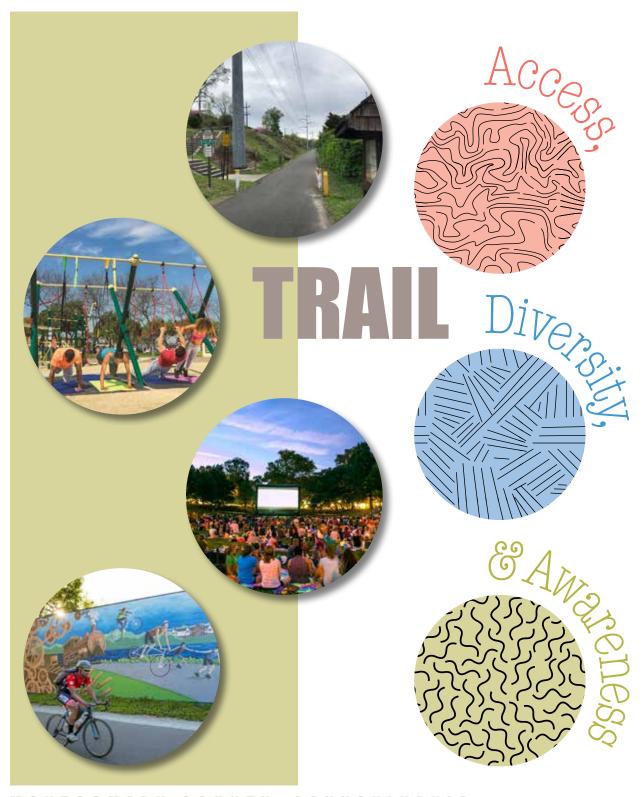
Montgomery County



MONTGOMERY COUNTY. PENNSYLVANIA

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Montgomery County

Trail Access,
Diversity,
& Awareness
Plan



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Executive Summary

How To Use This Document

Although this plan focuses on trails in three specific locations in Montgomery County, it includes best practices that can be applied to any trail network, including how to analyze a trail, tools to improve access to trail networks, and how to propose solutions that get the attention of community residents and leaders. Each section of this document provides information that you can apply to the trails in your community.

OVERVIEW

Montgomery County's trail network is an amazing resource that is open to everyone. This section provides an overview of why increasing trail access, diversity, and awareness is important.

While reading this section, think about your community- both the people who live there and your local trail network. Do some research on your community using the resources described, including the Indicators of Potential Disadvantage tool and plans like Walk and Bike Montco. Think about how you use the local trail network. Do you use the trail for transportation or recreation? Do you visit the trail with friends and family or by yourself? What about your neighbors? What would encourage you to use the trail more?

EXISTING CONDITIONS

This section provides detailed descriptions of the Schuylkill River Trail in Norristown and Pottstown, as well as the portion of the Pennypack Trail located in Montgomery County. Analyzing how a trail looks and functions is the first step to determining which factors may prevent people from using a trail.

Take a trip to your favorite trail, but pretend you have never been there before. Pay attention to the route you take to get to the trail. Is the trailhead hard to find? Once you find the trailhead, do you know which way to go to reach your destination? Try writing a description of your favorite trail, paying particular attention to things that may be confusing to new trail users.

TOOLS TO INCREASE ACCESS, DIVERSITY, AND AWARENESS

This section takes lessons learned from the existing conditions analysis and feedback from the general public to make recommendations on how to increase trail access, diversity, and awareness by implementing improvements in six areas: signage and connectivity, gateway and trailhead improvements, corridor improvements, public art, programming and events, and marketing and communications.

Think about what you observed while using your favorite trail. Which improvements would make your trail more user friendly? Do you think improvements in one category would be more impactful than another? Ask your friends, family, and neighbors which improvements make the most sense to them.

CONCEPT DESIGNS FOR SRT NORRISTOWN STUDY AREA

This section applies the tools introduced in the previous section to the part of the Schuylkill River Trail that runs through Norristown. Concept designs show where to

implement corridor wide improvements; where to install signage to promote the connectivity between the trail and surrounding neighborhood; which trailheads and gateways need improvement to attract new users, and how to activate the entire corridor by making space for public art, programming, and events.

This section serves as a guide for community leaders in Norristown to seek funding for improvements, but it also provides a case study to anyone interested in improving the access, diversity, and awareness of trails in their community. Although this plan presents concepts that were developed by design professionals, anyone can pull up an aerial image of the trail in their community and start sketching ideas.

CONCLUSION

The conclusion of this document is a call to action that acknowledges the need for cooperation between the county and stakeholders, including municipal governments and organizations, to successfully engage a diverse public.

Acronyms and Terms

AGENCIES AND PARTNERS

DCED – Pennsylvania Department of Community and Economic Development

DVRPC – Delaware Valley Regional Planning Commission

MCIU - Montgomery County Intermediate Unit

MCCC - Montgomery County Community College

MCPC – Montgomery County Planning Commission

Montco - Montgomery County

Norristown – Municipality of Norristown

PARRC – Pottstown Area Regional Recreation Committee

PECO – Philadelphia Electric Company

PennDOT – Pennsylvania Department of Transportation

Pottstown - Borough of Pottstown

Parks – Montgomery County Parks, Trails and Historic Sites

SRG - Schuylkill River Greenways National Heritage Area

SEPTA – Southeastern Pennsylvania Transportation Authority

OTHER TERMS

- ACS American Community Survey
- GIS Geographic Information Systems
- IPD Indicators of Potential Disadvantage
- LTS Level of Traffic Stress
- MUTCD Manual on Uniform Traffic Control Devices
- SCORP Statewide Comprehensive Outdoor Recreation Plan (Pennsylvania)
- SRT Schuylkill River Trail

Overview

Background

Montgomery County is a county on the move in many ways. It's a growing county, with an additional estimated 29,000 residents since the last decennial census according to the American Community Survey. It's an ethnically diverse place, with growing Hispanic and Asian populations, and an increasing foreign-born population. It's also a population that's physically moving: the county's 830,000 residents travel daily for school, work, shopping, and entertainment. The county's comprehensive plan, *Montco 2040: A Shared Vision*, acknowledges this diverse population and establishes housing and transportation goals that foster inclusiveness and access for all residents.

Montgomery County has an extensive and heavily-used trail system comprised of both county and local trails. The trails within the network that are owned and maintained by Montgomery County are designed to a multi-use path standard, with a width of at least eight feet—ideally 12—a paved asphalt or cinder surface, and a maximum slope of five percent. The trails provide for recreational use, as well as a transportation alternative. The trails' popularity is evident through user counts conducted by the Delaware Valley Regional Planning Commission (DVRPC) and the Schuylkill River Greenways National Heritage Area (SRG). While the counts indicate heavy use throughout the year, Montgomery County wants to ensure that that its trail network is equitable, in that it is accessible to all potential users, and that all Montgomery County residents, as well as visitors, are aware of the trail amenities available to them, and feel comfortable using them. This plan aims to address several perceived issues:

- 1. The demographics of the county's trail users do not match that of the communities they pass through. Additionally, several communities located within the Pennypack and Schuylkill River Trail (SRT) corridors have been identified as potentially disadvantaged and equity-deficient, as compared to other communities. The SRT runs through the county's most urbanized areas in Pottstown and Norristown, each of which has significant minority populations and concentrations of poverty, among other indicators. The Pennypack Trail, one the county's newest trails, runs through and near areas with growing Asian and Eastern European populations.
- 2. The communities adjacent to the trail network are not always well integrated with the trail system. One major barrier to trail access is a lack of wayfinding signage to trail access points. In addition to signage, it is important to provide safe and accessible connections that permit all potential users to access the trail from within the community.
- 3. Montgomery County's trails were originally designed for recreational use and did not specifically consider use by a wide range of users. The widespread adoption of e-bikes, and the desire to accommodate the needs of an aging population, people with disabilities, and non-English speaking populations all present unique challenges to designing an inclusive trail system.

This document focuses on three study areas as shown in detail in Figure 1.

- Schuylkill River Trail Norristown (SRT Norristown Study Area) Spring Mill Road to Port Indian Road
- Schuylkill River Trail Pottstown (SRT Pottstown Study Area) Borough of Pottstown
- 3. Pennypack Trail Study Area from Lorimer Park in Abington Township to Byberry Road, Upper Moreland Township

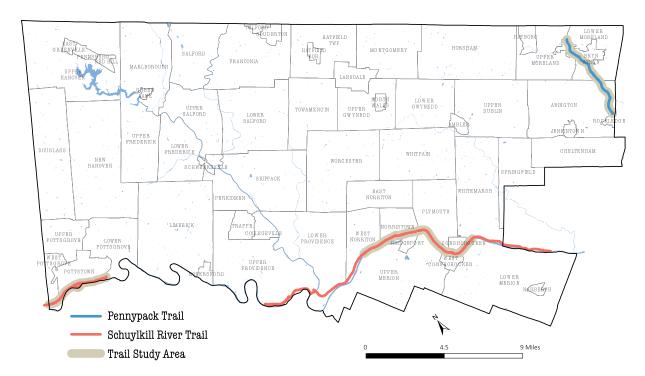


Figure 1 · · · Plan Study Areas

DVRPC Indicators of Potential Disadvantage

Each of the three trail corridors run through uniquely diverse communities. DVRPC has prepared an Equity Analysis for the Greater Philadelphia region as a resource for DVRPC staff, partner agencies, and residents of the nine-county Greater Philadelphia region called the Indicators of Potential Disadvantage (IPD).¹

The IPD analysis identifies populations of interest under Title VI of the Civil Rights Act and the Executive Order on Environmental Justice (#12898), using U.S. Census American Community Survey (ACS) 2013-2017 five-year estimates data. The IPD uses Geographic Information Systems (GIS) to map the populations of interest for every census tract in the region. Each of the following population groups represents an "indicator" in the analysis:

- Youth
- Older Adults
- Female
- Racial Minority
- Ethnic Minority

- Foreign-Born
- Limited English Proficiency
- Disabled
- Low-Income

The IPD score for each census tract is determined by standard deviations relative to an indicator's regional average. This score classifies the concentration of the population groups of interest on a scale from "well below average" to "well above average" in every census tract in the region. A map showing the score for each of the three study areas is shown in the below figures. The IPD was used to understand the characteristics of the population living adjacent to each of the three study areas and help direct public the outreach process.

¹ https://www.dvrpc.org/webmaps/IPD/

An analysis of the demographic information in the IPD showed the following broad trends near each of the three trail study areas:

- SRT Norristown Study Area American Community Survey (ACS) estimates indicate that Norristown's population is 42% white, 36% black, and 3% Asian, with 6% identifying as being two or more races, and 28% identifying as being ethnically Hispanic. The IPD shows that, as compared to the Greater Philadelphia Region as a whole, census tracts adjacent to the trail corridor have a "well above average" percentage of Hispanic residents (over 35%), residents with Limited English Proficiency (over 19%), and low-income residents (over 59%).
- SRT Pottstown Study Area According to ACS data, Pottstown's population is 69% white, 21% black, 0.8% Asian, with 7% identifying as being two or more races, and 8% identifying as being ethnically Hispanic. The IPD shows that along the trail corridor, the percentage of residents with one or more physical and or/mental disabilities (over 19%) is above average or well above average, compared to the Greater Philadelphia Region as a whole. The percent of low-income households (over 45%) is also above the average for the region.
- Pennypack Trail Study Area The Pennypack Trail passes through multiple communities; however, some unique trends emerge when looking at the IPD data. These trends include: three census tracts showing well above average percentages of older adults (over 32%) living along the trail corridor, and above average percentages of residents born outside of the United States (over 19%) in two census tracts, compared to the region.

Figures 2, 3, and 4 show concentrations of these populations (based on place of residence), at the census tract level, in relation to the existing trails for the three study areas.

