township, Douglass Township (Montgomery County), and New Hanover Township, the alignment recommendations in this feasibility study are preliminary, and more detailed analysis is required in the future.

Figure 9: Upper West Trail



Upper West Trail Alternatives and Alignments

Upper West Trail Alignment Alternatives Comparison Tables

Alternatives A and B (Table 8) provide different means of connecting the Lower West Trail, the Manatawny Trail, and Murgia Park to the Upper West Trail in Upper Pottsgrove. Alternative A is a multi-use trail along Goose Run that would make use of existing trails in the Goose Run Recreation Area in Douglass Township (Berks County) and which is accessible to all users. Alternative B enables cyclist and pedestrian access to the retail at the popular Upland Square Mall, but cyclists can only approach the mall from the north and pedestrians can only approach it from the south because of property ownership constraints to the north of Alternative B, and steep slopes constraints to the south. In order to accommodate all users, both Alternatives A and B should be constructed.

Table 8: Upper West Trail Alternatives A and B

Factors	Alternative A	Alternative B
Accessibility to Varied Users (Poor, Fair, Good, Excellent; i.e., Poor–Excellent)	Excellent (multi-use trail segments)	Good (some on-road segments and a steep off-road segment)
Level of Connectivity to Residential, Commercial, and Recreational Areas (Poor–Excellent)	Excellent (Goose Run Recreation Area, Murgia Park)	Excellent (Upland Square Mall, Murgia Park)
Overall Quality of User Experience (Poor–Excellent)	Excellent (almost entirely through wooded and creekside areas)	Good (steep slopes may yield scenic on- and off-road views)
Cost Savings through Project Coordination	None	None
Property Ownership	Two easements required	Three easements required
Water Crossings	None	Two bridges required
Road or Railroad Crossings	One signalized crossing required	One signalized crossing required
Topography (Few, Moderate, or Significant Elevation Changes)	Significant elevation changes	Significant elevation changes
PennDOT Partnership	PennDOT coordination required	PennDOT coordination required
Cost (See Opinion of Probable Cost on p. 74 for more information)	\$769,963	\$583,701
Cost per Linear Foot	\$99.19/LF	\$66.59/LF

Alternatives C, D, and E (Table 9) offer three ways to take the Upper West Trail from the Upper Pottsgrove/West Pottsgrove border to the existing Goose Run Trail, which is part of Upper Pottsgrove Township’s parks network. Alternatives C and D both use the Goose Run Recreation Area and Goose Run Trail trails and low-volume roads. Alternative C relies on Levensgood Road and some residential trail easements, while Alternative D is entirely off-road: first on property owned by Waste Management and then following a wooded corridor along Goose Run. Alternative E is partially off-road and partially on-road, but Chestnut Grove Road is a quiet neighborhood road, making this alignment accessible to most users. This study recommends constructing Alternative D but acknowledges that its construction is entirely dependent on Waste Management’s willingness to create a trail easement through its property.

Table 9: Upper West Trail Alternatives C, D, and E

Factors	Alternative C	Alternative D	Alternative E
Accessibility to Varied Users (Poor, Fair, Good, Excellent; i.e., Poor–Excellent)	Excellent (off-road or low-traffic road)	Excellent (off-road segment)	Excellent (most cyclists will be able to travel on this alignment)
Level of Connectivity to Residential, Commercial, and Recreational Areas (Poor–Excellent)	Fair (leads to two existing parks)	Fair (leads to two existing parks)	Good (leads to two existing parks, adjacent to relatively higher population)
Overall Quality of User Experience (Poor–Excellent)	Excellent (views of fields and woods)	Excellent (entirely through forested area)	Good (some views of fields and woods, quiet road)
Cost Savings through Project Coordination	None	None	None
Property Ownership	Two easements required	Four easements required	Four easements required
Water Crossings	Two bridges required	One bridge required	None
Road or Railroad Crossings	None	One signalized crossing required	None
Topography (Few, Moderate, or Significant Elevation Changes)	Few elevation changes	Few elevation changes	Few elevation changes
PennDOT Partnership	None	None	None
Cost (See Opinion of Probable Cost on p. 74 for more information)	\$678,539	\$477,174	\$284,288
Cost per Linear Foot (LF)	\$128.77/LF	\$108.98/LF	\$53.74/LF

Alignments F and G (Table 10) enable cyclists and pedestrians to travel from an existing portion of the Sprogels Run Trail in Upper Pottsgrove Township to PA 663 in New Hanover Township. They are considered “alignments” rather than “alternatives” because even though they serve as two means of getting to the same point like alternative segments, they connect to and move through very different areas in Douglass (Montgomery) and New Hanover Townships.

Both alignments use on-road and off-road segments to find a balance among several goals: reducing the need to purchase easements from private property owners, creating a direct route between destinations, and prioritizing trails over on-road bicycle facilities. Alignment F passes as a multi-use trail through a mixture of public and private property before becoming on-road along Gilbertsville Road. At Thrush Drive, it returns to a multi-use trail along the Minister Creek corridor and passes through private properties, preserved farms, and the New Hanover Community Park before reaching PA 663. Alignment G stays on the Sprogels Run Trail for a longer distance and then becomes on-road, passing Beaufort’s Run Sanctuary and heading northeast until reaching a utility corridor along the Sanatoga Creek West Branch that is owned by Met-Ed (formerly Metropolitan Edison Company). The alignment then becomes on-road along PA 663.

Table 10: Upper West Trail Alignments F and G

Factors	Alignment F	Alignment G
Accessibility to Varied Users (Poor, Fair, Good, Excellent; i.e., Poor–Excellent)	Good (some parts of Gilbertsville Road may be suitable for high-skilled cyclists)	Fair (Moyer Road and PA 663 are narrow, high-volume roads and are suitable for high-skilled cyclists)
Level of Connectivity to Residential, Commercial, and Recreational Areas (Poor–Excellent)	Excellent (connected to many neighborhoods, Sprogels Run Trail, New Hanover Community Park)	Excellent (connected to many neighborhoods, Sprogels Run Trail, Beaufort’s Run Sanctuary)
Overall Quality of User Experience (Poor–Excellent)	Good (parkland and forested areas but some busy on-road segments)	Fair (parkland and quiet streets but some busy on-road segments)
Cost Savings through Project Coordination	None	None
Property Ownership	17 easements required	One easement required
Water Crossings	One bridge required	None
Road or Railroad Crossings	One signalized crossing required	None
Topography (Few, Moderate, or Significant Elevation Changes)	Significant elevation changes	Few elevation changes
PennDOT Partnership	PennDOT coordination required	None

Factors	Alignment F	Alignment G
Cost (See Opinion of Probable Cost on p. 74 for more information)	Without equestrian amenities: \$1,398,496; With equestrian amenities: \$1,763,007	\$671,855
Cost per Linear Foot (LF)	Without equestrian amenities:\$80.89/LF; With equestrian amenities: \$101.97/LF	\$32.23/LF

Upper West Trail Segments

Table 11: Upper West Trail Segments

Segment	Segment Description	Segment Length (LF)
UW-A-1	Murgia Park to Goose Run Recreation Area	2,681
UW-A-2	Goose Run Recreation Area (Existing)	4,711
UW-A-3	Levengood Road to Alternative B	371
UW-B-1	Murgia Park to Manatawny Street	753
UW-B-2	Hill from Manatawny Street	2,304
UW-B-3	Upland Square Drive	2,055
UW-B-4	Sell Road	1,487
UW-B-5	Levengood Road–South	2,167
UW-C-1	Levengood Road–North	2,682
UW-C-2	Levengood Road to Chestnut Grove Road around Waste Management Property	2,588
UW-D-1	Levengood Road to Chestnut Grove Road via Goose Run Corridor	4,378

Segment	Segment Description	Segment Length (LF)
UW-E-1	Levengood Road to Chestnut Grove Road via Easements	3,498
UW-E-2	Chestnut Grove Road	1,793
UW-1	Goose Run Trail (Existing)	1,748
UW-2	Goose Run Trail to Srogels Run Trail	4,908
UW-3	Srogels Run Trail past Prout Farm Park (Existing)	1,835
UW-F-1	Srogels Run Trail to Moyer Road	2,737
UW-F-2	Gilbertsville Road	5,041
UW-F-3	Thrush Drive	398
UW-F-4	Thrush Drive to PA 663 via Minister Creek Corridor	9,113
UW-G-1	Srogels Run Trail to Snyder Road (Existing)	4,817
UW-G-2	Snyder Road	865
UW-G-3	Detweiler Road/Bruce Drive	3,681
UW-G-4	Moyer Road	1,923
UW-G-5	Yarnall Road	700
UW-G-6	Met-Ed Utility Corridor	3,544
UW-G-7	PA 663 to Minister Creek Corridor	5,315
UW-4	Minister Creek Corridor to Swamp Pike	2,239
UW-5	Swamp Pike–On-Road	366

Segment	Segment Description	Segment Length (LF)
UW-6	Swamp Pike to Reifsnyder Road	4,097
UW-7	Reifsnyder Road	514
UW-8	Reifsnyder Road to Upper Frederick Border	6,542
TOTAL: Alternative A		7,762 (1.50 miles)
TOTAL: Alternative B		8,765 (1.66 miles)
TOTAL: Alternative C		5,269 (1.00 miles)
TOTAL: Alternative D		4,378 (0.83 miles)
TOTAL: Alternative E		5,290 (1.00 miles)
TOTAL: Alignment F		17,289 (3.27 miles)
TOTAL: Alignment G		20,845 (3.95 miles)
TOTAL: Segments 1–8		22,249 (4.21 miles)

Upper West Trail Construction Phasing Outline

A more thorough study of the central and north segments of the Upper West Trail is required in order to determine the trail’s phasing. Because it covers a larger land area and passes mainly through private property, it is a more complex implementation project than the Coventry, Manatawny, Pottsgrove, or Lower West trails. Recommended phasing is included for Alternatives A and C/D only. No upper bound is listed for the “construction phasing recommendation” because the total number of phases is unknown at this time.