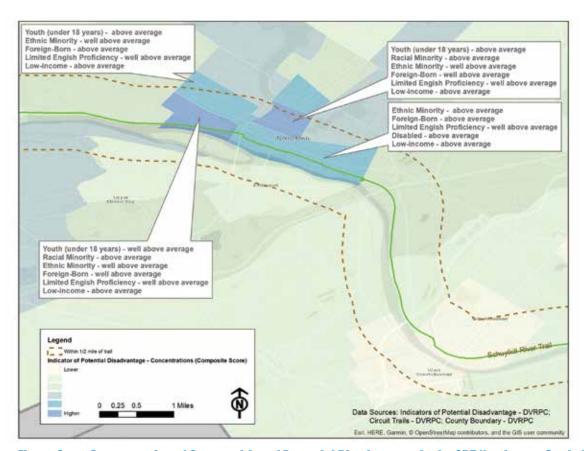


Figure $2 \cdot \cdot \cdot$ Concentration of Communities of Potential Disadvantage in the SRT Norristown Study Area

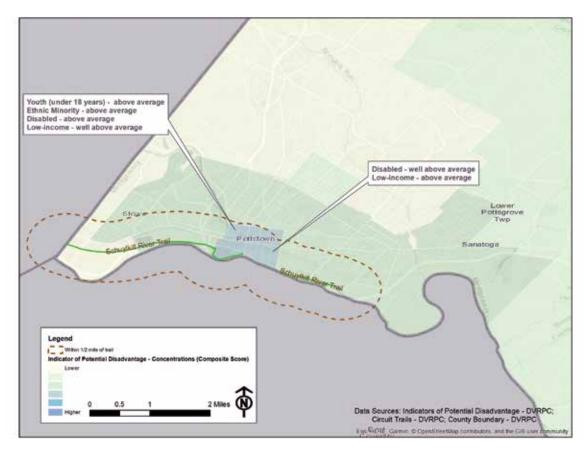


Figure 3 · · · Concentration of Communities of Potential Disadvantage in the SRT Pottstown Study Area

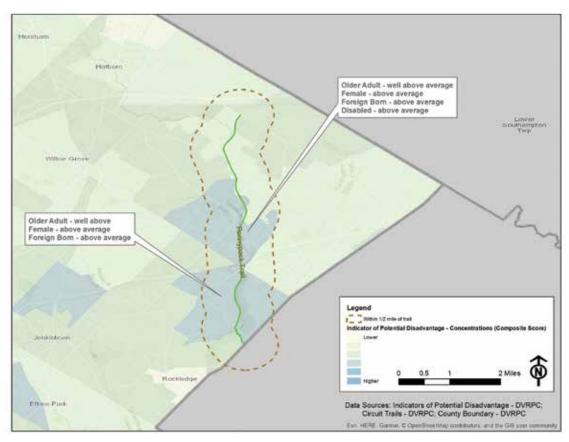


Figure 4 · · · Concentration of Communities of Potential Disadvantage Along the Pennypack Trail Study Area

These maps highlight the distribution of the populations with the greatest cumulative potential disadvantage and their approximate distance from the trails. Further, the maps inform the specific characteristics of those potentially disadvantaged populations, which was critical to developing the tailored public engagement approach, described on pages 8-10.

Goals and Objectives

The goals of this study are threefold:

- 1. To increase the diversity of trail users;
- 2. To increase the awareness, visibility, and ease of access to the county trail system; and,
- 3. To modernize trail designs to take into account the changing, diverse needs of the communities they pass through.

In order to achieve these goals, the plan seeks to address the following:

- Access What prevents potential users from accessing and using trails?
- Diversity What prevents specific sub-populations from using trails?
- Awareness What opportunities are there to increase awareness of the trails and trail access?

As noted in the 2014-2019 Pennsylvania State Comprehensive Outdoor Recreation Plan (SCORP), there is a noticeable lack of diversity in outdoor recreation participants. The plan survey results reflect some of the lack of diversity and/or bias in surveying, with 92% of statewide participants self-identifying as white.

Target sub-populations are generally located in the communities adjacent to the trail, according to an analysis of the IPD map. These communities also represent areas where demand or potential demand for walking/bicycling/trail use is likely to be greatest. The Existing Conditions section (pages 13-42) uses feedback gained from site visits and conversations with stakeholders and the general public to identify the barriers that prevent the identified target populations from using the trails. Finally, recommendations identify strategies to overcome those challenges and leverage opportunities for all trails within the county's network, not only those considered as part of this study.



Local youth using the Schuylkill River Trail

Summary of Existing Planning Documents

COUNTYWIDE PLANS

Montco 2040: A Shared Vision – The Comprehensive Plan for Montgomery County, 2015 – The plan provides countywide implementation themes and goals. The goals that most relate to this study are:

- Expand and connect county trails, local trails, greenways, natural areas and parks
- Improve transportation quality and expand options for county residents and workers
- Provide more opportunities for residents to exercise and have healthy lifestyles

Bike Montco – The Bicycle Plan for Montgomery County, 2018 – The plan provides an existing inventory and analysis of the bicycle infrastructure network. Proposed priority bike routes that connect to the Pennypack Trail include Byberry Road and Terwood Road. Proposed trail linkages are included for both the Norristown and Pottstown sections of the SRT.

Walk Montco – Montgomery County Walkability Study, 2016 – The plan provides existing inventory and analysis of the pedestrian infrastructure network. The study lists health benefits of walking and provides recommendations for connections to popular destinations including schools, transit stops, commercial corridors, and downtown areas.

SRT NORRISTOWN STUDY AREA PLANS

Norristown Comprehensive Plan, 2009 – The comprehensive plan sets forth the vision for the community as adopted by the Municipal Council and the regulatory tools used to implement that vision. Goals that relate to this study include identifying opportunities for new linkages among existing parks, trails, and recreational areas as redevelopment occurs.

Riverfront Park Master Plan, 2011 – This plan provides a park design concept for the redevelopment of Riverfront Park in Norristown. The design provides increased river access, improves connection to the SRT, Crawford Park and the surrounding neighborhood, provides facilities for passive recreation, and incorporates best practices for stormwater management. Improvements to the Haws Avenue trailhead, river overlook area adjacent to the SRT and walking trails within the park are some of the elements included in the concept design.

Stony Creek/Saw Mill Run Greenway Plan, 2016 – This plan assesses opportunities for creating continuous greenway corridors along Stony Creek and Saw Mill Run in Norristown and in portions of the adjacent municipalities of East Norriton and West Norriton Townships. The plan also assesses the feasibility of implementing a public trail within each municipality's greenway corridor.

PENNYPACK TRAIL STUDY AREA PLANS

Township of Abington Master Bicycle Plan, 2015 – The plan provides an existing inventory and analysis of the bicycle network and provides recommendations for proposed network improvements and connections. The study proposes routes that connect to the Pennypack Trail along an open space area south of Welsh Road, Old Huntingdon Pike, open space behind Redeemer Sisters' Chapel, and near the intersection of Mankin Avenue and Robbins Avenue. The proposed recommendations and routes that connect to the Pennypack Trail were analyzed to determine whether

they fit the goals of this study and could be incorporated in the recommendations.

Walk Park Train Abington, 2017 – The goal of this plan is to maximize the capacity, quality, and efficiency of Abington's transportation infrastructure. The plan includes an updated proposed sidewalk network.

SRT POTTSTOWN STUDY AREA PLANS

The Greater Pottstown Trails Feasibility Study, 2018 – This feasibility study examines the opportunities and challenges of construction of 40 miles of trails and on-road bicycle facilities in the Greater Pottstown region. The sections that connect into the SRT include the Lower West Trail, Manatawny Trail, and Pottsgrove Trail. The proposed recommendations and routes that connect to the Schuylkill River Trail were analyzed to determine whether they fit the goals of this study and could be incorporated in the recommendations.

Pottstown Borough Comprehensive Plan, 2014 – The plan provides an overall vision for the community along with tools to implement that vision. Priority highlights in this report that relate to this study include the completion of the SRT, sidewalk and bicycle network improvements, and the "Safe Routes to School" campaign.

Pottstown Sustainability Plan, 2018 – The plan centers around the principles of connected communities/equity, education, and infrastructure as key elements of sustainability. A stated goal is to "enhance the overall well-being of Pottstown's residents by providing opportunities that promote healthy choices in regards to wellness." Specific action items proposed in this report that are relative to this study include: connecting the borough through a safe, accessible, and green pedestrian network; creating a more bike-friendly Pottstown; conducting an educational campaign to promote bicyclist and pedestrian safety; and promoting events that support healthy activities to community members of all ages.

Literature Review

As part of the planning process, a review of existing plans, policies, and initiatives was completed to support plan development. The goal of this literature review was to identify barriers to trail use that are unique to minority populations so that future outreach and trail improvements account for trail diversity, equity, and access. These groups include low-income, racial minority, ethnic minority, youth, and senior populations. The literature review attempts to address the following questions:

What are potential causes of lack of diversity on the Schuylkill River Trail and Pennypack Trail, and what are potential solutions?

What are the disparities in how people from different racial, age, and socio-economic backgrounds use parks/ trails/open space?

What has been successful in overcoming the obstacles to park/trail use in other places?

What are the health benefits of trail use for the target audiences?

What are the transportation benefits of trail use for commuters?

In summary, the review found that the health benefits of walking and biking are well established, and the literature shows that trails can provide a low-stress place for those activities. Although utilizing a trail for transportation or recreation will lead to significant health benefits, people must be comfortable using the trail in order to

realize those benefits. Increasing the usage of the trail, especially among diverse user groups, will require a strategic approach to community engagement that addresses access limitations, communication challenges, fear of discrimination, and a lack of awareness. Agencies need to build genuine partnerships with diverse groups within the community to understand the specific barriers limiting trail uses, and to develop collaborative solutions. When trail users and local agencies work together to implement these solutions, the relationship between the two becomes even stronger. As more individuals have positive experiences using the trail, they will share their experiences with family, friends, and neighbors, which will increase awareness and decrease fear, resulting in a resource that is truly open for all to enjoy.

The Literature Review is included in its entirety as an appendix to this plan.

Public Engagement Process

Existing data, plans, and mapping provide a solid foundation for outlining plan goals and objectives. However, the primary recommendations found within this plan come from talking with the people who live in Norristown, Pottstown, and along the Pennypack Trail. The public engagement process was designed to facilitate conversations with residents to determine whether they know about the local trail system, and to identify what prevents them from using the trail system and what would make them more aware of the trail system, and thereby more likely to use it. The reasons uncovered extend well beyond transportation infrastructure and engineering. The public engagement process is described below.

STAKEHOLDER INTERVIEWS

The first step of the outreach process was to identify key stakeholders in Norristown, Pottstown, and within the vicinity of the Pennypack Trail to interview. Interviewees included leaders in local government and the non-profit sector, selected based on guidance from the county and informed by its relationship with the local population and the county's commitment to the project goals. The goal of the stakeholder interviews was not only to confirm and refine the information gleaned from existing plans and mapping, but also to begin to develop an understanding of the critical issues facing those who live along the trail corridors. A minimum of three interviews were held for each study area. Overall, 11 interviews were held—four for SRT Pottstown, four for SRT Norristown and three for the Pennypack study area. Common themes began to emerge from the feedback received over the course of these stakeholder interviews. More than 70 recommendations were consolidated and grouped into six broad categories:

- Signage and Connectivity
- Gateway/Trailhead Improvements
- Corridor Improvements
- Public Art
- Programming and Events
- Marketing and Communications

Those recommendations were used to develop materials for outreach to the general public. Feedback from the interviews was also used to select the appropriate community events to conduct outreach to the general public.

PUBLIC OUTREACH PHASE 1

One public outreach event was held for each of the three trail study areas. Based on feedback received in the stakeholder interviews, public outreach was conducted at existing, well-attended community events, instead of holding project-specific public workshops. This approach was selected because a public workshop to talk about the trail would likely only attract existing trail users. The events selected were National Night Out in Norristown on Tuesday, August 8 and Carousel of Flavor in Pottstown on Sunday, October 20. Because the Pennypack Trail extends through multiple communities, the project team elected to conduct outreach on the Pennypack Trail adjacent to Lorimer Park on Sunday, September 29, based on feedback provided by the Pennypack Trail stakeholders that the park is a popular destination for minority families picnicking on the weekends.

Public outreach events featured the following stations:

- Station 1: A map showing the trail segment and surrounding community. The
 goal of this station was to orient people with the map, introduce them to the
 trail and points of access to the trail, and discuss the plan.
- Station 2: An interactive board asking participants "Do you use the trail?" in both English and Spanish. If participants answered "Yes", they were asked to post what they like to do on the trail. If they answered "No", they were asked to identify barriers that prevent them from using the trail.
- Station 3: A visioning board with a visual preference survey. The board included eight photographs depicting different types of programming and activity options. Participants were asked "What would encourage you to use the trail?" in both English and Spanish, and then were able to pick their top three options. Options included places to rest, places to gather and socialize, bike share and amenities, places for fitness and play, races, signage, public art, and outdoor events.

Results from each of the public outreach processes are included in the Existing Conditions section of this plan, starting on page 13.

FOCUS GROUPS

Feedback received from the interviews and public outreach events, findings from the literature review, and information gathered during the evaluation of existing conditions were used to develop preliminary recommendations. These recommendations were the basis for discussion during three focus group sessions (one in each study area) that were held with key stakeholders to further develop and refine the contents of the plan. Key stakeholders included interviewees, staff from municipal and county park departments, and representatives from local nonprofit organizations. These sessions were oriented toward developing plan implementation actions. The discussions at these focus group sessions provided the feedback necessary to refine draft plan materials that were presented at the second public outreach series.

A brief presentation was followed by small group breakout sessions that focused on:

- Connectivity: Identify the "who", the "where", and the "how".
 - **Who** do we want to connect to the trail? Participants brainstormed to identify all target audiences.
 - **Where** are the target users or destinations located? Participants identified destinations and user groups near the trail system.
 - ♦ **How** do we want to connect? Participants brainstormed ways to improve connections between user groups and connections to the trail.

- Physical Improvements: Identify opportunities for physical improvements and prioritize those improvements.
- Programming Opportunities: How can programming be used to introduce people to the trail and make it more accessible?
 - ♦ What type of events will bring out neighborhood residents?
 - ♦ What type of events will local organizations help organize/sponsor/support? Which organizations?
 - ♦ What is an effective way to promote these events?
 - ♦ How can we use public art to engage the community?
 - ♦ How can we use public art to inspire community pride?
 - ♦ How do we convey the benefits of trail use (recreation/transportation/health/fitness)?
 - ♦ How do we teach people how to use the trail (access, etiquette)?
- Challenges to overcome
 - ♦ Right-of-Way
 - ♦ Staff Capacity
 - ♦ Funding Capacity

The results of these activities informed the development of the recommendations beginning on page 43 of this document. Feedback from the Norristown Focus Group informed the development of the concept designs on pages 61 through 72 of this document.

PUBLIC OUTREACH PHASE 2

The intent for Phase 2 of public outreach was to share the draft plan with municipal leaders, stakeholders and the general public. Due to the onset of the Covid-19 pandemic, Phase 2 outreach was changed to a virtual format. MCPC staff presented to Pottstown Borough Council on May 11, 2020 and to Norristown Municipal Council on June 18, 2020.

The presentations provided an overview of the plan's development, with an emphasis on the extensive outreach that was conducted to inform the recommendations. The presentation to Norristown Municipal Council also included the physical improvement recommendations that were developed for trail access points at Haws Avenue, Chain Street, the Norristown Transportation Center, and the Trail Junction Center.

The response to the plan was positive in both municipalities. The presentation to Norristown council was covered by the local press and was featured in an article that ran on Saturday, June 27 in the local newspapers, The Times Herald (www.thetimesherald.com), serving Norristown, and the Pottstown Mercury (www.pottsmerc.com).

Coordination

The public engagement conducted as part of the planning process for this document started a public process around trail planning. However, in order to achieve the goals of this plan—to increase access to the trail, increase the diversity of trail users, and increase awareness of the trail—ongoing engagement and coordination with the

public and the local partners, both municipal and non-profit, is critical.

This plan acknowledges that it is necessary to provide for the recreational needs of the surrounding neighborhoods in order to support the physical and mental health of community members. Montgomery County's trail network is a major recreational and transportation amenity that is not always well integrated with the communities adjacent to the trail. The creation of comfortable, safe access, and travel to and along the trail for walkers, bicyclists, and other non-motorized modes may increase the use of the trail system by neighboring residents. However, the best way to create that access requires the feedback from the communities where the trail is located. Not involving the community in the design of trail access solutions risks creating additional public infrastructure that is underutilized. In order to increase access, diversity, and awareness of the trail system, the county needs to work with the community—not on behalf of the community—to develop solutions.

INCLUDE COMMUNITY IN DECISION-MAKING

This plan proposes multiple projects for all study areas based on public feedback at a conceptual level. The recommendations contained within are intended to be applicable to the countywide trail network, not only the study areas identified for this plan. In addition to the general recommendations, the plan identifies physical improvements applicable specifically to the SRT Norristown Study Area. As proposed projects progress from planning into funding, design, construction, and maintenance, it is incumbent upon project leaders to collaborate with the community throughout the decision-making process. Project leaders should use the DVRPC IPD map to identify vulnerable user groups located within a specific project area, and then work through channels, including local civic associations, elected officials, nonprofit leaders, and faith groups, to engage those groups. It may take multiple attempts to engage the community and earn their trust. Project leaders are advised to engage with the stakeholders/organizations identified in the Stakeholder Matrix, included as Exhibit B on pages 91 through 93.

Project leaders should approach the community at the beginning of the process of any proposed project, and work with the public to create a public engagement framework that empowers the local community and builds sustainable local involvement with the trail network. The project lead should ask the community how they would like to collaborate on the project planning and development, and then propose a public engagement framework based on public feedback. All project partners, including agencies and the general public, should collaborate on finalizing the public engagement framework and endorse it before moving forward with the project. A good public engagement process will do the following:

- Allow for the development of shared goals
- Clearly identify the points in the process where the public has opportunities to offer feedback, and how that feedback will impact the project design
- Allow for a discussion and modification of the project scope before money is spent on design
- Clearly identify the project timeline and phasing, if necessary; also identify factors that may impact the timing of the project, i.e. grant funding

INCREASE PUBLIC/PRIVATE PARTNERSHIPS

Although Montgomery County has jurisdiction over the trail right-of-way, other agencies (local or state) often control the approaches to the trail. In addition, private nonprofits and community groups may be involved with programming along or adjacent to the trail. Encouraging collaboration between public entities and private entities can open new avenues for funding infrastructure improvements and support new trail users though programming. This coalition approach has worked well for growing the regional trail network, as evidenced by the success of the Circuit Trails Coalition. A scaled-down model comprised solely of local partners could help localities that are interested in expanding access to their piece of the trail system.

SUPPORT RECOMMENDATIONS FOR RELATED INFRASTRUCTURE PLANS

Montgomery County and local municipalities already have multiple planning documents that inform infrastructure planning as noted on pages 6 and 7, Existing Planning Documents. These documents were created based on feedback from those in attendance at steering committee meetings and other public meetings in support of those plans, and the recommendations included in this document support those plans. However, it is also important to acknowledge that a representative cross-section of the general public was not involved with the creation of these plans. During the creation of project-specific public engagement frameworks in the future, it is essential that all participants are up to speed on all the plans for a given area, so that everyone is working with the same baseline information.

Existing Conditions

Each of the trail segments within the defined study areas have design features that present unique challenges to improving access to the trail system. In order to achieve the goals of the plan, an understanding of the existing physical conditions along each of the trail segments is critical.

Note: The photo numbers are keyed to the maps of each project area included at the end of each study area description.

SRT Norristown Study Area

DESCRIPTION

The study area of the Norristown section of the SRT passes through (from west to east) West Norriton Township, the Municipality of Norristown, Plymouth Township, Conshohocken Borough, and Whitemarsh Township.

The SRT Norristown Study Area begins at the intersection of Port Indian Road and South Schuylkill Avenue in West Norriton Township and continues east, entering the Municipality of Norristown at the eastern edge of the Montgomery Cemetery. The trail, which is permitted via an easement with PECO, continues east for 6.25 miles along the SEPTA rail line, into Spring Mill Park in Whitemarsh Township, which marks the end of the study area. Ultimately the SRT continues as a multi-use trail into Philadelphia.

The existing trail is a 12-foot wide asphalt multi-use trail through the entire study area, as a result of a trail widening project completed in 2017.

Figures 6 and 7 on pages 20 and 21 show the current access points, existing curb ramps and sidewalks within a quarter-mile from each access point, and photograph locations. Norristown does not have an existing bicycle facility network beyond the SRT.

West Norriton Township Trail Access Points (west to east)

- Port Indian Road
- South Schuylkill Avenue
- Intersection of Rittenhouse Boulevard and Beaver Hollow Road

Trail access near the intersection of Port Indian Road and South Schuylkill Avenue opens to a gravel lot owned by the Port Indian Civic and Boating Association. Despite the close proximity to the trail, potential users should note the numerous signs indicating that parking is prohibited. Amenities include a bicycle fix-it station, a water fountain, two benches, and a pet waste station. Signage includes a blade sign that identifies mileage to common destinations along the trail (Conshohocken, Manayunk, Philadelphia Art Museum), and a pole sign that features the trail logo, a "Bike Route" sign, and directional signs to orient users (Philadelphia/Valley Forge).

The two-mile section of the trail between Port Indian Road in West Norriton Township to Haws Avenue in the Municipality of Norristown features dense vegetation to the north and a high-power transmission line directly adjacent to the south side of the trail. Dense vegetation is located to the south between the utility lines and Schuylkill River. As adjacent neighborhoods are separated from the trail by dense vegetation through much of this corridor, trail users can feel isolated.

Where the trail crosses South Schuylkill Avenue, there is a kiosk that features a trail









Gravel lot off South Schuylkill Avenue near Port Indian Road is not available for trail parking.

map, trail rules, and other information, two benches, and a trash can. A variety of signage that lacks a cohesive look is also located within this vicinity.

Past this intersection, the only amenities for 1.65 miles are two benches. There is no access to the river along this section of trail, and views of the river are limited. The corridor is maintained by Montgomery County Parks, Trails and Historic Sites (Parks) staff, who mow regularly along both sides of the corridor.

Municipality of Norristown Trail Access Points (west to east)

- Haws Avenue south of Washington Street
- Intersection of West Lafayette Street and Barbadoes Street
- Norristown Transportation Center south of Lafayette Street between Swede Street and DeKalb Street
- The Trail Junction Center, located at the southeast corner of East Lafayette and DeKalb Streets
- Walnut Street and East Lafayette Street
- Franklin Street and East Lafayette Street
- Ford Street and East Lafayette Street

Upon entering the Municipality of Norristown, neighborhoods adjacent to the trail are located to the north, but are separated from the trail visually and physically by thick vegetation. Residents must access the trail via Haws Avenue.

Approaching the intersection where Haws Avenue crosses West Washington Street, there are two faded bicycle route signs that guide users either towards Riverfront Park by continuing on Haws Avenue, or to Valley Forge via the SRT. However, to those unfamiliar with the area, these connections are not intuitive, and could be more clearly marked to reduce confusion. At Haws Avenue, a concrete pathway connects to the southwest corner of the West Washington Street intersection (Photo 1). This pathway connects to the SRT. A kiosk featuring trail wayfinding signage and a built-in bench is located south of the trail at the Haws Avenue access point (Photo 2). A set of stairs from the south side of the trail connects pedestrians



Photo 1: View of the Haws Avenue access point to the SRT and roadway access under bridge to Riverfront Park.



Photo 2: Wayfinding signage and bench along the SRT near the Haws Avenue access point.

to Riverfront Park below. Cyclists looking to access Riverfront Park must leave the trail at the Haws Avenue Trailhead and bike along Haws Avenue south under the trail to access the Riverfront Park parking lot.

East of Haws Avenue, the next 1,300 feet of trail is located between a combination of light industrial development and dense residential neighborhoods to the north and Riverfront Park to the south. The high-power transmission line continues along the south edge of the trail through this section.

Further east along the trail, there are two desire lines (informal worn paths) at Chain Street and Pearl Street that connect the SRT to the adjacent neighborhood (see Photo 3 on page 16). The Pearl Street desire line continues south of the trail through the vegetation down a hill to Riverfront Park, as shown in Figure 5 below.



Figure 5 · · · SRT Desire Lines from Chain Street and Pearl Street

After passing Riverfront Park, the trail crosses over Stony Creek and Water Street via a concrete bridge. This section includes a cell tower with utility boxes on a transmission line pole. The trail then continues over a railroad and Route 202 before reaching the Barbadoes Street access point. The trail is connected to the intersection of Barbadoes Street and West Lafayette Street by an asphalt path about 300 feet long. There is wayfinding signage at the junction of the asphalt path and the trail (Photo 5 on page 16), but there is no wayfinding signage at the intersection of Barbadoes and West Lafayette Street (Photo 6 on page 16). Further, the wayfinding signage provided is oriented towards people on the asphalt path walking towards the trail and is not as visible to those already on the trail. There are no benches or other amenities provided along this section of the trail.



Photo 3: Desire line from Chain Street to SRT.



Photo 4: View of Riverfront Park driveway with staircase to is the SRT in background.



Photo 5: Wayfinding signage at the junction of the trail with the asphalt path leading from Barbadoes Street.



Photo 6: No wayfinding signage exists at the intersection of Barbadoes and West Lafayette Street to direct users to the trail located further down the path to the west.

The trail continues between a large parking lot for the Montgomery County Intermediate Unit (MCIU) and a light industrial area before passing through the Norristown Transportation Center (NTC). SEPTA's Norristown High Speed Line, bus station, and parking garage are located north of the trail, and the regional rail platforms, Norristown Station ticket office and SEPTA parking lot are located south of the trail (see Figure 32 on page 68).

East of the parking garage, the trail passes over DeKalb Street past the Trail Junction Center site, which includes an access point to the trail from the southeast corner of East Lafayette Street and DeKalb Street (Photo 8). Upon construction of the Chester Valley Trail, which will connect with the Schuylkill River at this location, non-vehicular access will have off-road access between Exton in Chester County to Philadelphia.



Photo 7: View of the pathway passing through the Norristown Transit Center.



Photo 8: View of the recently renovated Trail Junction Center with the Schuylkill River Trail to the right and the pathway access point from East Lafayette Street and DeKalb Street to the left.

East of the Trail Junction Center, the pathway was recently reconstructed to be atgrade with the street as part of the Lafayette Street Extension Project. A 300-foot long retaining wall to the north of the trail is evidence of the grade change, and presents an opportunity to create a mural, with community input (see photo 9). Since the field visit, additional new trail and roadway improvements have been completed. Open green space is located between the trail and roadway. Access points have been created at the intersections with Walnut Street, Franklin Street and Ford Street. The trail follows East Lafayette Street before exiting the Municipality of Norristown at the Norristown Sewage Treatment Plant located at the base of Ross Street, where there is roadway access to the trail, but no sidewalk connections.



Photo 9: View facing east of the new retaining wall and asphalt pathway with new green space in the background.



Photo 10: View facing east of new asphalt pathway crossing Ford Street with ongoing East Lafayette Street roadway construction.