- Phase 1: Murgia Park to Goose Run Recreation Area, Segment UW-A-1;
- Phase 2: Goose Run Recreation Area to Levensgood Road, Segments UW-A-2 and UW-A-3; and
- Phase 3: Levensgood Road to Goose Run Trail, Segment UW-D-1 or Segment UW-C-1 and UW-C-2.



UW-A-1: Murgia Park to Goose Run Recreation Area

Length: 2,681 feet (0.51 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 1

Segment A-1 is the first of the priority segments for the Upper West Trail, which pass through the Goose Run Recreation Area. This segment connects the Upper West Trail to the Manatawny Trail and the Lower West Trail via an existing trail and proposed bridge in Murgia Park. It enables cyclists and pedestrians to cross the high-volume Manatawny Street safely using a signalized crosswalk and then travel on a multi-use trail through woods along the west side of Goose Run before reaching existing trails in the Goose Run Recreation Area. This segment runs through two private properties and requires easements from the landowners. Because the segment runs parallel to some steep slopes down to Goose Run, it may require some length of retaining walls

to prevent erosion of the hillside. The length of these walls will depend on the precise alignment of the segment.

Manatawny Street is a state road, so the creation of a signalized crossing would require coordination with PennDOT.



UW-A-2: Goose Run Recreation Area (Existing)

Length: 4,711 feet (0.89 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2

The Goose Run Recreation Area already has an earthen trail that runs north from its trailhead and parking lot to Levensgood Road, a little-used gravel road. The Upper West Trail links to this existing trail to connect cyclists and pedestrians in Douglass Township (Berks County) to the rest of the Upper West Trail to the north, and to the Manatawny and Lower West Trails to the south. More investigation is needed to determine if the grading, width, and treatment of the existing earthen trail can accommodate all possible users of the trail. The cost estimate in this study conservatively assumes that the existing trail will be expanded to a 10-foot-wide multi-use asphalt trail.



UW-A-3: Levensgood Road to Alternative B

Length: 371 feet (0.070 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 2

Alternative A ends on a small stretch of Levensgood Road, which is used so infrequently that it is essentially an off-road multi-use trail. A bridge over Goose Run has collapsed and needs to be reconstructed in order to complete this segment.



UW-B-1: Murgia Park to Manatawny Street

Length: 753 feet (0.14 miles)

Type: 10-foot-wide multi-use asphalt trail

This segment is the first of Alternative B in the Upper West Trail and connects Alternative B with the Manatawny Trail and Lower West Trail through an existing trail in Murgia Park. This segment is also located in Murgia Park, and it extends the trail in the park northeast to Manatawny Street. A bridge is required for the trail to cross a tributary of the Manatawny Creek.



UW-B-2: Hill from Manatawny Street

Length: 2,304 feet (0.44 miles)

Type: Three- to six-foot-wide soft-surface pedestrian hiking trail

Because this segment traverses some of the steepest slopes in the Greater Pottstown Trails network, it would be difficult and costly to build a graded multi-use trail, and thus this segment is dedicated to pedestrian use.

Even so, the trail may require switchbacks and retaining walls to maintain a comfortable incline for walking of 10 degrees or less. The constructed width of the segment can accommodate some variation, which may range between three and six feet depending on localized site conditions.

The segment crosses through three private properties before reaching municipal-owned land, so easements are also required. A signalized or unsignalized crossing, depending on the level of anticipated use, may be required to cross Manatawny Street. The Opinion of Probable Cost (page 74) uses the value of an unsignalized crosswalk.

Manatawny Street is a state road, so the creation of this crossing would require coordination with PennDOT.



UW-B-3: Upland Square Drive

Length: 234 feet (0.044 miles)
Type: On-road sharrows

This segment and the following segment (UW-B-4) are intended for cyclists to reach Upland Square Mall.

This part of Upland Square Drive does not contain high volumes of daily traffic, and the posted speed limit is 35 miles per hour, so sharrows are a reasonable treatment for this segment.

Upland Square Drive is a state road, so the installation of sharrow markers on the road would require coordination with PennDOT.

This segment also makes use of a small driveway on a municipal parcel, the same one used for segment UW-B-2. Sharrows are also recommended for this driveway.



UW-B-4: Sell Road

Length: 1,487 feet (0.28 miles)
Type: On-road sharrows

Like Upland Square Drive north of the Upland Square Mall, Sell Road does not contain high volumes of daily traffic, so sharrows are a reasonable treatment. However, this road does not contain a shoulder as Upland Square Drive does.

Important Destination: Upland Square Mall

Upland Square Mall contains a variety of regional and national chains, including Target, Giant Food Stores, Best Buy, T.J. Maxx, and Five Below. A bicycle and pedestrian connection to the mall will enable residents from around the region to shop, eat, and see a movie at the Carmike 12 Cineplex.





UW-B-5: Levensgood Road–South

Length: 2,167 feet (0.41 miles)

Type: 10-foot-wide multi-use asphalt trail

Levensgood Road is the final segment for Alternative B before meeting Alternatives C and D. It is a rarely used gravel road that functions more as a driveway for two homes along it. This road right-of-way, when paved, can function as a multi-use trail. There is a bridge along the road that has disintegrated and requires reconstruction before this segment can be used.



UW-C-1: Levensgood Road–North

Length: 2,682 feet (0.51 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 3 if Alternative D is not feasible

Alternative C begins where Alternatives A and B end on Levensgood Road. Cyclists and pedestrians follow the road north for about half of a mile before turning east onto segment C-2. This alternative may be used if Waste Management, a major adjacent landowner, does not agree to provide an easement for the construction of Alternative D.



UW-C-2: Levensgood Road to Chestnut Grove Road around Waste Management Property

Length: 2,588 feet (0.49 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 3 if Alternative D is not feasible

This segment travels outside the border of property owned by Waste Management. It passes through two privately owned properties before reaching preserved open space that is owned by Upper Pottsgrove Township and which forms part of the land on which the Goose Run Trail travels. The trail proceeds northeast until it connects with the Goose Run Trail.



UW-D-1: Levensgood Road to Chestnut Grove Road via Goose Run Corridor

Length: 4,378 feet (0.83 miles)

Type: 10-foot-wide multi-use asphalt trail

Construction phasing recommendation: Phase 3

Alternative D brings cyclists and pedestrians through forests and fields along Goose Run. It is uninterrupted by roads for about four-fifths of a mile before it reaches Chestnut Grove Road, a quiet road and the beginning of the Goose Run Trail. As Alternative D is located along a stream corridor, it may require some extra grading and retaining walls to prevent erosion. Chestnut Grove Road requires one unsignalized crossing, and the trail requires one small bridge to cross a tributary of Goose Run. The trail corridor runs through four private properties, so four trail easements are required for the construction of this segment. Waste Management is the largest property owner of the four, and the viability of this alternative is dependent on its willingness to provide an easement.



UW-E-1: Levensgood Road to Chestnut Grove Road via Easements

Length: 3,498 feet (0.66 miles)

Type: 10-foot-wide multi-use asphalt trail

The alignment of this first segment in Alternative E depends on landowner interest. It requires easements from two large and two smaller property owners in order to be constructed.



UW-E-2: Chestnut Grove Road

Length: 1,793 feet (0.34 miles)

Type: On-road sharrows

Chestnut Grove Road has low traffic volumes, making sharrows a reasonable treatment. Cyclists travel on this segment until they reach the trailhead for the existing Goose Run Trail, the westernmost trail in Upper Pottsgrove's existing trail network.



UW-1: Goose Run Trail (Existing)

Length: 1,748 feet (0.33 miles)

Type: 10-foot-wide multi-use asphalt trail

The Goose Run Trail is an existing six-foot-wide multi-use trail. Eventually, to accommodate more cyclist and pedestrian traffic as the Greater Pottstown Trails network expands, it should be widened and paved, but this action is a lower priority in relation to the development of new trails and on-road facilities around it.



UW-2: Goose Run Trail to Sprogels Run Trail

Length: 4,908 feet (0.93 miles)

Type: 10-foot-wide multi-use asphalt trail

This trail segment connects the existing Goose Run Trail with the existing Sprogels Run Trail, Upper Pottsgrove Township's longest constructed trail. Easements are needed from five private property owners. Two of the properties are preserved farms. These farms may be preserved under the Pennsylvania Agricultural Easement Purchase Program, which currently does not allow trail easements or other non-agricultural uses on preserved farms. This policy may have to change for this segment to be constructed.

The segment crosses two high-volume state roads, Farmington Avenue and PA 100, and two relatively low-volume roads, Pine Ford Road and Moyer Road. The intersection at PA 100 can make use of the existing signal at Moyer Road. The other three crossings can likely be unsignalized (as is reflected in the Opinion of Probable Cost, page 74), although Farmington Avenue may require a signal. Farmington Avenue, PA 100, and Moyer Road are all state roads, and require additional coordination with PennDOT for the installation of the crossings. Furthermore, the segment has a few steep slope areas that may need switchbacks and support from retaining walls.



UW-3: Sprogels Run Trail past Prout Farm Park (Existing)

Length: 1,835 feet (0.35 miles)

Type: 10-foot-wide multi-use asphalt trail

This segment of Sprogels Run Trail is at present a pedestrian path along Sprogels Run. It enables trail users to reach Prout Farm Park without a car. Ultimately, it should be expanded and converted to a multi-use asphalt path so cyclists and pedestrians can both use it.



UW-F-1: Sprogels Run Trail to Moyer Road

Length: 2,767 feet (0.52 miles)

Type: 10-foot-wide multi-use asphalt trail

This segment is the first in Alignment F, which travels from Sprogels Run Trail to PA 663 at Minister Creek. It makes use of an existing logging road used to harvest ash trees. It also requires up to five easements on private properties before reaching municipal land along Moyer Road. The trail's proximity to Sprogels Run and steep embankments along that waterway may necessitate the construction of one bridge and retaining walls.



UW-F-2: Gilbertsville Road

Length: 5,041 feet (0.96 miles)

Type: Bidirectional bicycle lanes

After passing through preserved open space at the corner of Moyer Road and Gilbertsville Road, the trail switches to bidirectional bicycle lanes heading north and south along Gilbertsville Road. Bicycle lanes should be used on this road because its posted speed of 40 miles per hour is too high for comfortable cycling, and it experiences relatively high volumes of traffic as a major connector road. Gilbertsville Road is too narrow at present to accommodate bicycle lanes, but it is possible that this road could be expanded in the future, at which time bicycle lanes should be added. As Gilbertsville Road is a state road, the installation of bicycle lanes requires coordination with PennDOT.



UW-F-3: Thrush Drive

Length: 398 feet (0.075 miles)

Type: On-road sharrows

From Gilbertsville Road, cyclists turn onto the quiet Thrush Drive and continue on-road using sharrows for a short distance before going off-road on segment F-4.



UW-F-4: Thrush Drive to PA 663 via Minister Creek Corridor

Length: 9,113 feet (1.73 miles)

Type: 10-foot-wide multi-use asphalt trail or eight-foot-wide stone dust trail with three-foot-wide equestrian track

This segment follows the Minister Creek corridor until it meets PA 663. It makes use of preserved farms and the New Hanover Community Park. Like the other segments proposed through farmland, UW-F-4 may be dependent on changes to the Pennsylvania Agricultural Easement Purchase Program, which currently prevents trail easements on working farms preserved under that program. That is only one of several constraints on this segment, which also requires easements from at least 14 private property owners. Furthermore, as the trail would be located parallel to the banks of Minister Creek, retaining walls may need to be constructed to prevent erosion along the trail. Given the significant barriers to its construction, this segment would likely not be completed until well into the future.

This segment could be of sufficient length and width to reasonably accommodate equestrians. The Opinion of Probable Cost (page 74) includes estimates of costs both for a non-equestrian trail and an equestrian trail for this segment.



UW-G-1: Sprogels Run Trail to Snyder Road (Existing)

Length: 4,817 feet (0.91 miles)

Type: 10-foot-wide multi-use asphalt trail

This segment is the first of Alignment G, which provides a second means of travel between the existing Sprogels Run Trail and PA 663. Like UW-3, Alignment G first makes use of a portion of the Sprogels Run Trail. Also like UW-3, this part of the trail is currently a pedestrian path, and it is recommended that this path eventually be expanded and paved to accommodate pedestrians and cyclists. The segment enables car-free access to Althouse Arboretum and Sussell Park.



UW-G-2: Snyder Road

Length: 865 feet (0.16 miles)

Type: On-road sharrows

After traveling south of Sussell Park, the trail ends at Snyder Road. The segment along Snyder Road begins a series of on-road segments that last until the Met-Ed utility corridor to the northeast. The streets that the on-road segments use are narrow, making sharrows the only feasible option. However, Snyder Road has low traffic volumes, and cyclists of most abilities would be comfortable using this road.



UW-G-3: Detweiler Road/Bruce Drive

Length: 3,681 feet (0.70 miles)

Type: On-road sharrows

On this segment, cyclists will travel along Detweiler Road and then continue along Bruce Drive until reaching Moyer Road. This segment enables cyclists to visit Beaufort's Run Sanctuary, which is located along Detweiler Road. As with Snyder Road, these two roads are too narrow for any cycling infrastructure beyond sharrows, but a low traffic volume enables most cyclists to travel comfortably on them.



UW-G-4: Moyer Road

Length: 1,923 feet (0.36 miles)

Type: Bidirectional bicycle lanes

From Bruce Drive, cyclists turn onto Moyer Road. Bicycle lanes should be used on this road because its posted speed of 40 miles per hour is too high for comfortable cycling, and it experiences relatively high volumes of traffic. However, like the previous segments, Moyer Road is currently too narrow to accommodate this treatment. Moyer Road could be widened in the future, at which time bicycle lanes should be incorporated into the design to enable cyclists to comfortably use this segment. Because Moyer Road is a state road, coordination with PennDOT is required for any changes.



UW-G-5: Yarnall Road

Length: 700 feet (0.13 miles)

Type: On-road sharrows

After traveling on Moyer Road for about one-third of a mile, cyclists exit onto Yarnall Road, a lower-volume road than Moyer Road, where sharrows are an appropriate treatment.



UW-G-6: Met-Ed Utility Corridor

Length: 3,544 feet (0.67 miles)

Type: 10-foot-wide multi-use asphalt trail

Alignment G switches to an off-road multi-use trail at a utility corridor that roughly follows the Sanatoga West Creek Branch corridor. This corridor is an easement owned by Met-Ed. Met-Ed will have to give permission to create a trail easement, and coordination will be required with the owners of five private properties through which the segment travels. The trail may need to cross the Sanatoga West Creek Branch, requiring the construction of a bridge.



UW-G-7: PA 663 to Minister Creek Corridor

Length: 5,315 feet (1.01 miles)

Type: Bidirectional bicycle lanes

On this segment, cyclists turn left from the Met-Ed utility corridor and head north along PA 663 until reaching the Minister Creek corridor, which is south of Swamp Pike. Bicycle lanes should be used on PA 663 because its posted speed of 45 miles per hour is too high for comfortable cycling, and it experiences relatively high volumes of traffic. Along this segment, PA 663 is too narrow to accommodate bicycle lanes. However, there is a possibility that PA 663 could be widened in the future, and if so, this project should include bicycle lanes to enable cyclists to use this segment. PA 663 is a state road, so coordination with PennDOT is required for all changes.



UW-4: Minister Creek Corridor to Swamp Pike

Length: 2,239 feet (0.42 miles)

Type: 10-foot-wide multi-use asphalt trail or eight-foot-wide stone dust trail with three-foot-wide equestrian track

Segments 4 through 8 could be of sufficient width and length to reasonably accommodate equestrians. The Opinion of Probable Cost (page 74) includes estimates of costs both for a non-equestrian trail and an equestrian trail for each of these five segments.

Segment 4 begins at the convergence of segments F-4 and G-8 and continues to follow Minister Creek as segment F-4 did. This segment requires one signalized crossing over PA 663. Also, as this segment travels alongside the borders of farmland and residential property, easements would be required from three private property owners before the segment reaches Swamp Pike.



UW-5: Swamp Pike—On-Road

Length: 366 feet (0.069 miles)

Type: 10-foot-wide multi-use asphalt sidepath or eight-foot-wide stone dust sidepath with three-foot-wide equestrian track

East of Swamp Pike, Minister Creek passes through a golf course, and it is expected that the owner of that parcel will not be willing to grant a trail easement through the center of the course. Thus, all users will need to cross and travel along Swamp Pike for a short distance on this segment. A signalized crossing is required, as well as easements from at least two private property owners. More discussion, particularly between New Hanover Township, engineers, and adjacent property owners, is required to ensure the installation of proper safety features along Swamp Pike, particularly if equestrians are included as users of the segment. Coordination with PennDOT will be required in order to make any changes along Swamp Pike, which is a state road.



UW-6: Swamp Pike to Reifsnyder Road

Length: 4,097 feet (0.78 miles)

Type: 10-foot-wide multi-use asphalt trail or eight-foot-wide stone dust sidepath with three-foot-wide equestrian track

After traveling along Swamp Pike for a very short distance, trail users return off-road, traveling along the borders of the Falkner Swamp United Church of Christ property, a golf course, and other private properties. The construction of this segment will thus require between three and eight easements before reaching Reifsnyder Road.



UW-7: Reifsnyder Road

Length: 514 feet (0.97 miles)

Type: 10-foot-wide multi-use asphalt trail or eight-foot-wide stone dust sidepath with three-foot-wide equestrian track

Reifsnyder Road is a narrow, low-volume road that users must cross and walk alongside to reach the final segment of the Upper West Trail before it leaves the Greater Pottstown region. The road requires one unsignalized crosswalk and the permission of two or three private landowners to create an easement for a sidepath. The recommended location for the sidepath is the northbound side of the street. The houses on this side of the street are set back farther from the street, offering more space for a sidepath, as well as more separation between the sidepath and homes. However, one of these properties is a preserved farm, and it may not be possible in the near future to add a trail easement if the owner's existing easement is defined by the Pennsylvania Agricultural Easement Purchase Program. As with the other preserved farms in this study, the possibility of accommodating trails on the edges of farmland preserved under this program is a long-term goal that requires policy change at the state level.



UW-8: Reifsnyder Road to Upper Frederick Border

Length: 6,542 feet (1.24 miles)

Type: 10-foot-wide multi-use asphalt trail or eight-foot-wide stone dust sidepath with three-foot-wide equestrian track

This segment returns trail users to the Minister Creek corridor. This corridor has several areas of steep slopes that may require a few switchbacks and retaining walls. One signalized crosswalk is required to cross New Hanover Square Road. Coordination with PennDOT will be required for making changes to the road, as New Hanover Square Road is a state-owned road.

As with the previous four segments, this segment passes through private properties, and easements would be needed on nine parcels. One parcel is a preserved farm, so the same conditions apply as those described for the previous segment.