Plymouth Township Trail Access Points (west to east)

Ernest Station Road

The next trail access point is where Ernest Station Road intersects the trail between Norristown and Conshohocken in Plymouth Township. Ernest Station Road connects several industrial businesses to Conshohocken Road, and has no sidewalks. From there, the trail continues for approximately two miles through an industrial area. Other than two benches located at the Brad Fox Memorial, located just south of the Ernest Station Road crossing, this section lacks amenities, other than trail logo signs and the occasional mile marker. Dense vegetation close to the corridor contributes to a sense of isolation. As the trail nears the municipal boundary of Conshohocken, vegetation has been cut back along the north side of the trail along the Arcelor Mittal property.



There are no sidewalks leading to the trail along Ernest Station Road (view facing south).



Trail crossing at Ernest Station Road (view facing west).



Trail crossing at Ernest Station Road (view facing east).



Trail crossing at Ernest Station Road (view facing north).

Conshohocken Borough Trail Access Points (west to east)

- West Elm Street and Colwell Lane
- Oak Street
- Harry Street
- Ash Street
- Poplar Street
- · Cherry Street

There are frequent access points to the trail throughout Conshohocken Borough, and the trail within the Borough is heavily used. The first access point is located at West Elm Street and Colwell Lane near The Grande at Riverview apartments. This portion of the trail is directly adjacent to at-grade railroad tracks that separate the trail from pedestrian connections to the south. There is another trail access point from The Grande at Riverview parking lot and at the base of Oak Street. Access to the outbound platform of SEPTA's Conshohocken regional rail station is adjacent to the trail near the Fayette Street overpass. The trail then passes under Fayette Street and crosses Harry Street and Ash Street, both of which have sidewalks that connect to the north side of the trail, and lead to Conshohocken's downtown commercial district and residential neighborhoods. The regional rail inbound platform is accessed by crossing the railroad tracks at Harry Street.

Continuing east, access points at Poplar Street and Cherry Street have gaps between the trail and sidewalk connections to the north. It is assumed that the gap area is the width of the PECO right-of-way that extends beyond the trail easement. Harry, Ash, Poplar, and Cherry Streets cross over the trail and railroad to connect to mixed-use development located between the railroad and the Schuylkill River. None of these cross-streets have designated bike infrastructure. The trail width uses the entire easement through the borough, which complicates/impedes the ability to place amenities. Current amenities consist primarily of signage.

Whitemarsh Township Trail Access Points (west to east)

- Lee Street
- Station Avenue

The trail continues east into Whitemarsh Township near Jones Street, which does not connect through to the trail. Lee Street crosses over the trail and railroad to connect to the Spring Mill regional trail station, and office buildings located between the railroad and the Schuylkill River. The easternmost trail access point in the SRT Norristown Study Area is at Station Avenue, which has a sidewalk connection to the newly constructed Courts at Spring Mill Station to the north. The Station Avenue right-of-way crosses over the trail and railroad but is known as East North Lane south of the trail. The Spring Mill SEPTA station and a small parking lot are located adjacent to the railroad tracks to the south. An additional SEPTA parking lot is located on Station Road north of the trail. There are also informal access points from businesses along the trail in this area.

The land to the east of Station Avenue is Spring Mill Park, which is owned by Montgomery County. This undeveloped tract of land is currently designated as a scenic area. Future plans should consider how this park can be developed to enhance the connectivity between trail users and the park.





Pavement marking improvements to trail intersections near Spring Mill in Whitemarsh Township.

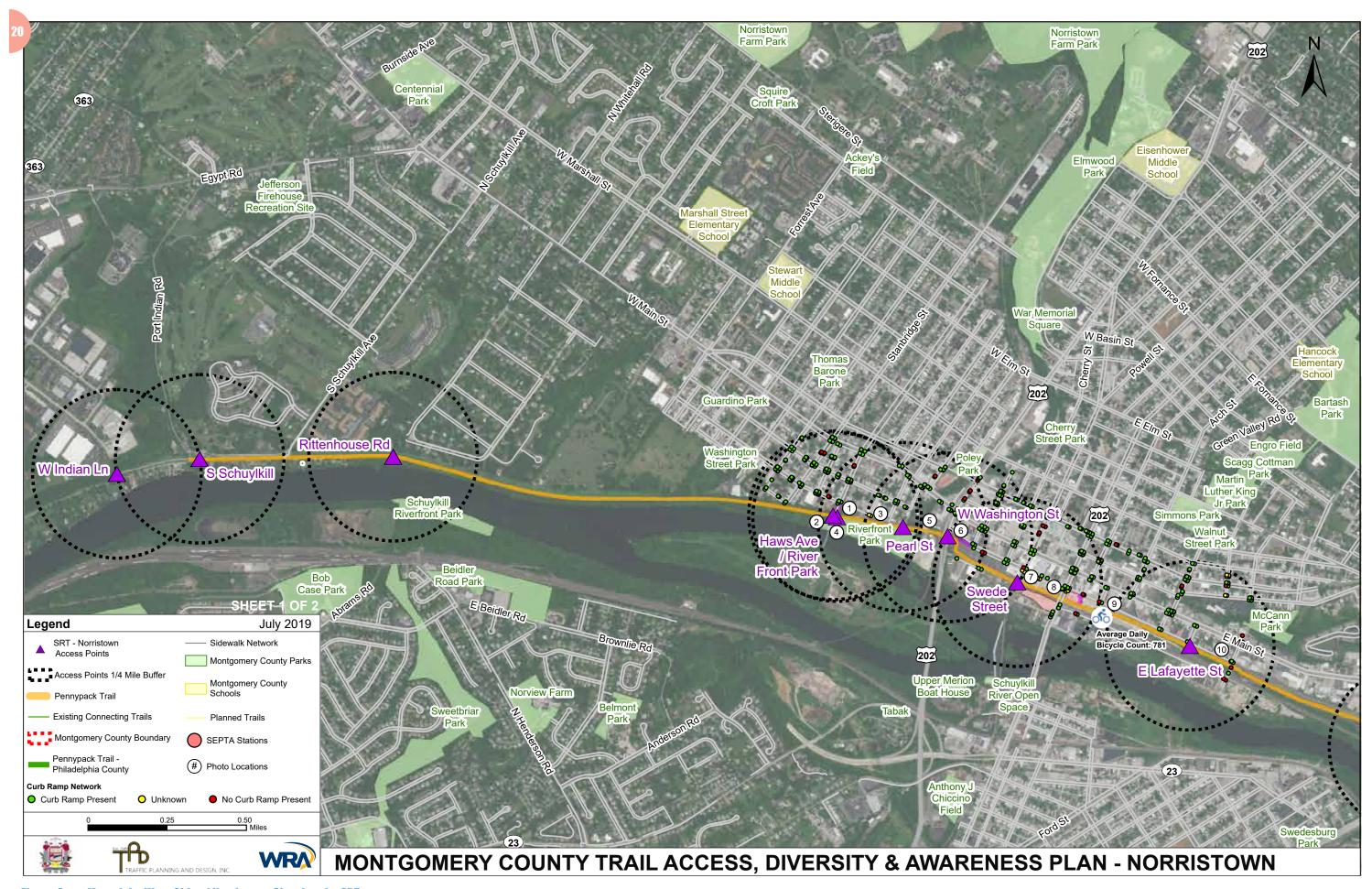


Figure 6 · · · Map of the West Side of Norristown Showing the SRT

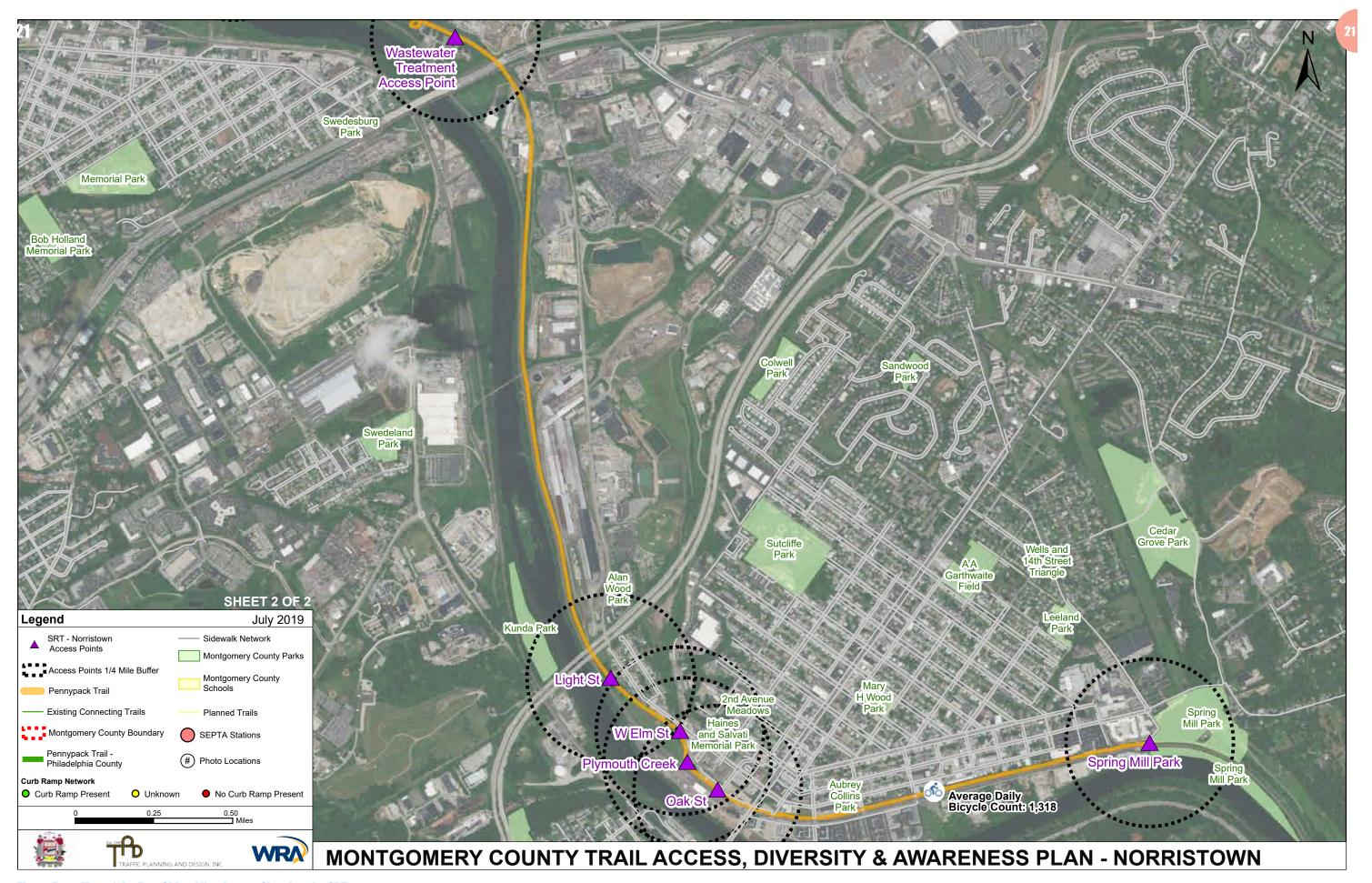


Figure 7 · · · Map of the East Side of Norristown Showing the SRT

TRAIL USE DATA

DVRPC publishes pedestrian and bicycle counts to assess trail use within the Greater Philadelphia region. Bicycle counts have been conducted at two locations within the SRT Norristown Study Area. One count location is along the SRT from Swede Street to US Route 202/DeKalb Street in Norristown and another is from Cherry Street to Jones Street in Conshohocken as shown below in Figures 8 and 9. Counts are conducted for a full week, and detailed hourly reports are available. According to DVRPC's Pedestrian and Bicycle Count website (https://www.dvrpc.org/webmaps/pedbikecounts/), "Annual Average Daily Bicycles" "represents an estimate of all bicycle traffic during a 24-hour period at the location indicated for the year in which it was collected." The most recent counts were conducted in September 2017, and the results are shown below.



Figure 8 · · · Bicycle Counts for the Schuylkill River Trail from Swede Street to US 202/DeKalb Street in Norristown

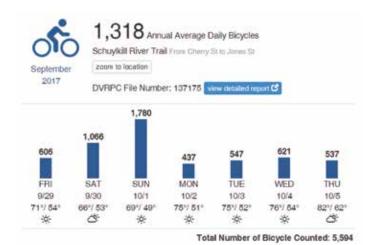


Figure 9 • • • Bicycle Counts for the Schuylkill River Trail from Cherry Street to Jones Street in Conshohocken

OBSERVED ISSUES AND POTENTIAL SOLUTIONS

Feedback received during personal interviews and at National Night Out was further refined during focus group meetings. Montgomery County Parks staff provided focus group attendees with an update on the status of maintenance along the trail and

trail improvements that are in the pipeline. They shared that a Bridge, Overpass, and Culvert Inspection Study underway corroborates some of the safety issues identified during site visits and detailed in the Existing Conditions section of this document, such as the railing systems used at bridge locations.