This final segment of the Upper West Trail connects the Greater Pottstown Trails network to the border of New Hanover Township and Upper Frederick Township. From this border, partners representing other trail networks will connect the Greater Pottstown Trails to the proposed Sunrise Trail, the West County Trail, and other trails in Montgomery County.

Opinion of Probable Cost

The Opinion of Probable Cost for constructing each segment in the study is included as a chart on the following pages. The segment names and numbers in the Opinion of Probable Cost match those in the maps and text.

The Opinion of Probable Cost includes information on each segment type and subtype, which informs the listed cost per linear foot. That cost per linear foot, when multiplied by the length of the segment, yields the base cost of the segment. It is important to note that the unit cost of sharrow markers was converted into linear feet by dividing the cost of each discrete marker by the recommended distance between each marker. For sharrows on neighborhood streets, that distance is one sharrow for every 100 feet; and for sharrows on arterial streets, it is one sharrow marker every 200 feet.

Some segments have additional costs on top of the base cost for easements or acquisitions, fencing and retaining walls, bridges, or road and railroad crossings. Segments on or alongside state-owned roads may have an additional time cost from coordination with PennDOT, but in some instances, it may be possible to share trail implementation costs with PennDOT if the agency has a project on a street that is also planned as a segment in this study.

The Opinion of Probable Cost includes all of the aforementioned costs, except those for easements or acquisitions and PennDOT coordination, as those costs cannot be accurately estimated for this study. The Opinion of Probable Cost does not include soft costs, legal fees, or other pre- and post-construction expenses, such as engineering costs or trail maintenance.

Table 12: Opinion of Probable Cost for the Greater Pottstown Trails Network

COVENTRY TRAIL: OPINION OF PROBABLE COST

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
CT-A-1	Schuylkill River Trail Stub	North Coventry	Multi-use trail	10'-wide asphalt trail	80	357	\$ -								Yes	\$ -
CT-A-2	Schuylkill River Trail to Kenilworth Park Trailhead	North Coventry	Multi-use sidepath	10'-wide asphalt trail	80	465	\$ 37,222	Yes					1 signalized crossing (PennDOT adding)	\$ -	Yes	\$ 37,222
CT-A-3	Kenilworth Park	North Coventry	Multi-use trail	10'-wide asphalt trail	80	2,873	\$ 229,866			\$ 14,250	25	\$ 50,000				\$ 294,116
CT-A-4	Miller Road	North Coventry	On-road bike facility	Sharrow: neighborhood road	2.5	1,485	\$ 3,712									\$ 3,712
CT-A-5	Coventry Trail (Existing)	North Coventry	Pedestrian path (to be expanded to multi-use trail)	10'-wide asphalt trail	60	2,466	\$ 147,976									\$ 147,976
CT-B-1	Schuylkill River Trail to Old Schuylkill Road	East Coventry	On-road bike facility	Sharrow: neighborhood road	2.5	786	\$ 1,965						1 signalized crossing (PennDOT adding)	\$ -	Yes	\$ 1,965
CT-B-2	Old Schuylkill Road	East Coventry	On-road bike facility	Sharrow: arterial road	1.25	373	\$ 467								Yes	\$ 467
CT-B-3	Spiece Road	East Coventry	On-road bike facility	Sharrow: neighborhood road	2.5	1,065	\$ 2,662									\$ 2,662
CT-B-4	Crest Lane	East Coventry	On-road bike facility	Sharrow: neighborhood road	2.5	1,040	\$ 2,601	Yes								\$ 2,601
CT-B-5	PECO Easement–North	East Coventry	Multi-use trail	10'-wide asphalt trail	80	3,742	\$ 299,390			\$ 21,450						\$ 320,840
CT-B-6	Coventry Trail (Existing)	North Coventry/ East Coventry	Pedestrian path (to be expanded to multi-use trail)	10'-wide asphalt trail	60	331	\$ 19,840									\$ 19,840
CT-1	PECO Easement–South	North Coventry/ East Coventry	Multi-use trail	10'-wide asphalt trail	80	3,390	\$ 271,222	Yes			25	\$ 50,000	2 unsignalized crossings	\$ 20,000	Yes	\$ 341,222
CT-2	Riparian Corridor from PECO Easement to South Hanover Street	North Coventry	Multi-use trail	10'-wide asphalt trail	80	4,729	\$ 378,350	Yes			25	\$ 50,000	1 unsignalized crossing	\$ 10,000	Yes	\$ 438,350
CT-3	Hanover Meadows Park	North Coventry	Multi-use trail	10'-wide asphalt trail	80	3,610	\$ 288,839									\$ 288,839
														ALTERNATIVE A	\$ 483,026	
														ALTERNATIVE B	\$ 328,535	
														SEGMENTS 1–3	\$ 1,068,410	

POTTSGROVE TRAIL: OPINION OF PROBABLE COST, CONTINUED

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
PT-12	Sunset Park	Upper Pottsgrove	Multi-use trail	10'-wide stone dust trail	40	735	\$ 29,413				30	\$ 10,000	1 unsignalized crossing	\$ 10,000		\$ 49,413
PT-13	Glendale Avenue	Upper Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	913	\$ 2,282						1 signalized crossing with 3 curb ramps	\$ 72,000	Yes	\$ 74,282
PT-14	Juniper Street/Deerfield Way	Upper Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	2,225	\$ 5,563									\$ 5,563
PT-15	Meadowview Drive	Upper Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	231	\$ 577									\$ 577
PT-16	Hollenbach Park	Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	416	\$ 33,303			\$ 16,050						\$ 49,353
													SEGMENTS 1-16	\$ 2,665,486		
													ALTERNATIVE A	\$ 368,064		
													ALTERNATIVE B	\$ 11,031		

MANATAWNY TRAIL: OPINION OF PROBABLE COST

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
MT-1	Schuylkill River Trail to College Drive	Pottstown	Multi-use sidepath	10'-wide asphalt trail	80	308	\$ 24,672	Yes					1 unsignalized crossing	\$ 10,000		\$ 34,672
MT-A-1	College Drive to High Street	Pottstown	On-road bike facility	Sharrow: arterial road	1.25	1,053	\$ 1,317									\$ 1,317
MT-A-2	High Street to Pottsgrove Manor Property	Pottstown	On-road bike facility	Bike lane	2.5	187	\$ 468						1 signalized crossing	\$ 60,000	Yes	\$ 60,468
MT-A-3	High Street to TRec District (Existing)	Pottstown	On-road bike facility	Bike lane	0	89	\$ -								Yes	\$ -
MT-A-4	High Street to King Street	Pottstown	Multi-use trail	10'-wide asphalt trail	80	396	\$ 31,697	Yes								\$ 31,697
MT-A-5	King Street	Pottstown	On-road bike facility	Bike lane	2.5	587	\$ 1,468								Yes	\$ 1,468
MT-B-1	College Drive to Montgomery County Community College	Pottstown	On-road bike facility and sidewalk	New concrete sidewalk and existing sharrows	58	509	\$ 29,541	Yes								\$ 29,541
MT-B-2	Montgomery County Community College	Pottstown	Multi-use trail	10'-wide asphalt trail	80	567	\$ 45,322	Yes								\$ 45,322
MT-B-3	Tunnel under Train Tracks	Pottstown	Multi-use trail	Existing sidewalk through tunnel	0	133	\$ -	Yes								\$ -
MT-B-4	Train Tracks to High Street	Pottstown	On-road bike facility	Sharrow: neighborhood road	2.5	200	\$ 499									\$ 499
MT-B-5	High Street to TRec District (Existing)	Pottstown	On-road bike facility	Bike lane	0	472	\$ -									N/A
MT-2	TRec District to Memorial Park	Pottstown	Multi-use trail	10'-wide asphalt trail	80	484	\$ 38,708	Yes								\$ 38,708
MT-3	Memorial Park	Pottstown	Multi-use trail	10'-wide asphalt trail	80	2,809	\$ 224,706	Yes					1 signalized crossing	\$ 60,000	Yes	\$ 284,706
MT-4	Berks County Redevelopment Authority	Pottstown	Multi-use trail	8'-wide stone dust trail with post-and-rail fence	55	3,173	\$ 174,535	Yes	\$ 3,000	\$ 30,000						\$ 207,535
MT-5	Colebrookdale Property to Murgia Park	Pottstown	Multi-use trail	8'-wide stone dust trail	40	1,259	\$ 50,372	Yes		\$ 46,500			1 signalized crossing	\$ 60,000		\$ 156,872
MT-6	Murgia Park to Bridge over Manatawny Creek	West Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	1,390	\$ 111,229			\$ 18,000						\$ 129,229
MT-7	Colebrookdale Railroad to Murgia Park	West Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	203	\$ 16,237				150	\$ 300,000				\$ 316,237

MANATAWNY TRAIL: OPINION OF PROBABLE COST, CONTINUED

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
MT-8	Murgia Park Trail (Existing)	West Pottsgrove	Multi-use trail (to be paved)	10'-wide asphalt trail	60	1,053	\$ 63,178									\$ 63,178
MT-9	Murgia Park to Grosstown Road	West Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	1,027	\$ 82,126				120	\$ 240,000				\$ 322,126
MT-10	Grosstown Road	West Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	499	\$ 1,247	Yes							Yes	\$ 1,247
MT-11	Secret Valley Trail Segment	West Pottsgrove	Pedestrian path	3'-6'-wide soft-surface hiking trail	10	891	\$ 8,909	Yes		\$ 130,200						\$ 139,109
MT Spur 1-1	PA 100	Pottstown	Sidewalk	Concrete sidewalk	100	1,014	\$ 101,366	Yes		\$ 152,100			1 unsignalized crossing, 1 curb ramp	\$ 14,000	Yes	\$ 267,466
MT Spur 1-2	Shoemaker Road (Partially Existing)	Pottstown	Sidewalk	Concrete sidewalk	100	1,028	\$ 23,000									\$ 23,000
MT Spur 2-1	Colebrookdale Property to Old Glasgow Street	Pottstown	Multi-use trail	10'-wide asphalt trail	80	264	\$ 21,120	Yes		\$ 39,450			1 unsignalized crossing	\$ 10,000		\$ 70,570
MT Spur 2-2	Old Glasgow Street	Pottstown	On-road bike facility	Sharrow: arterial road	1.25	335	\$ 419									\$ 419
MT Spur 2-3	Pottstown Airport–East	Pottstown/West Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	1,597	\$ 127,731			\$ 239,550						\$ 367,281
												SEGMENTS 1–11 PLUS SPURS		\$ 2,422,354		
												ALTERNATIVE A		\$ 94,949		
												ALTERNATIVE B		\$ 75,361		

LOWER WEST TRAIL: OPINION OF PROBABLE COST

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
LW-1	Schuylkill River Trail to Manatawny Trail via Grosstown Road	West Pottsgrove/ Pottstown	On-road bike facility	Sharrow: arterial road	1.25	9,778	\$ 12,223						1 signalized crossing (PennDOT adding) and curb ramps	\$ 76,000	Yes	\$ 88,223
LW-2	Oldtimers Field	West Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	919	\$ 73,502			\$ 30,000						\$ 103,502
LW-3	Pottstown Airport–West	West Pottsgrove/ Pottstown	Multi-use trail	10'-wide asphalt trail	80	2,025	\$ 161,963	Yes								\$ 161,963
LW-4	Circle of Progress	Pottstown	On-road bike facility	Sharrow: neighborhood road	2.5	1,549	\$ 3,872									\$ 3,872
LW-5	Sly Fox Brewery to Murgia Park	West Pottsgrove/ Pottstown	Multi-use trail	10'-wide asphalt trail	80	1,197	\$ 95,736	Yes		\$ 42,150			1 unsignalized crossing	\$ 10,000		\$ 147,886
													ALIGNMENT TOTAL	\$ 505,445		

UPPER WEST TRAIL: OPINION OF PROBABLE COST

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
UW-A-1	Murgia Park to Goose Run Recreation Area	West Pottsgrove/ Douglass (Berks)	Multi-use trail	10'-wide asphalt trail	80	2,681	\$ 214,469	Yes		\$ 103,200			1 signalized crossing	\$ 60,000	Yes	\$ 377,669
UW-A-2	Goose Run Recreation Area (Existing)	Douglass (Berks)	Earthen trail (to be expanded to multi-use trail)	10'-wide asphalt trail	60	4,711	\$ 282,640									\$ 282,640
UW-A-3	Levengood Road to Alternative B	Douglass (Berks)/ West Pottsgrove/ Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	371	\$ 29,654				40	\$ 80,000				\$ 109,654
UW-B-1	Murgia Park to Manatawny Street	West Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	753	\$ 60,234				30	\$ 60,000				\$ 120,234
UW-B-2	Hill from Manatawny Street	West Pottsgrove	Pedestrian path	3'-6'-wide soft-surface hiking trail	10	2,304	\$ 23,037	Yes		\$ 128,250			1 unsignalized crossing	\$ 10,000	Yes	\$ 161,287
UW-B-3	Upland Square Drive	West Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	2,055	\$ 5,137								Yes	\$ 5,137
UW-B-4	Sell Road	West Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	1,487	\$ 3,718									\$ 3,718
UW-B-5	Levengood Road-South	West Pottsgrove/ Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	2,167	\$ 173,326				25	\$ 120,000				\$ 293,326
UW-C-1	Levengood Road-North	Douglass (Berks)/ Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	2,682	\$ 214,538									\$ 214,538
UW-C-2	Levengood Road to Chestnut Grove Road around Waste Management Property	Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	2,588	\$ 207,002	Yes		\$ 117,000	70	\$ 140,000				\$ 464,002
UW-D-1	Levengood Road to Chestnut Grove Road via Goose Run Corridor	Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	4,378	\$ 350,274	Yes		\$ 66,900	25	\$ 50,000	1 unsignalized crossing	\$ 10,000		\$ 477,174
UW-E-1	Levengood Road to Chestnut Grove Road via Easements	Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	3,498	\$ 279,806	Yes								\$ 279,806
UW-E-2	Chestnut Grove Road	Upper Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	1,793	\$ 4,482									\$ 4,482
UW-1	Goose Run Trail (Existing)	Upper Pottsgrove	Pedestrian path (to be expanded to multi-use trail)	10'-wide asphalt trail	60	1,748	\$ 104,870									\$ 104,870
UW-2	Goose Run Trail to Sprogels Run Trail	Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	4,908	\$ 392,661	Yes		\$ 37,500	55	\$ 110,000	3 unsignalized crossings	\$ 30,000	Yes	\$ 570,161

UPPER WEST TRAIL: OPINION OF PROBABLE COST, CONTINUED

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
UW-3	Sprogels Run Trail past Prout Farm Park (Existing)	Upper Pottsgrove	Pedestrian path (to be expanded to multi-use trail)	10'-wide asphalt trail	60	1,835	\$ 110,099									\$ 110,099
UW-F-1	Sprogels Run Trail to Moyer Road	Upper Pottsgrove	Multi-use trail	10'-wide asphalt trail	80	2,737	\$ 218,973	Yes		\$ 19,050	30	\$ 60,000				\$ 298,023
UW-F-2	Gilbertsville Road	Upper Pottsgrove/ Douglass (Montgomery)	On-road bike facility	Bidirectional bike lanes	5	5,041	\$ 25,205								Yes	\$ 25,205
UW-F-3	Thrush Drive	Douglass (Montgomery)	On-road bike facility	Sharrow: neighborhood road	2.5	398	\$ 995									\$ 995
UW-F-4 (Option 1)	Thrush Drive to PA 663 via Minister Creek Corridor	Douglass (Montgomery)/New Hanover	Multi-use trail	10'-wide asphalt trail	80	9,113	\$ 729,022	Yes		\$ 335,250			1 unsignalized crossing	\$ 10,000	Yes	\$ 1,074,272
UW-F-4 (Option 2)	Thrush Drive to PA 663 via Minister Creek Corridor	Douglass (Montgomery)/New Hanover	Multi-use trail	8'-wide stone dust trail with 3'-wide equestrian track	120	9,113	\$1,093,534	Yes		\$ 335,250			1 unsignalized crossing	\$ 10,000	Yes	\$ 1,438,784
UW-G-1	Sprogels Run Trail to Snyder Road (Existing)	Upper Pottsgrove	Pedestrian path (to be expanded to multi-use trail)	10'-wide asphalt trail	60	4,817	\$ 289,042									\$ 289,042
UW-G-2	Snyder Road	Upper Pottsgrove	On-road bike facility	Sharrow: neighborhood road	2.5	865	\$ 2,162									\$ 2,162
UW-G-3	Detweiler Road/Bruce Drive	Upper Pottsgrove/ Douglass (Montgomery)	On-road bike facility	Sharrow: neighborhood road	2.5	3,681	\$ 9,202									\$ 9,202
UW-G-4	Moyer Road	Douglass (Montgomery)/New Hanover	On-road bike facility	Bidirectional bike lanes	5	1,923	\$ 9,615								Yes	\$ 9,615
UW-G-5	Yarnall Road	New Hanover	On-road bike facility	Sharrow: neighborhood road	2.5	700	\$ 1,751									\$ 1,751
UW-G-6	Met-Ed Utility Corridor	New Hanover	Multi-use trail	10'-wide asphalt trail	80	3,544	\$ 283,507	Yes			25	\$ 50,000				\$ 333,507
UW-G-7	PA 663 to Minister Creek Corridor	New Hanover	On-road bike facility	Bidirectional bike lanes	5	5,315	\$ 26,575								Yes	\$ 26,575