Figure 10 · · · Station 2 Board from Norristown Public Outreach at National Night Out

DO YOU USE THE TRAIL?			
YES - What do you like to do on the trail?	NO – What keeps you from using the trail?		
Ride my bike	Did not know		
Watch dragon boat races	Unaware of trail		
Convenient for biking 20 miles at Haws	I didn't know there was a trail, but would love to go		
Borrowing bikes from Schuylkill River Greenway (in Pottstown) – get swag for 10 rides (water bottle), 20 rides (backpack), 30 rides (water bottle cage)	No rowing from Norristown		
Walk at lunchtime	Lack of safe access from home to trail		
Go for a walk	Feel it is unsafe		
Walk our dog	Go to the gym		
Walking and spending time with friends/family	Used to use it when kids were little		
Walk on trail in Philly	Kids don't ride bikes anymore		
Watch the falls by the bridge	Bad knees		
	Website clarity about where to park; GPS address of parking area would help		
	Would come out for fitness equipment like Philly at East River Drive		
	Family with many small kids; hard to mobilize		
I love that I can bike from Norristown to Green Lane or Philadelphia	No I didn't know but would love to go		

Figure 11 · · · Results from Station 2 Board from Norristown Public Outreach Phase 1 at National Night Out

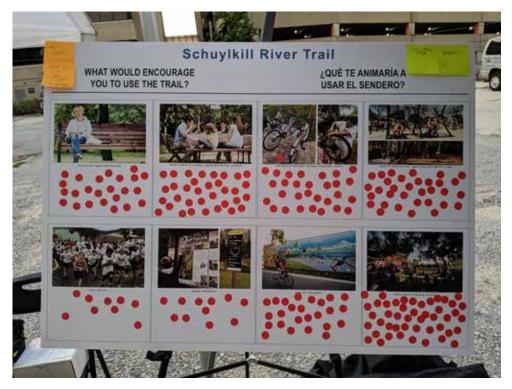


Figure 12 · · · Station 3 Board from Norristown public outreach at National Night Out

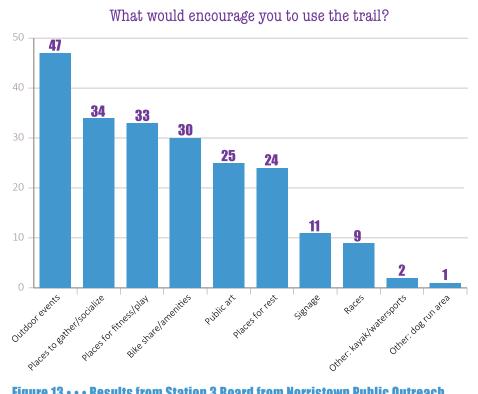


Figure 13 · · · Results from Station 3 Board from Norristown Public Outreach Phase 1 at National Night Out

Some issues and potential solutions that emerged from focus group attendees include: 2

Access

- Access points feel unsafe and are generally not well-marked.
- The Haws Avenue trailhead was identified as a public safety access issue; Police want vehicular access to the trail; the Fire Department also needs access to the trail.
- There is no trail connection to the commercial area in West Norriton (near Home Depot and Walmart); although the area is outside of the study area, consider evaluating trail connections in this location.
- Current signage is confusing; signs should be clear, concise, and symbologybased to mitigate any language barriers. Signage should not only indicate where you are on the trail, but also indicate nearby destinations off the trail, such as food and beverage venues.

Programming

- Trail etiquette is poor; trail etiquette should be promoted through signage and education efforts.
- There are currently a limited number of places to gather along the trail corridor; Norristown Parks and Recreation staff expressed interest in creating pavilion spaces along Lafayette Street and expressed openness to staffing events; an agreement between County Parks and Norristown's Parks and Recreation Department would need to be formalized during the design process.
- Currently no pop-up events (gardens, activities and games, etc.) occur along the trail; equipment for events could potentially be stored at the Trail Junction Center.
- Currently no programming along trail; Norristown Parks and Recreation staff
 expressed willingness to program Lafayette Street space with free concerts or
 movie nights, especially if the Trail Junction Center could be used as support
 space (restrooms, water supply, etc.).

Safety

• Lines of sight should be clear on and off the trail. Efforts to thin dense vegetation (but not complete removal) would improve the user experience and enhance the perception of safety.

Maintenance

- There are maintenance concerns regarding art and signage painted on the trail; maintenance agreements must be in place. The group discussed the opportunity to have the community develop the designs and possibly incorporate temporary installations with chalk paint, then follow-up with permanent installations implemented by professional artists once funding and long-term maintenance are available.
- Concerns around maintenance of future public art; there is support for public art
 opportunities that engage the community from the beginning of the process to
 implementation of the art along the trail. Ideas included a mural on the existing
 retaining wall (it was recently resurfaced with a smooth finish concrete) and
 along or on the trail near gateways or trailheads.
- Concerns around maintenance of future fitness equipment; would need an outside organization to champion that effort and support and/or finance maintenance.
- All parties expressed concern with public safety and maintenance.

² Complete notes from focus group meetings are included in Appendix C.

SRT Pottstown Study Area

DESCRIPTION

The corridor defined as the SRT Pottstown Study Area is comprised of the Schuylkill River Trail from its entry into Montgomery County from the west at the Berks County line, beginning in West Pottsgrove Township (a municipality contiguous with the western edge of Pottstown) at the Grosstown Road Trailhead, and ending at Pottstown Borough's eastern boundary at the junction of Industrial Highway and Moser Road. Work is currently underway to design plans to develop the off-road connection at a county-owned access located off Industrial Highway through undeveloped land in Lower Pottsgrove Township, cross under the US Route 422 bridge, and connect to Chester County via a designated 15-foot protected trail lane on the US Route 422 bridge over the Schuylkill River. Once this connection is completed, the SRT will run uninterrupted for approximately 60 miles between Philadelphia and Reading.

The western and eastern sections of the existing trail are a 10- to 12-foot-wide asphalt pathway with access points at Grosstown Road, Old Reading Pike, Keystone Boulevard, Riverfront Park, South Washington Street, and Moser Road. The central portion of the trail—between Keystone Boulevard and South Washington Street—is an unprotected on-road route marked with sharrow pavement markings. Figure 14 on page 31 shows the current access points and photograph locations. Pottstown has some additional on-road bike facilities. Those facilities that form part of the on-road route are described below.

The western section of the trail begins at the Grosstown Road Trailhead, which features a parking lot with approximately twenty parking spaces and trailhead signage. The trail then crosses Grosstown Road at-grade with a striped crosswalk. Travelling southeast along the trail, there is an unsignalized at-grade road crossing at Old Reading Pike. The trail continues along a wooded corridor, although the US Route 422 expressway is visible for part of this section. After passing the expressway, riders on the trail can see the Schuylkill River before traveling under US Route 100/Pottstown Pike, where the trail reaches the Keystone Boulevard Trailhead. This trailhead has more than twenty parking spaces and can be accessed from Keystone



Photo 11: View from the Grosstown Road parking lot looking east across Grosstown Road to the SRT.



Photo 12: View of the Old Reading Pike trail crossing looking northeast.

Boulevard west of College Drive. The distance between the Grosstown Road and Keystone Boulevard trailheads is slightly over a mile and a half.

At this point, the trail diverges into two separate alignments—one on-road and one off-road. The on-road alignment, identified by sharrow pavement markings, runs east along College Drive to its intersection with South Hanover Street. College Drive is a two-lane road that varies in width between 30 and 35 feet. Montgomery County considers this to be the main trail alignment, despite being on-road.

The off-road alignment begins at the Keystone Boulevard Trailhead, passes through Riverfront Park, and ends at Hanover Street. It should be noted that this section is owned and maintained by the Pottstown Parks and Recreation Department and is not constructed to a multi-use trail standard. Starting from the Keystone Boulevard parking lot, this alignment passes through woods along the river and crosses over the Manatawny Creek, a tributary to the Schuylkill River, at a narrow trail bridge, before entering Pottstown's Riverfront Park. Riverfront Park is the largest trailhead in the Pottstown area, having a parking lot with more than 100 spaces. The parking lot



Photo 13: View of a pavilion located in Riverfront Park. The trail is visible between the river and the pavilion.



Photo 14: View of the stairs connecting the eastern edge of Riverfront Park with the Hanover Street/College Drive intersection looking west.



Photo 15: View of the Schuylkill River Greenway building and Riverfront Park looking south from College Drive.



Photo 16: View of the College Drive trail crossing looking west. The South Street trail is visible on the right side of the photograph.

is accessed from College Drive, just west of the South Hanover Street intersection. Amenities at the park include restrooms, a pavilion, and an amphitheater. The park is also home to the Schuylkill River Academic and Heritage Center, which houses offices of the Schuylkill River Greenways National Heritage Area (SRG), and Montgomery County Community College's Sustainability Hub. The SRG offices feature "The River of Revolutions Interpretive Center", a visitor center that interprets natural and historic information about the Schuylkill River. SRG also provides bicycles for public use through a free bike share program located on-site. The off-road portion of the trail ends at the eastern edge of the park, and a staircase leads trail users to Hanover Street.

The two alignments merge at the intersection of South Hanover Street and College Drive. The trail continues on-road east along Industrial Highway for approximately a half-mile to its intersection with Washington Street. At Washington Street, the trail diverts from the road onto a grade-separated side path (Photos 17 and18). Just past the Norfolk Southern railroad crossing, the trail returns to being at-grade, and is separated from Industrial Highway by a guardrail. The trail continues along Industrial Highway for 1.1 miles to its terminus, where Industrial Highway becomes Moser Road at the municipal line (Photo 20).



Photo 17: View of the trailhead at South Washington Street and Industrial Highway, looking west.



Photo 18: View of the eastern segment of trail along Industrial Highway looking east.



Photo 19: View of the guardrail barrier along the eastern trail segment at the intersection of Keim Street and Industrial Highway.



Photo 20: View of the eastern segment of trail looking north towards the intersection of Moser Road and Industrial Highway.

This stretch of trail is essentially a sidepath, with a guardrail separating trail users from Industrial Highway. While the guardrail is a necessary safety feature that keeps trail users safe from vehicular traffic, it also prevents access, since users are limited to entering the trail at South Washington Street or at Moser Road, unless they jump over the guardrail.

The Keim Street bridge, which connects Montgomery and Chester Counties, is in the process of being reconstructed. The trail intersection of the Keim Street bridge is offset from South Keim Street (which serves as an arterial connection to High Street and the borough's commercial district) by approximately 550 feet. While there is a gap in the guardrail to allow access to and from the bridge, there is no way for people coming from the neighborhoods adjacent to South Keim Street to safely access the trail directly (see Photo 19). The intersection of Industrial Highway and South Keim Street would be a logical location to have a break in the guardrail to allow for trail access. Additionally, directional signage could be installed at the current terminus of the on-road portion of the SRT on Cross Street directing trail users to this location. Pottstown has adopted the *Keim Street Gateway Study*, one of the goals of which is to "ensure greater,



Photo 21: View of the South Street and South Hanover Street intersection looking east.



Photo 23: View of Madison Street at Cross Street looking south.



Photo 22: View of the East High Street at Franklin Street looking east.



Photo 24: View of Cross Street at Pollock Park looking southeast. This is the terminus of the on-road route.

safer, and more attractive access to and from the Schuylkill River Trail." The plan's recommendations will guide transportation improvements in this area.

Other than the amenities provided in Riverfront PARK, few exist along this corridor. Signage, other than safety signage, is limited, and predominantly consists of only the trail logo.

A signed SRT "business route" alternative connects Riverfront Park with the intersection of Cross Street and South Keim Street. East of Riverfront Park, signage identifies an alternative alignment that traverses on-road through the Borough of Pottstown's downtown commercial district. This route exits Riverfront Park at the entrance to the parking lot, crossing over College Drive to access a short section of trail that turns into South Street (see Photo 16). The route heads north on South Hanover Street where riders must share the road for two blocks before turning east onto East High Street which has bike lanes running in each direction.

The route runs along East High Street for just under one mile to Madison Street, where the route turns south. The route is a shared road facility along Madison, as indicated by sharrows. The route heads east on Cross Street, where it continues as a shared road facility before terminating at the location of the former Pollock Park Trailhead. Pollock Park was closed to the public in 2017 due to environmental issues.

There are two separate sets of wayfinding signage throughout the Pottstown area:

The older set of wayfinding signage (1 to the left) is used to show the on-road route through the heart of downtown Pottstown. This signage was originally installed on the initial phases of the trail development in Pottstown by the Schuylkill River Greenways SRG prior to the newly constructed sections of offroad trail. Montgomery County has since installed the new logo and signage (2 to the left) along the off-road portions of the trail from the Grosstown Road Trailhead to the Pottstown Riverfront Park and the newly constructed off road portion from the 422 Sportsplex to Washington Street. Having two sets of signage is inconsistent and leads to confusion among trail users.