UPPER WEST TRAIL: OPINION OF PROBABLE COST, CONTINUED

Segment Number	Segment Name	Municipal Location	Segment Type	Segment Subtype	Cost/Linear Foot (LF) for Segment Subtype	Length (LF)	Base Cost	Easements/ Acquisition	Fencing (\$15/LF)	Retaining Walls (\$150/LF for 5-6' Wall)	Total Length of Bridges (LF)	Bridge Cost (\$2,000/LF)	Crossing Type	Crossing Cost	PennDOT Involved	Total Cost (Rounded to the Unit Digit)
UW-4 (Option 1)	Minister Creek Corridor to Swamp Pike	New Hanover	Multi-use trail	10'-wide asphalt trail	80	2,239	\$ 179,110	Yes					1 signalized crossing	\$ 60,000	Yes	\$ 239,110
UW-4 (Option 2)	Minister Creek Corridor to Swamp Pike	New Hanover	Multi-use trail	8'-wide stone dust trail with 3'-wide equestrian track	120	2,239	\$ 268,666	Yes					1 signalized crossing	\$ 60,000	Yes	\$ 328,666
UW-5 (Option 1)	Swamp Pike—On-Road	New Hanover	Multi-use sidepath	10'-wide asphalt trail	80	366	\$ 179,110	Yes					1 signalized crossing	\$ 60,000	Yes	\$ 239,110
UW-5 (Option 2)	Swamp Pike—On-Road	New Hanover	Multi-use sidepath	8'-wide stone dust trail with 3'-wide equestrian track	120	366	\$ 268,666	Yes					1 signalized crossing	\$ 60,000	Yes	\$ 328,666
UW-6 (Option 1)	Swamp Pike to Reifsnyder Road	New Hanover	Multi-use trail	10'-wide asphalt trail	80	4,097	\$ 29,278	Yes								\$ 29,278
UW-6 (Option 2)	Swamp Pike to Reifsnyder Road	New Hanover	Multi-use trail	8'-wide stone dust trail with 3'-wide equestrian track	120	4,097	\$ 43,916	Yes								\$ 43,916
UW-7 (Option 1)	Reifsnyder Road	New Hanover	Multi-use sidepath	10'-wide asphalt trail	80	514	\$ 327,732	Yes					1 unsignalized crossing	\$ 10,000		\$ 39,278
UW-7 (Option 2)	Reifsnyder Road	New Hanover	Multi-use sidepath	8'-wide stone dust trail with 3'-wide equestrian track	120	514	\$ 491,598	Yes					1 unsignalized crossing	\$ 10,000		\$ 53,916
UW-8 (Option 1)	Reifsnyder Road to Upper Frederick Border	New Hanover	Multi-use trail	10'-wide asphalt trail	80	6,542	\$ 523,361	Yes		\$ 67,650			1 signalized crossing	\$ 60,000	Yes	\$ 387,732
UW-8 (Option 2)	Reifsnyder Road to Upper Frederick Border	New Hanover	Multi-use trail	8'-wide stone dust trail with 3'-wide equestrian track	120	6,542	\$ 785,041	Yes		\$ 67,650			1 signalized crossing	\$ 60,000	Yes	\$ 551,598
												ALTERNATIVE A	\$ 769,963			
												ALTERNATIVE B	\$ 583,701			
												ALTERNATIVE C	\$ 678,539			
												ALTERNATIVE D	\$ 477,174			
												ALTERNATIVE E	\$ 284,288			
												ALIGNMENT F (WITHOUT EQUESTRIAN AMENITIES)	\$ 1,398,496			
												ALIGNMENT F (WITH EQUESTRIAN AMENITIES)	\$ 1,763,007			
												ALIGNMENT G	\$ 671,855			
												SEGMENTS 1–8 (WITHOUT EQUESTRIAN AMENITIES)	\$ 1,719,639			
												SEGMENTS 1–8 (WITH EQUESTRIAN AMENITIES)	\$ 2,091,893			

Funding Sources for Implementation

The following information is derived from DVRPC's 2014 publication *Funding Trails: A Guide for Funding Multi-Use Trails in Southeastern Pennsylvania*.⁶ Sources of funding for trails can include federal, state, county, and local governments; private companies and foundations; and some other sources. The availability of funding, the timing of applications, and match and eligibility requirements vary among each of these programs on a year-to-year basis, so it is advisable to contact program staff and monitor the websites below for program announcements.

State and federal funding in southeastern Pennsylvania is typically accessible from three agencies:

DVRPC maintains the region's transportation improvement program and administers several grant programs for which trail planning, design, and construction are eligible:

Regional Trails Program provides targeted investment in the planning, design, and construction of multi-use trails across Greater Philadelphia, particularly to close gaps in the Circuit Trails network. For more information: www.dvrpc.org/Trails/RegionalTrailsProgram and www.circuittrails.org.

Transportation Alternatives Set-Aside Program sets aside federal transportation funds for community-based "non-traditional" projects that build infrastructure for cyclists and pedestrians. Planning, design, and construction of on-road and off-road facilities, including sidewalks, trails, cycle tracks, bike lanes, buffered bike lanes, and pedestrian and bicycle signals, are all eligible. For more information: www.dvrpc.org/tap.

Congestion Mitigation and Air Quality funds transportation-related projects that help reduce emissions from mobile sources and meet the National Clean Air Act Standards. Design and construction of bicycle and pedestrian facilities are eligible. For more information: www.dvrpc.org/cmaq.

Transportation and Community Development Initiative provides funding to undertake early-stage planning, analysis, or design initiatives for projects or programs that enhance smart development or revitalization and also improve the efficiency of the regional transportation system. For more information: www.dvrpc.org/tcdi.

Safe Routes to School funds the installation of sidewalks, crosswalks, bike lanes, multi-use paths, traffic-calming measures, and other means to ensure the ease and safety of children walking or biking to school. For more information: www.dvrpc.org/SafeRoutes.

The Pennsylvania Department of Conservation and Natural Resources (PA DCNR) provides grants and technical assistance for the development of local and regional trails, greenways, parks, natural areas, and open space, with priority given to statewide greenways and regionally significant trails. PA DCNR's grants are provided through the agency's Community Conservation Partnerships Program. Trail planning, design, and construction, as well as right-of-way acquisition, are eligible. For more information: www.dcnr.state.pa.us/brc/grants/index.aspx or contact PA DCNR Regional Advisors Drew Gilchrist: agilchrist@pa.gov and Jean Lynch: jealynch@pa.gov.

⁶ Delaware Valley Regional Planning Commission, *Funding Trails: A Guide to Funding Multi-Use Trails in Southeastern Pennsylvania* (Philadelphia: Delaware Valley Regional Planning Commission, 2014).

The Pennsylvania Department of Community and Economic Development (PA DCED) Commonwealth Financing Authority administers a portion of Pennsylvania's Marcellus Shale Legacy Funds supplied by the impact fee on unconventional gas drilling.

The Greenways, Trails, and Recreation Program funds trail planning, design, construction, repair, rehabilitation, and right-of-way acquisition. For more information: www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/greenways-trails-and-recreation-program-gtrp.

The Multimodal Transportation Fund may be used for the development, rehabilitation, and enhancement of transportation assets to existing communities, which includes crosswalk safety improvements and bicycle lanes and route designation. For more information: dced.pa.gov/programs/multimodal-transportation-fund/#.WBswO8IWJQ0.

PennDOT administers a separate Multimodal Transportation Fund that provides funding for similar types of projects to PA DCED's Multimodal Transportation Fund, as well as the construction of trails. For more information: www.penndot.gov/ProjectAndPrograms/MultimodalProgram/Pages/default.aspx#.Vfwm17HD-Uk.

Counties administer capital and open space funds. These funds may be available for trail planning, design, and construction. In-kind contributions of labor or equipment and assistance with right-of-way acquisition may also be available from county sources. Contact county staff for more information on what is available in your area. For more information, each county's planning or open space department is as follows:

Berks County Planning Department: <http://www.co.berks.pa.us/Dept/Planning/Pages/default.aspx>

Chester County Open Space Preservation: www.chesco.org/index.aspx?NID=179

Montgomery County Open Space Board: www.montcopa.org/index.aspx?NID=623

Foundations and private sources can also support trail design and construction.

The **William Penn Foundation** has allocated over \$23 million to a program administered by DVRPC to fund trail design and construction projects, planning and feasibility studies, and technical assistance. The foundation also provides direct grants to support trail planning and advocacy.

National Trail Advocacy Groups, such as the Rails to Trails Conservancy and People for Bikes, offer periodic grants.

Developers of residential, commercial, and industrial buildings can construct or pay for trails. Developers should be encouraged to view trails as an amenity.

Corporations can support trail-building efforts. Bristol Myers Squibb and the Educational Testing Service have played a key role in development of the Lawrence Hopewell Trail, a Circuit trail in New Jersey, for example.

Property owners can donate trail easements or property, or sell them at a discount to make projects feasible.

The Study Development Process

Precedent Plans and Reports

This study acknowledges and has incorporated a variety of regional and municipal documents relating to multi-modal transportation and trail networks:

- *Berks County Greenway, Parks, and Recreation Plan*, Berks County Planning Commission;
- *Douglass Township Open Space Plan*, Douglass Township (Montgomery County);
- *Parks and Open Space Plan* (draft), East Coventry Township;
- *Landscapes2*, Chester County Planning Commission;
- *Montco 2040: A Shared Vision*, Montgomery County Planning Commission;
- *Montgomery County Primary Trail Network*, Montgomery County Planning Commission ;
- *New Hanover Township Open Space Plan*, New Hanover Township;
- *Overall Parks and Open Space Plan*, Lower Pottsgrove Township;
- *Pottstown Bike and Ped Plan*, Borough of Pottstown;
- *Pottstown Borough Comprehensive Plan*, Borough of Pottstown;
- *Pottstown Metropolitan Regional Comprehensive Plan*, Montgomery County Planning Commission ;
- *Regional Parks, Recreation, and Open Space Plan*, Federation of Northern Chester County Communities;
- *Regional Trails: Douglass (Berks), Upper Pottsgrove, Pottstown, West Pottsgrove* (draft), Montgomery County Planning Commission;
- *South Loop Trail Improvements*, Schuylkill River Heritage Area;
- *Upper Pottsgrove Parks and Open Spaces*, Upper Pottsgrove Township; and
- *West Pottsgrove Township Open Space Plan Update*, West Pottsgrove Township.

Field Survey Schedule

On July 21, 2015, the Project Steering Committee, the Pottstown Area Regional Recreation Coordinator, and DVRPC staff met to tour planned trail alignments for the Coventry Trail, Pottsgrove Trail, Manatawny Trail, and West Trail in each participating municipality. The group inspected possible alignments in and around the Kenilworth Park and trailhead site, Coventry Trail, Memorial Park, Sunset Park, Hollenbach Park, Murgia Park, and the Goose Run Recreation Area, and toured the rest of the region by car. The observations from this tour informed the study and its proposed alignments. See **Appendix A** for the site visit schedule.

Project Steering Committee Meetings

The Project Steering Committee met three times in 2015 and 2016 to evaluate the trail alignments and suggest changes. On October 30, 2015, each subcommittee, representing each of the four trails, met to review the concept alternatives in hour-long meetings. The Pottstown Area Regional Recreation Coordinator and DVRPC staff presented preliminary trail alignments.

On January 27, 2016, the Pottstown Area Regional Recreation Coordinator presented recommended trail alignments and classifications (multi-use trail, bicycle infrastructure, or pedestrian path) to the subcommittees representing the Coventry and Pottstown trails. On February 24, 2016, he presented the same information on

the West and Manatawny trails to those subcommittees. The subcommittees offered final comments on the recommended alignments prior to the first public meeting.

Near the end of the study drafting process, the Project Steering Committee met again on February 22, 2017, to discuss the revised feasibility study and maps. Comments from that meeting were incorporated into the feasibility study draft.

Public Meetings

The Pottstown Area Regional Recreation Coordinator and DVRPC staff presented a draft version of the feasibility study to members of the public on April 5, 2016. Members of the Project Steering Committee were in attendance, as well as residents of the region.

Some of the attendees' major concerns included materials used on the trails; the personality, identity, and cohesive experience of the trail network as a whole; equestrian uses; challenges in routing trails through preserved farms; communications with trail-adjacent residents; and connectivity with commercial areas.

Following the meeting, at the request of one of the attendees, the project team produced a base map to be posted at the "Important Destinations" included in the plan for visitors to view and comment on. The Pottstown Area Regional Recreation Coordinator posted the proposed alignments and PowerPoint presentation from the public meeting for a 30-day public comment period.

The Pottstown Area Regional Recreation Coordinator and DVRPC staff presented a final version of the feasibility study to members of the public on August 2, 2017. The Pottstown Area Regional Recreation Coordinator posted the PowerPoint presentation on several regional and local websites, and the project team promoted an additional 30-day public comment period. Comments were incorporated into a subsequent draft of the study.

The meeting minutes and the attendance sheets from the 2016 and 2017 public meetings are in **Appendix B**.



Appendix A

Appendix A: Site Visit Schedule

July 21, 2015

9:00 Meet at 140 College Drive, Pottstown

9:15–10:15 Coventry Trail: *North Coventry Township*

Feasibility Section: Meet at Diamond Bright Carwash (1410 E. Schuylkill Road) and inspect recently acquired trailhead site. Drive to Kenilworth Park and walk from Kenilworth Park to 899 Miller Road.

Planning Section: Auto tour alignments from 899 Miller Road to 879 Cedarville Road.

10:30–11:30 Pottsgrove Trail: *Upper Pottsgrove, Lower Pottsgrove, Pottstown Borough*

Feasibility Section: Meet at corner of Evans and Mervine Street, Pottstown. Auto tour to Pottsgrove High School and Sunset Park.

Planning Sections: Pottsgrove High School to Gerald Richards Park. Auto tour from Sunset Park to Hollenbach Park.

11:30–12:00 Manatawny and West Trail Primary Destinations: *Pottstown, West Pottsgrove*

Begin auto tour at entrance to Circle of Progress, West Pottsgrove Pool, Pottstown Municipal Airport, Oldtimers Field, businesses along Shoemaker Road and Pottstown Recreation District.

12:00–1:00 Lunch

1:00–2:15 Manatawny Trail: *Pottstown, West Pottsgrove*

Feasibility Section: Meet at Spray Park in Memorial Park, Pottstown. Walk to Route 100 bridge. Auto tour along Manatawny Street, Glasgow Street to Murgia Park.

Planning Sections: Auto tour to Grosstown Road.

2:15–4:00 West Trail: *West Pottsgrove, Upper Pottsgrove*

Planning Section: Begin auto tour at Murgia Park and travel to Upland Square, Levengood Road, and Goose Run Recreation Area.

Feasibility Section: Auto tour of alignments along Grosstown Road, Quarry Road and Ben Franklin Highway connecting to the Schuylkill River Trail at Squirrel Hollow Road.



Appendix B

Appendix B: Public Meeting Minutes

Meeting 1: April 5, 2016

Attendee Comments

- What type of materials will be used on the trails?
 - *Project team response:* Trails will be asphalt, earthen, or stone dust, depending on use of the trail, topography that the trail goes through, and cost.
- It's important for the trails to have a personality, distinct identity, and cohesive experience, especially since some segments aren't family friendly. Some segments will be limited to A and B [more advanced-level] cyclists. Continuity would be ideal. Hiking trails appear to be open to anyone, but on-road facilities are often for more intermediate use. We need to know who the user is for each segment.
- Have you considered equestrian users, especially for the Coventry Trail?
 - *Project team response:* We haven't considered it yet but we are open to considering equestrian use in some areas. It is not permitted on some sections of the Schuylkill River Trail. Horses require greater trail width than cyclists or pedestrians, and only some places could accommodate that width. Greater width would also bring a cost increase in construction. We could connect to the equestrian-friendly Horseshoe Trail via New Hanover, Douglass (Montgomery County), and Upper Pottsgrove.
- In Chester County, you have to be careful about routing trails through preserved farms, as the easements may restrict that construction.
 - *Attendee response:* Municipalities should incorporate interest in trails into planning documents, zoning ordinances, and subdivision and land development ordinances to facilitate creation of trails.
 - *Project team response:* It's a long-term hope that efforts by lobbyists to accommodate trails on the edges of farmland will come to fruition. The trail segments running through farmland would be phased later in the future to give others time to advocate. In the short term, we can ask municipalities to endorse the trails plan and incorporate it into their other planning products.
- The county planning commissions, municipalities, and counties should know about any changes to planning materials. Developers want to know about this plan and there could be more outreach to them.
 - *Project team response:* We are working with the counties and municipalities. They are aware of the trails feasibility study. If a developer agrees to donate a trail or easement for a trail, we can use the value of their donation as a match for a grant.
- Would it be prudent to make sure that those close to the trail are made aware of the plans?
 - *Project team response:* Yes, but there is limited time that we can dedicate to outreach. We have put out press releases and notified municipalities. We are trying to reach out but probably can't do that on an individual basis.
 - *Attendee response:* For past projects, we have contacted property owners adjacent to trails but not farther away.
 - *Attendee response:* The public are invited to municipal meetings to discuss the plans.
- Is there a way to communicate with the public about the trails plan at the points of interest marked on the maps that were presented tonight? It's onerous for most people to go to public meetings.

- *Project team response:* Yes, we can put a map together soon and distribute it to municipalities to post on their website and elsewhere.
- What are the options for getting the word out?
 - *Attendee response:* Try to get local information disseminated more through different local groups. If someone cares, they'll learn more about the issue and disseminate it more. This is a universal issue, not unique to trails.
- Alignments near commercial areas should be connected with commercial areas.

On the record from Kenneth L. Pick, Executive Director, Redevelopment Authority of Berks County:

“Sorry I was unable to attend the public meeting on April 5, 2016. Please make this email part of the official record. The Redevelopment Authority is not opposed to the trail study as long as the study does not include any trail on the Authority’s railroad property. As I expressed previously, freight development is the next priority for the project and we do not want anything to hinder the ability to obtain new freight customers and develop facilities for freight traffic. No trail will be permitted on the Authority’s railroad property.”

Meeting 2: August 2, 2017

Attendee Comments

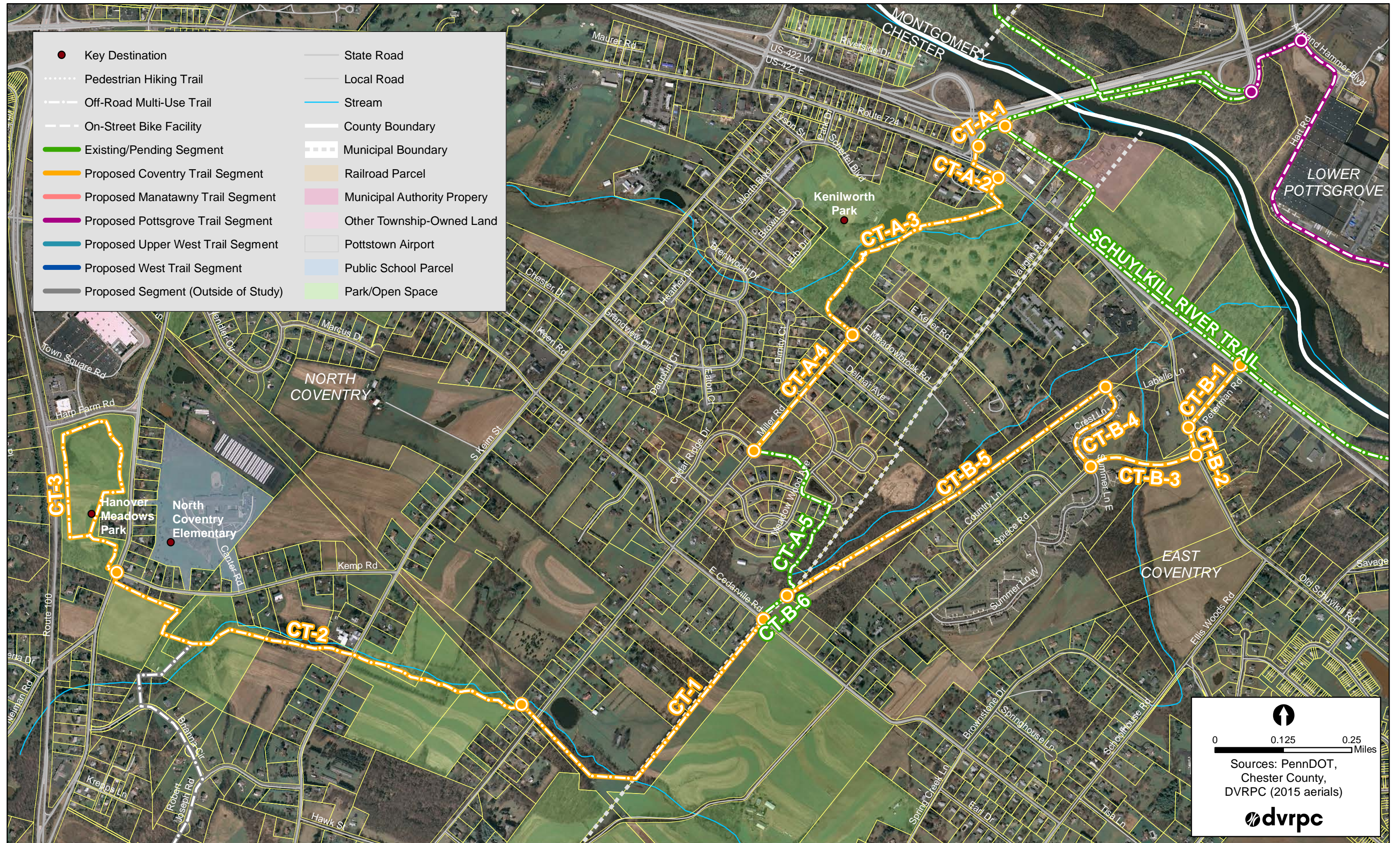
- In the Upper West Trail, Jays Lane (UW-G-7) is a private road, not a public right-of-way, and the segment UW-G-8 conflicts with a pending development project. These two segments should be revisited. However, a nearby development (Kingston Hill Development-Zavitsanos Development) already has a trail that could be used in an alternative alignment. Also, New Hanover Township is in the process of holding community conversations on the PA 663/Swamp Pike area in conjunction with the New Hanover Town Center development, and trails could be included in that discussion.
- The study should focus on pedestrian access between the Pottstown Shopping Center shopping area and nearby neighborhoods. Neighbors try to cross to gain access to Pottstown Shopping Center. A man was recently killed in a car crash on PA 100 when he tried to cross the highway to get to work.
 - *Project team response:* Prompted by this crash, Pottstown Borough is developing a separate study to improve access across PA 100. The Greater Pottstown Trails feasibility study seeks to address similar accessibility concerns, but its primary focus has always been to create an unbroken set of trails and on-road facilities in the region for cyclists of moderate ability. The study addresses pedestrian access in a more limited way (in the context of this main set of bicycle alignments) and recommends creating a sidewalk inventory plan that examines sidewalk access throughout the Greater Pottstown region.
 - *Attendee response:* The study has a particular focus because funding was available for this topic (regional trails and cycling). The funding source and goals of the funder can limit the topic of a single study, but that doesn’t mean other topics aren’t important.
- The proposed alignment between the Manatawny Trail and Pottstown Shopping Center (MT-Spur 1) is too indirect, and people will continue to want to take the shortest route and cross PA 100.
 - *Project team response:* We can’t stop people from taking the shortest route, but we can create a formal, protected alignment. Though it’s longer, we hope that its safety features will encourage more people to use it.
- An attendee had questions about the alignment of the Manatawny Trail in relation to the Manatawny Creek.