TRAIL USE DATA

DVRPC publishes pedestrian and bicycle counts to assess trail use within the Greater Philadelphia region. Unfortunately, there is no count data available for the portion of the SRT in Pottstown. MCPC, SRG, PARRC, and Pottstown Borough should work with DVRPC to establish trail counts along this portion of the trail in advance of the proposed extension of the SRT east of Pottstown. Filling a major gap in the SRT between Parkerford and Pottstown will support the justification for conducting trail counts through this corridor. It is envisioned that trail counts will be conducted upon the completion of the trail through this section. Ideally, completion of the trail will promote a non-vehicular commuter alternative and reduce the current rush hour traffic counts on Route 422.

OBSERVED ISSUES AND POTENTIAL SOLUTIONS

Information collected as part of site visits and mapping revealed issues with trail infrastructure and design, but feedback obtained during Phase 1 of Public Outreach provided information about other barriers to trail use for the local population, as well as potential solutions. As shown in Figures 15 through 18 below, public





1

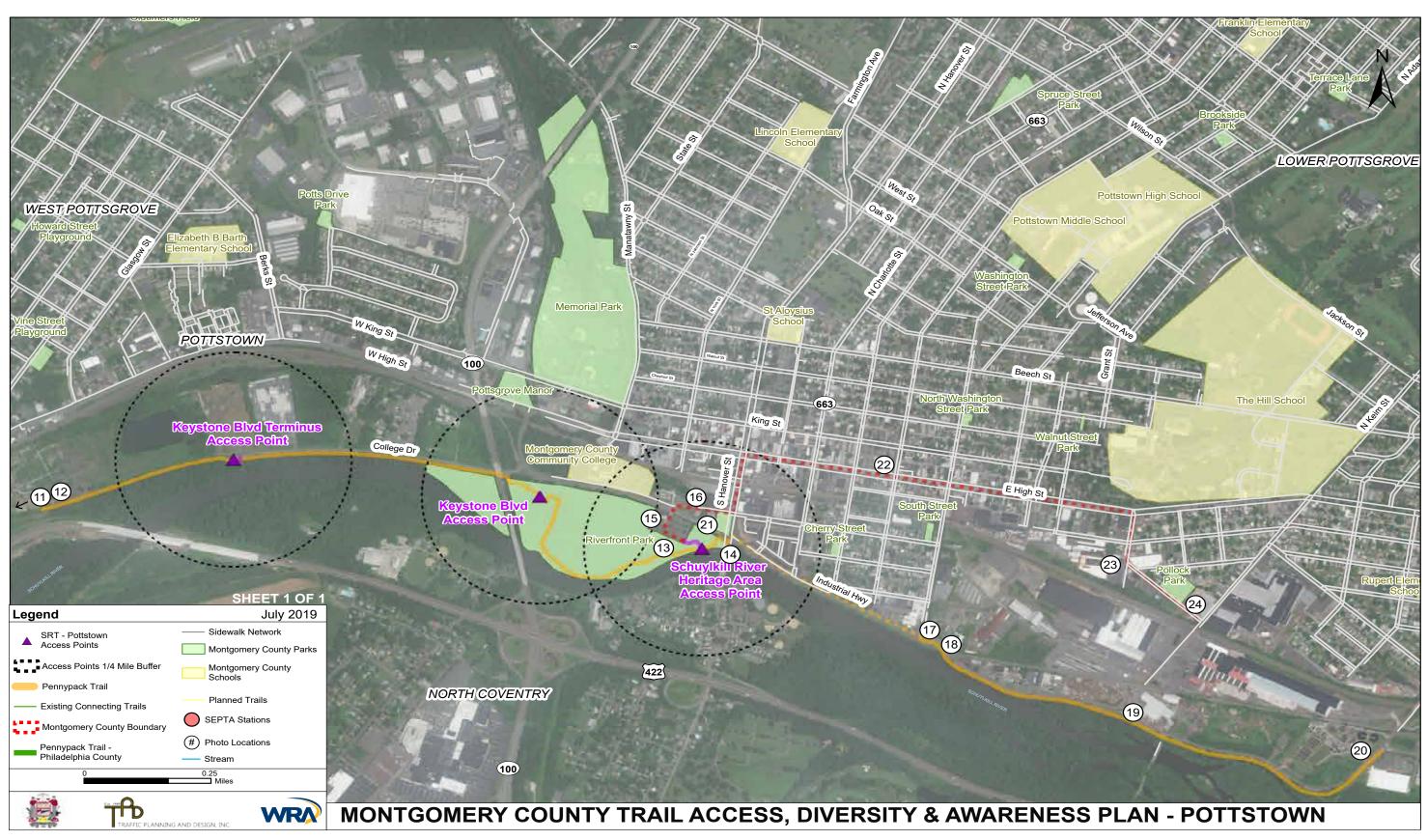


Figure 14 · · · Map showing Schuylkill River Trail in Pottstown

outreach at the Carousel of Flavor restaurant festival in Pottstown revealed that many people were unsure the trail existed or how to access it. When asked what would encourage them to use the trail, 47 attendees selected outdoor events like free concerts or movies, 34 selected places to socialize or gather, and 33 selected places for fitness and play.

Feedback received during the Carousel of Flavor was further refined during focus group meetings.

Some issues and potential solutions provided by focus group attendees include: 3

Access

- Signage and materials are currently only in English; Spanish is the predominant non-English language
- Wayfinding signage in town and along trail is poor; also needs to be posted on social media to facilitate ease of access
- People are generally unaware of the trail.
- Connections to the park are limited; need to assess how trail connections to parks can be created or improved, i.e. Pottstown High School to Memorial Park to SRT/Riverfront Park
- Portions of the trail are assumed to be for serious bicyclists, not the general public
- Bike share is limited to adults 16 and older; need to have a bike share for younger age groups, also adults need to be present for children to rent bikes; explore opportunity to develop a children's rent-to-own bike share

Maintenance

- Programming
- The African American community is often introduced to different modes of recreation at a young age, so trails as recreation may not be as intuitive to some groups as it is to others; explore how to expose children to trails/ exercise/nature—walking/running/hiking/biking/kayaking, etc.
- Events like "Trails on Tap" has brought attention to the trail, as well as the use of bikes and kayaks in the area of Riverfront Park
- Regular flooding at Riverfront Park limits ability to build an amphitheater or other structure for outdoor events

Safety

- Large user groups can conflict with smaller groups/families
- Issues with outreach and marketing; mailings have been shown to work better than email or digital outreach, but they are expensive; engage other partners such as the Chamber of Commerce
- Negative stigma associated with Riverfront Park and Pottstown in general
- More communication needs to happen between organizations

³ Complete notes from focus group meetings are included in Appendix C.

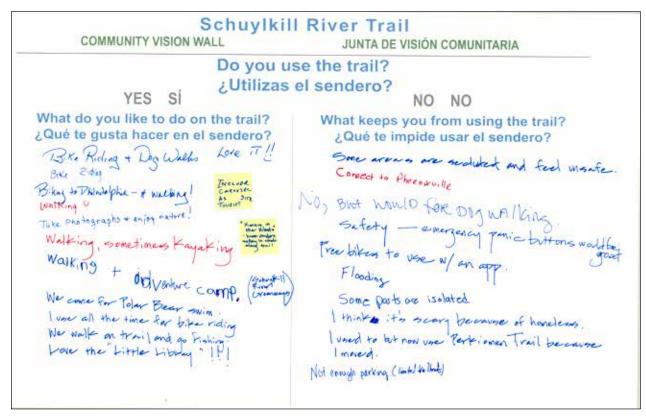


Figure 15 · · · Station 2 Board from Pottstown Public Outreach Phase 1 at the Carousel of Flavor

DO YOU USE THE TRAIL?	
YES - What do you like to do on the trail?	NO – What keeps you from using the trail
Bike riding and dog walking Love it!!	Some areas are secluded and feel unsafe
Bike Riding	Connect to Phoenixville
Biking to Philadelphia and walking	No, but would for dog walking
Walking	Safety – emergency panic buttons would be good
Take photographs and enjoy nature	Free bikes to use with an app
Walking, sometimes kayaking	Flooding
Walking and adventure camp	Some parts are isolated
We come for Polar Bear Swim. I use all the time for bike riding. We walk on trail and go fishing. Love the "little library" !!!	I think it's scary because of homeless. I used to, but now use Perkiomen Trail because I moved
Include Carousel as tourist site	Not enough parking (limited trailheads)

Figure 16 \cdots Results from Station 2 Board from Pottstown Public Outreach Phase 1 at the Carousel of Flavor



Figure 17 · · · Station 3 Board from Pottstown public outreach at the Carousel of Flavor

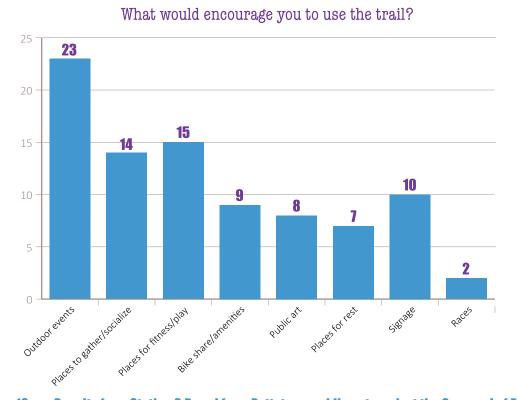


Figure 18 · · · Results from Station 3 Board from Pottstown public outreach at the Carousel of Flavor

Pennypack Trail Study Area

DESCRIPTION

The existing 5.25-mile section of Montgomery County's Pennypack Trail begins in the north at the Byberry Road Trailhead in Huntingdon Valley and continues south to the Montgomery County line in Rockledge Park. Lorimer Park's Fox Chase Trail connects to Philadelphia's Pennypack Trail and the Delaware River. Figures 19 and 20 on pages 38 and 39 show the current access points and photograph locations. Most of the existing trail is a compacted gravel pathway, although some areas are asphalt or wooden surface bridge crossings. Benches and waste receptacles are provided along the trail and most trailheads provide trail and area information as well as vehicle parking.

Access points are located at the following locations: Byberry Road Trailhead parking lot, the Pennypack Ecological Restoration Trust (PERT), Welsh Road and Terwood Road intersection and parking lot, Old Huntingdon Pike parking lot, Lorimer Park parking lot and trails, Walnut Hill parking lot on Moredon Road, and at Rockledge Park.

Between the Byberry Road Trailhead and Fetters Mill Road at the Bryn Athyn Post Office, the trail is located on the former Newtown Railroad corridor, which is owned



Photo 25: View of Montgomery County segment of the Pennypack Trail wayfinding signage at the Byberry Road trailhead that shows ¼ mile markers, trail amenities and adjacent green space and roadways.



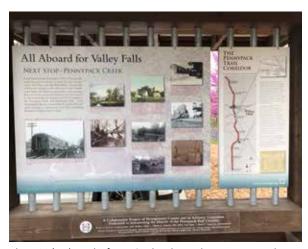


Photo 26 (top): Trail information brochures that are at several access points along the trail. Photo 27 (bottom): Educational information signage in the Old Huntingdon Pike parking lot.

by SEPTA and leased to Montgomery County. This corridor is located along the Pennypack Creek and runs through preserved lands owned by PERT. The Pennypack Trail can also be accessed from trails within the property owned by PERT, which connects to two additional parking lots off Creek Road and Edge Hill Road. Closer to Fetters Mill Road, single-family dwellings are located to the east of the trail. The Byberry Road Trailhead parking lot in the north is the only access point along this two-mile section of the trail. This parking lot provides approximately 55 parking spots. Parking count estimates at the Byberry Road trailhead indicate that there were 74,000 visitors in 2017 and 72,000 visitors in 2018. Trailhead amenities include signage, trail information brochures, a bike fix-it station, bench, a Port-a-Pot, pet waste station, and trash receptacles.

Development near the Byberry Road trailhead includes residential developments to the northeast, and the Masons Mill Business Park and the Huntingdon Valley







Photo 28 (top left): View of the site amenities at the Byberry Road Trailhead and parking lot.

Photo 29 (top right) View of the adjacent roadways where the Pennypack Trail crosses Fetters Mill Road with no connecting pedestrian or bicycle facilities.

Photo 30 (bottom left): View along the Pennypack Trail facing south at Fetters Mill Road, with existing signage and food truck seating area to the left.



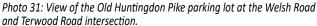




Photo 32: View of the Pennypack Trail along the Old Huntingdon Pike parking lot.

Christian Academy to the west. No pedestrian or bicycle infrastructure exists to connect these areas to the Byberry Road Trailhead. However, a signalized crossing with a pedestrian refuge area will be included as part of the construction for the final section of the trail in Montgomery County, from Byberry Road to County Line Road. This project is expected to be completed in 2020.

The southern section of trail can be accessed where it crosses Fetters Mill Road at Bryn Athyn Post Office, however, there is no public parking for trail users, and there are no existing pedestrian or bicycle facilities that connect the trail to the surrounding residential neighborhoods from this location. The roadways connecting residential neighborhoods to Fetters Mill Road and the trail have little or no shoulder, and some have steep slopes.

The 3.25-mile section from the trail crossing at Fetters Mill Road south to the trail's terminus at Rockledge Park continues to follow the Pennypack Creek. Neighborhoods adjacent to the creek's wooded riparian corridor include single-family homes, apartment complexes, and senior care facilities, and several smaller neighborhood parks. The access points in this section include the parking lot at the intersection of Welsh Road and Terwood Road, the Old Huntingdon Pike parking lot, at Lorimer Park (both at the picnic area north of Moredon Road and at the main parking lot located on the south side of Moredon Road), and at Rockledge Park. Figures 19 and 20 on pages 38 and 39 show the existing access points and a sidewalk inventory within a quarter-mile from each existing access point. There are no existing on-road bicycle facilities that connect the adjacent areas to the trail.

At the Welsh Road and Terwood Road intersection access point, there are existing sidewalks that connect the trail to destinations to the east, including senior living apartment complexes, residential neighborhoods, businesses, and doctor's offices. The sidewalk connection to the west of the trail is incomplete and the surrounding area includes residential neighborhoods, businesses and senior assisted living apartments. There are no bicycle facility connections to this trail access point. The trail parking lot is located where the Huntingdon Valley SEPTA train station used to exist. The parking lot has approximately 40 parking spots. Parking count estimates at

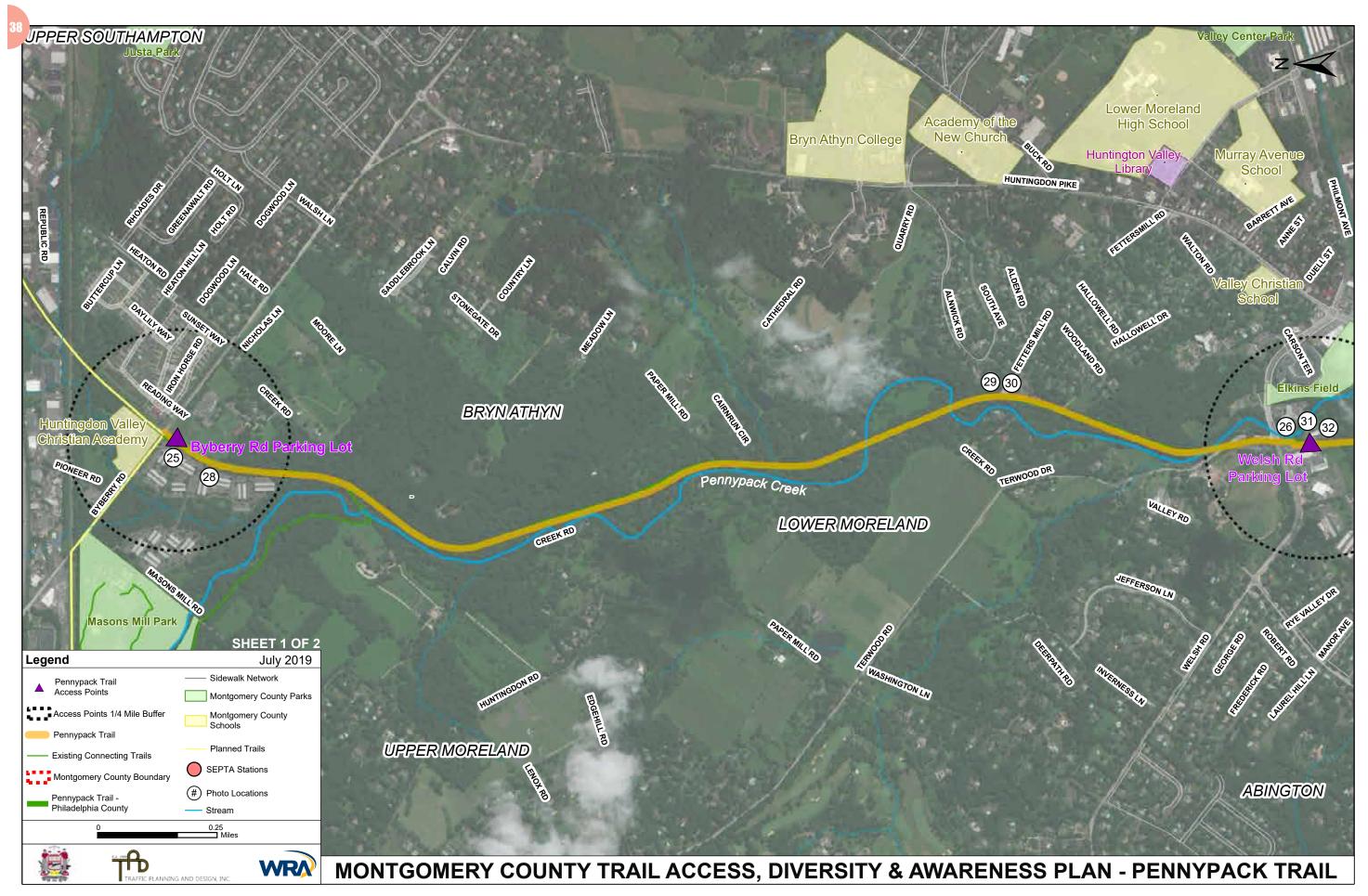


Figure 19 · · · Map showing northern part of Pennypack Trail

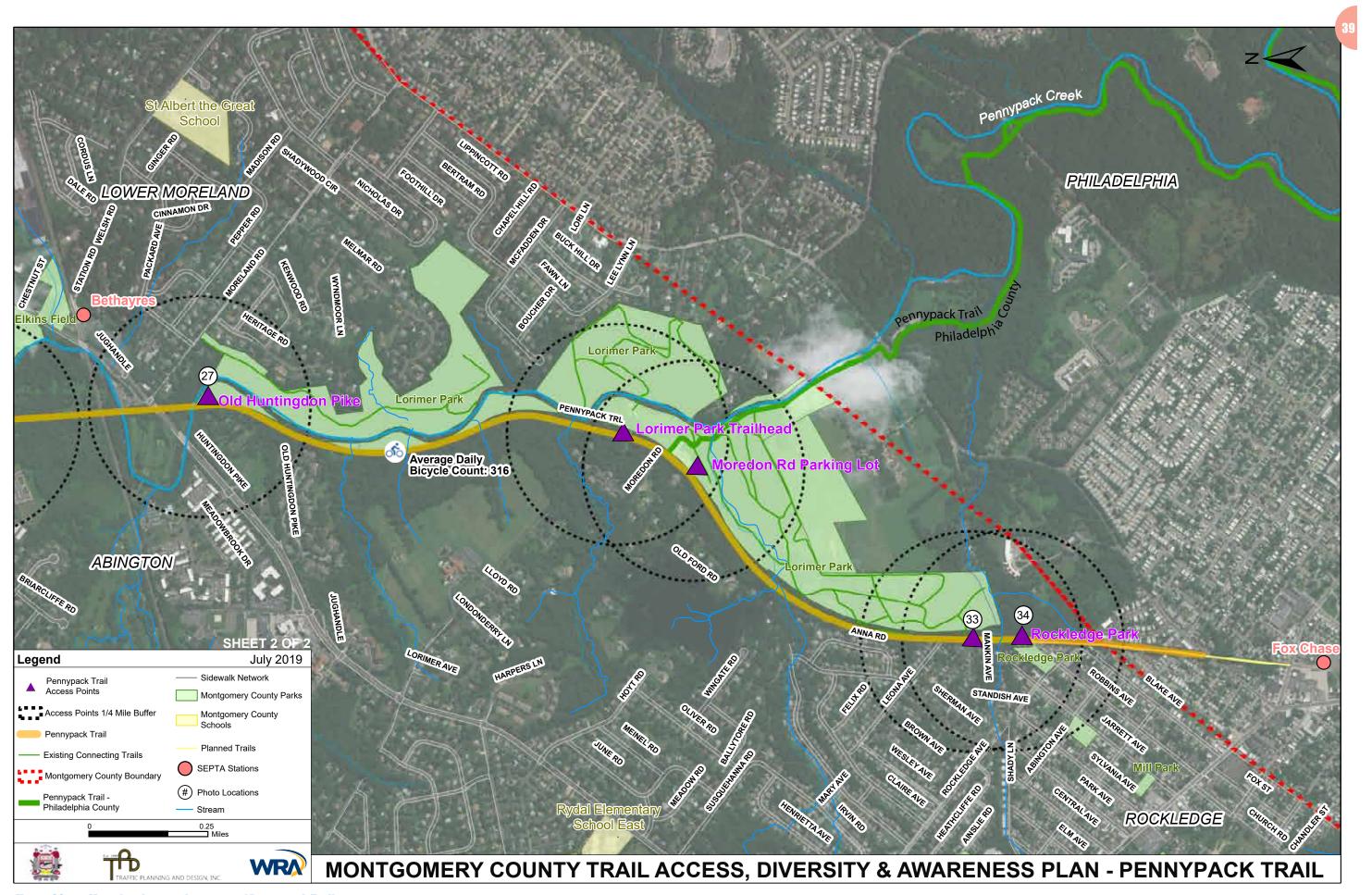


Figure 20 · · · Map showing southern part of Pennypack Trail



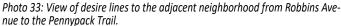




Photo 34: View Rockledge Park entrance with Pennypack Trail signage.

the Welsh Road Trailhead indicate that there were 79,000 visitors in 2017 and 68,000 visitors in 2018. There is an additional small parking area off Old Huntingdon Pike, approximately 0.5 miles south.

South of Old Huntingdon Pike, the trail enters Montgomery County's 230-acre Lorimer Park. Lorimer Park is owned and operated by Montgomery County and has amenities including hiking trails, picnic tables and a pavilion, restrooms, parking, and a ranger station/park office. There are two parking lots at Lorimer Park: a small 20-space parking lot that serves the picnic area, and the main parking lot for access to Lorimer Park and the Pennypack Trail that is located on the south side of Moredon Road. The main lot provides 130 paved spaces; the parking lot was expanded in 2016 to crate an additional 42-pace gravel parking area. This lot south of Moredon Road also serves as the trailhead for the Fox Chase Trail, which connects the Montgomery County section of the Pennypack Trail with the Philadelphia County section. The Moredon Road parking lot was expanded in 2016 to accommodate demand. Parking count estimates at the Lorimer Park trailhead indicate that there were 222,000 visitors in 2017 and 132,000 visitors in 2018. The decrease in 2018 is attributed to a number of rainy weekends. There are extensive residential developments to the east and west of Lorimer Park, but there are no bicycle or pedestrian facilities along Moredon Road, as the roadway has steep slopes and no shoulders.

A little less than a mile south of the main Moredon Road parking lot, there is an informal connection between the adjacent neighborhood to the Pennypack Trail at Robbins Avenue in Rockledge Borough. This access point also ties into a trail in Lorimer Park, and has an information kiosk, waste receptacles, and a bench. The final and southernmost access point along the Montgomery County section of the Pennypack Trail is the Rockledge Park trailhead. This trail connects to the walking path within Rockledge Park and on-street parking adjacent to the park. Robbins Avenue and Rockledge Park are the only access points for the last mile of the trail.

TRAIL USE DATA

DVRPC publishes pedestrian and bicycle counts to assess trail use within the Greater Philadelphia region. Bicycle counts have been conducted within the Pennypack Trail Study area north of Moredon Road. The most recent DVRPC counts were conducted in October of 2017, and the results are shown below in Figure 21.

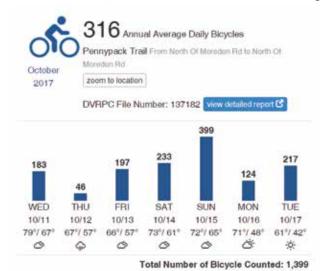


Figure 21 · · · Bicycle Counts for the Pennypack Trail from
North of Moredon Road to North of Moredon Road

OBSERVED ISSUES AND POTENTIAL SOLUTIONS

Information collected as part of site visits and mapping revealed issues with trail infrastructure and design, but public feedback from Phase 1 of Public Outreach was supposed to collect information about other barriers to trail use for the local population as well as potential solutions. Most members of the public engaged while tabling at Lorimer Park were not interested in completing the board exercises but had questions about future expansion of the Pennypack Trail to the north and how to connect to the Philadelphia portion of the trail in the south. Better maps and signage were discussed to address confusion about connectivity. Construction of the northern connection between County Line Road and Bucks County's Newtown Rail Trail is anticipated to commence in 2020.



Public outreach on the Pennypack Trail at Lorimer Park.

Some issues and potential solutions provided by focus group attendees include:

Access

 Parking lots are very crowded; since the Pennypack Trail was completed in 2015, parking counts at Lorimer Park have increased from 75,000 to 225,000 annually; the parking lot at Byberry Road has been doubled; all lots are full on weekends.

- City of Philadelphia waiting for funds to surface trail at the south end, leading to confusion among users
- Connections to surrounding community are limited; a connection to Lindy Apartment Complex and a link through the old golf course to Valley Road is desired; also interest in connecting to Bethayres Station via a boardwalk through wetlands.
- Navigation from parking lots into the trail is challenging; pedestrian crossings at the parking lots increase awareness to motorists about the trail; County needs to look at helping bikes and walkers navigate to Robbins Avenue from Huntington Pike.
- Abington is making progress with an on/off street route from Jenkintown Road to Robbins Avenue.
- Signage at Pine Road in Philadelphia needs to be checked.
- There is no wayfinding signage to direct users to the trail from nearby neighborhoods via bike and pedestrian corridors.