- *Project team response:* The Manatawny Trail alignment stays on the west side of the Manatawny Creek within rail property until it is within Murgia Park. Once within Murgia Park, the Manatawny Trail crosses to the north side of Manatawny Creek.
- A covered walkway over PA 100 or an underpass is needed.
 - *Project team response:* The Manatawny Trail uses an underpass below PA 100 along the highway abutments. We can look into a covered walkway, though that option has its own constraints in the form of higher costs and potential restrictions from PennDOT, who owns the highway.
- Question about these “primary” trails fitting in with other trails considered “secondary” or “tertiary” in the region.
- Concern that the costs listed in the matrix are not the full costs to property owners adjacent to trails: if the property owner seeks approval for a development proposal, municipalities may require the construction of trails on these properties as part of the approval.
- Several property owners close or adjacent to trail alignments proposed in the study attended and shared that they had not been notified that a trail was planned near them and had only learned about the project in the past week. One attendee suggested that someone notify property owners near a proposed trail by phone, as Pottstown Borough currently does when notifying neighbors about hydrant flushing.
- Concerns about trail access points and potential growth in the number of people parking along streets to get access to the trails. One attendee lives near a trail and has had problems with trespassers.
- One attendee noted that he has lived in the region for 20 years, has seen the trails grown and municipalities purchasing land for trails, and thinks it’s great.
- What is the status of the trail at Parker Ford on the Schuylkill River Trail?
 - *Project team response:* They are waiting for approvals before it is constructed. Two rights-of-way have not been acquired.

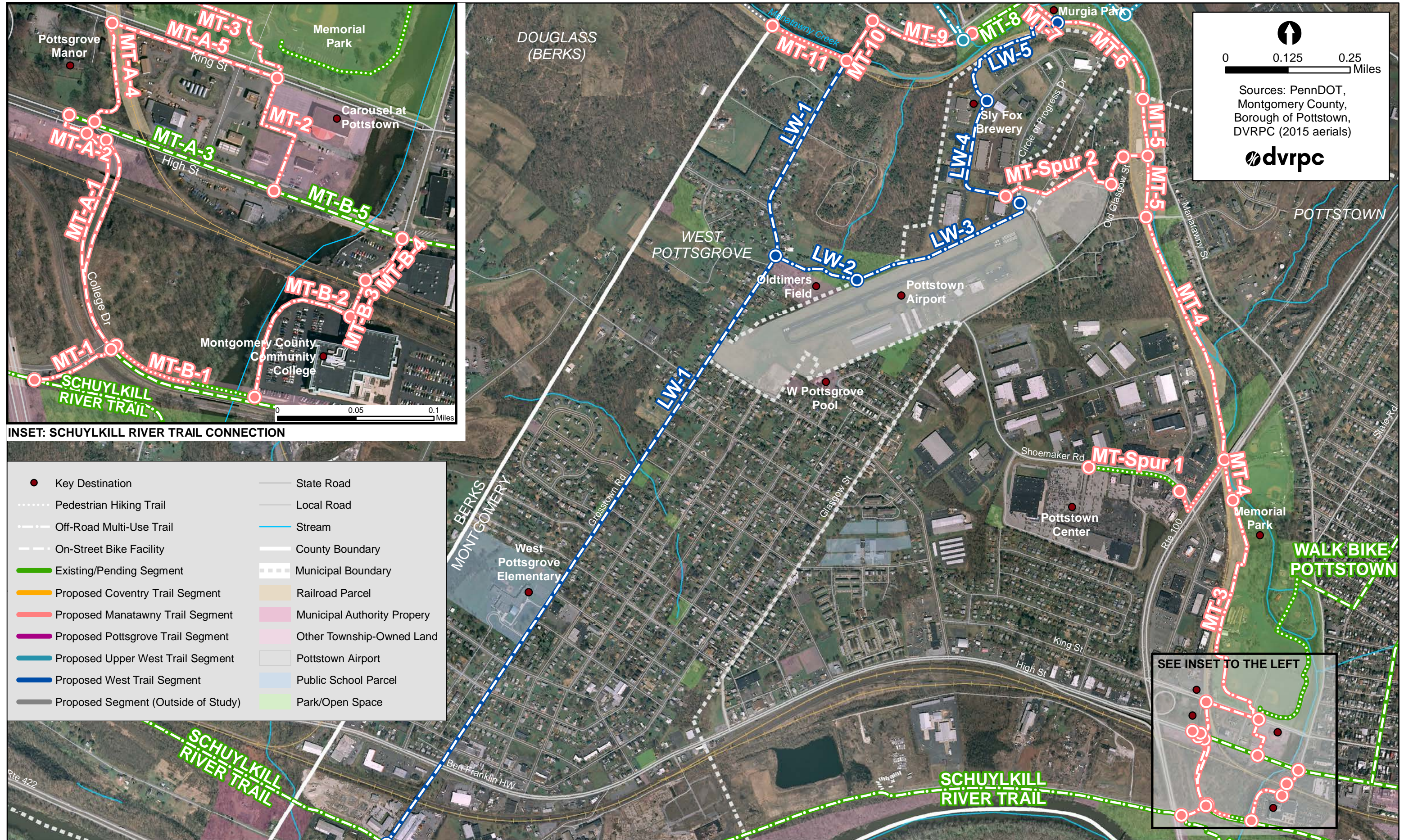


Appendix C

Appendix C-1: Coventry Trail



Appendix C-2: Lower West and Manatawny Trails



A Circle of Progress

The Greater Pottstown Trails Feasibility Study

Publication Number: 17037

Date Published: March 2018

Geographic Area Covered:

Douglass Township in Berks County, Pennsylvania; East Coventry Township and North Coventry Township in Chester County, Pennsylvania; and Douglass Township, Lower Pottsgrove Township, New Hanover Township, Pottstown Borough, Upper Pottsgrove Township, and West Pottsgrove Township in Montgomery County, Pennsylvania.

Key Words:

Berks County, Bicycle Facilities, Chester County, Circuit, Douglass Township, East Coventry Township, Equestrian, Land Preservation, Lower Pottsgrove Township, Montgomery County, Multi-Use Trails, New Hanover Township, North Coventry Township, Open Space, Parks, Pedestrian Facilities, Pottstown Borough, Recreation, Trails, Upper Pottsgrove Township, West Pottsgrove Township

Abstract:

This feasibility study examines the opportunities and challenges of constructing over 40 miles of trails and on-road bicycle facilities that make up the Greater Pottstown Trails network. This network includes four trails that are shared between nine municipalities in Chester County, Montgomery County, and Berks County: the Coventry Trail, the Pottsgrove Trail, the Manatawny Trail, and the West Trail, which is split into the Lower West Trail and the Upper West Trail. The primary intent of this study is to create and analyze a network of bicycle infrastructure that adults of medium-to-high cycling skill can comfortably use. This network will connect cyclists within the Greater Pottstown region and to other trail networks in the region. This study also pursues the creation of bicycle and multi-use trail facilities that enable people of all abilities to travel on bicycle, on foot, and in some cases on horse.

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