Programming

- No additional programming is recommended at this time due to staff capacity.
- Maintenance

Safety

- The existing bike repair station at the Byberry Road trailhead is inadequate; a second bike repair station is desired and feasible.
- No source of water along trail; there may be an opportunity to install a drinking fountain along the trail by Lorimer Park.
- A higher than average senior population lives within a relatively close proximity to this study area. Seniors like benches and there may be demand for more.
- There are no permanent restrooms along the trail; currently there are restrooms in the Lorimer Park picnic area, but users of this area of the park differ from trail users. There are Port-a-Potties at the three parking lots and at Bryn Athyn Station.

Tools to Increase Access, Diversity, and Awareness

The public outreach process uncovered a variety of factors impacting whether an individual chooses to use the trail for transportation or recreation. Sometimes, a lack of awareness of the trail location or how to access it was the limiting factor. Others were unsure whether it was appropriate to use the trail to take a walk, since they often observed runners and bicyclists using the trail. Because factors preventing trail use are numerous and diverse, there is not a single solution, and increasing the access, diversity, and awareness of the trail network will require a combination of approaches.

Based on feedback received from the general public and techniques used successfully in other communities, implementing improvements in the following five areas will improve the accessibility of the entire countywide trail system for all users:

- Signage and Connectivity
- Gateway and Trailhead Improvements
- Corridor Improvements
- Public Art
- Programming and Events
- Marketing and Communications

Signage and Connectivity

BACKGROUND

Signage and surface markings along a trail lets trail users know how to reach their destination while ensuring safety, promoting connectivity, and creating a more enjoyable experience. Inconsistent signage can confuse trail users and prevent potential new users from accessing the trail. Figures 22 and 23 show the range of wayfinding signage along the Schuylkill River Trail. Changes in branding, sign placement, and sign condition can discourage trail use among potential users because it can make it difficult for users to orient themselves and make the trail look neglected. Trail entrances should be clearly marked with consistent icons and branding, and should be visible from a distance so that they are welcoming to users accessing the trail network from adjacent neighborhoods.



Figure 22 · · · Wayfinding signage (left) leads to an unmarked and uninviting trail entrance (right) in Norristown

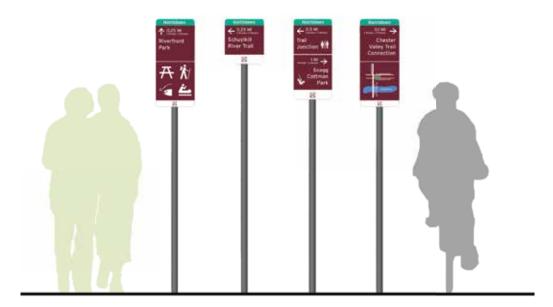


Figure 23 · · · Signage along the trail varies in quality and consistency

RECOMMENDATIONS

Develop a wayfinding signage system plan for all trails designated as being part of the countywide network

The wayfinding signage concepts shown in Figures 24 through 26 are to serve as a basis of design for an inter-agency effort to develop a consistent wayfinding signage system and branding for the countywide trail and surrounding community bike and pedestrian networks. The wayfinding signage system should connect users to and from the trail and surrounding destinations. Legible and cohesive wayfinding signage will enable a diverse set of users to locate where they are, successfully find their destinations, discover new destinations and accessible routes, and easily orient themselves in an appropriate direction. The wayfinding signage system will cultivate community pride and promote a positive impression to visitors. A successful wayfinding signage system will do the following:



On-Street Directional

These sign types are located within the public right-of-way in neighborhoods adjacent to the Schuylkill River Trail to provide directions to local destinations and trail connections. The signage includes direction, mileage and minutes to destinations and site amentities icons or map when appropriate. Signs are to be placed along ADA compliant pedestrian sidewalks or along bicycle networks. Example shown is for Norristown.



Off-Street Directional

These sign types are located at trail access points where the trail typically meets the street right-of-way, along the trail and/or where the main trail alignment meets an access point. This sign type identifies the trail, directions, information and may include a map. Additional trail signage could include surface signage (trail art), quarter-mile markers and interpretive signs.

Figure 25 · · · Example of Off-Street Directional Wayfinding Signage

Develop trail gateway signage that uses the same graphic language as directional signage

Gateway signage is intended to orient the user to their location in the trail network by identifying the trailhead, providing a map, and providing users with additional relevant information such as rules and emergency contact information. This type of signage is larger and contains more information.



Trailhead Gateway

These sign types are located at Schuylkill River Trail trailheads. The sign includes a simplified map of the regional trail networks and detailed maps showing local connections, destinations and amenities. The sign type includes space for additional information including jurisdiction/partner logos, condensed trail regulations and emergency or general contact information. The sign type may include multiple languages. For Norristown, this sign would include english and spanish languages.

Directional signage is smaller in size since it only provides directions to local destinations off the trail network and trail connections. Installing gateway and directional signage that is graphically consistent will introduce new users to the trail network and introduce existing users to new connections.

Include on- and off-street design elements

The signage concepts provided are for on-street and off-street directional and trailhead gateway signage. The on-street signage should be supported with MUTCD-compliant bicycle directional, turn, and confirmation signage. Providing both on and off-street signs acknowledges that many potential trail users walk and bike for transportation but may not know that a low-stress trail option is available to reach their destination. On-street signage that is visually similar to off-street signage helps create a complete bicycle and pedestrian network that is separate from the vehicular transportation network.

Increase amount of wayfinding signage to improve connectivity to trail access points

Wayfinding signage must be consistently placed proximate to the trail network so that it is visible to users approaching the trail from multiple directions. The wayfinding signage system plan will analyze the on-street bicycle and pedestrian network around each trail access point to determine where to place signage. Wayfinding signage on the trail will be placed at each trail access point and at any intersections with other trails. Wayfinding signage should emphasize the relationship between the trail, trail access and parking, and nearby commercial districts, such as downtown Pottstown, the North Coventry Mall, and local businesses along the trail corridor.

Make sure gateway signage is visible from the adjacent street network

During public outreach for this plan, multiple members of the public noted that they thought that trail systems were only for "serious" recreational bicyclists or runners. Since signage is often more visible than the trail itself, it needs to be visible and welcoming to all potential trail users from the adjacent street network.

Utilize icons whenever possible and provide text in English and a secondary language when there is a concentration of second language speakers

The trail network passes through areas of the county where more than 40% of households do not speak English at home. Providing signage in both English and a secondary language creates a more user-friendly system. Using icons to signify the amenities that are available at a given destination appeals to all users, whether or not they are fully literate in English.

Include distance to a destination in both mileage and time

Trail users who are new to the trail system or new to walking and biking may not know whether they have the level of fitness required to reach a given destination. Providing the distance of a destination in both mileage and time required to walk or bike that distance helps overcome this barrier and shows new users how convenient the trail system can be. Once users are on the trail, quarter mile-markers (See Corridor Improvement Recommendations, starting on page X) provide a convenient way to track progress to a destination, especially when they are used in conjunction with the distance information provided on wayfinding signage. Mile markers also provide a way for those using the trail for recreation to track their fitness goals.

Partner with local agencies that have a stake/jurisdiction with the trail Coordinate efforts with SRG to sign the trail.

Improve connectivity to the trail system

Signage directs potential users to the trail system, but safe connections for walkers

and people who ride bikes are necessary. For people living or working proximate to the trail system, there should be a safe, low-stress path for them to travel to the nearest trailhead. The ten-minute walk, or half mile radius, is the distance that both the National Park Service and Centers for Disease Control and Prevention use when considering park access for the purposes of promoting public health. A half-mile is also considered the distance that people are willing to walk before opting to drive. A ten-minute trip on a bicycle increases that radius to two miles, assuming the bicycle is traveling at 12 miles per hour. For this reason, physical connectivity for walkers should focus on a half mile radius from the trailhead, and physical connectivity for people who ride bikes should focus on connections within two miles of the trailhead.

Improve sidewalk connections to trail and make sure trails are ADA accessible

Sidewalks provide a safe route for people walking to access a trail. DVRPC is currently developing a regional sidewalk inventory that includes all of Montgomery County. The inventory is intended to assist community planning efforts and measures sidewalk mileage, condition, and connectivity. A "pedestrian facilities and planning portal" is currently under development, which will allow anyone to access an interactive map of sidewalk facilities. For more information on the status of this planning tool, see www.DVRPC.org/walk.

Portions of the Montgomery County trail network run through established urban or town centers that usually have adjacent networks of sidewalks that connect directly to trailheads. The pedestrian network within a half-mile radius, or ten-minute walk of the trailhead, should be inventoried and evaluated regarding accessibility, i.e. ADA compliant curb ramps, ADA compliant sidewalks, marked crosswalks, and signalized crossings over high speed/high volume roadways. Improvements to the sidewalk network should be prioritized and funding should be sought.

For portions of the trail network in more suburban and rural parts of the county, there may not be an existing sidewalk network adjacent to trailheads. If there is significant residential density in areas around the trailhead, the street network should be evaluated to determine if the addition of a sidewalk is feasible.

Add low-stress bicycle connections to proximate destinations, i.e. employment centers, parks, schools, commercial districts

Low-stress bike connections provide a safe route for people biking to access a trail. DVRPC recently released a Level of Traffic Stress (LTS) Map that classifies roadways based on the comfort of bicyclists. The assessment was based on the number of lanes, effective vehicle speed, and presence/type of bicycle facility.





Relaxing, Suitable for most riders



LTS 2

Comfortable for most adults



LTS 3

Comfortable for confident bicyclists



LTS 4

Uncomfortable for most

Figure 27 · · · Level of Traffic Stress Categories from the DVRPC Level of Traffic Stress Man

Streets were classified 1 through 4, with 1 being comfortable to ride for most riders including children, and 4 being uncomfortable for most riders. Examples of each category is included on page 47 in Figure 27.

The street network within a two-mile radius, or ten-minute bicycle ride of a trailhead, should be inventoried and evaluated in regards to low-stress connectivity using the "Existing Conditions LTS" layer in the DVRPC Level of Traffic Stress Map available at www.dvrpc.org/webmaps/BikeStress/. Streets that are classified LTS 3 or 4 should be further analyzed to determine feasible improvements that would lower the LTS to 1 or 2. Possible improvements include the installation of bicycle infrastructure such as a bike lane. Crossings over high LTS streets should also be assessed to ensure they are comfortable for bicyclists.

Proximate destinations including employment centers, parks, schools, and commercial districts should be identified to ensure there is low-stress connectivity between destinations and the trail. Connecting destinations to the trail via low stress routes increases the chances that the trail will be used for transportation between home and proximate destinations.

SHORT-TERM

Work with the local municipality, residents, and non-profit partners to install temporary wayfinding signage

Temporary wayfinding signage can provide an interim step before investing in permanent wayfinding signage. The organization *Walk [Your City]* (www.walkyourcity.org) can assist with the development of signs with their interactive sign designer. Using their website anyone can plan and design signs. *Walk [Your City]* fabricates the signs on corrugated plastic, and the local community can then install the signs with zip ties on existing poles. According to *Walk [Your City]*, there are four benefits to this approach:

- ♦ Experiment: Test with a pilot before you invest in more permanent pedestrian infrastructure
- ♦ Engage: Create new, approachable opportunities for public participation
- ♦ Encourage: Change community transportation choices for the better
- ♦ Educate: Help both neighbors and visitors see that it's not too far to walk

Walk [Your City] signs provide simple direction via an arrow, along with text describing how long it takes to walk to a given destination. There are also



Figure 28 · · · Walk (Your City) signage in Raleigh, NC

scannable codes on the signs so walkers can access a map with turn by turn directions. A sample sign is shown in Figure 28. This type of signage could be used to direct area residents to the trail, and to direct trail users from trailheads to destinations in adjacent communities.

Conduct analysis of half-mile walkshed and 2-mile bikeshed

Conducting a preliminary analysis of trailhead connectivity for trailheads in census tracts with an IPD score of 20 or higher. will identify the areas of greatest need based on the physical condition of the sidewalk and bicycle network and proximate population. Staff can utilize GIS and the online mapping tools provided by DVRPC for pedestrian connectivity and LTS as described above. This analysis will allow staff to understand Results can be used to engage local municipalities and other agencies around improvement planning, prioritization, and funding.

LONG-TERM

Fund a wayfinding signage system plan and phase sign implementation

A permanent Montgomery County wayfinding signage system should reflect recommendations included above. It should be implemented in phases, beginning with communities that have trail sections passing through census tracts with an IPD score of 20 or higher.

POTENTIAL PARTNERS AND FUNDING SOURCES

Different partnerships will be necessary depending on the location and type of proposed improvement. MCPC County Parks will be involved with any proposed improvements to the trail, but their jurisdiction only includes the trails and accompanying easements. Any proposed improvements off the trail corridor will require the involvement of adjacent municipalities. Possible partners include:

- Montgomery County Planning Commission
- Montgomery County Parks, Trails and Historic Sites
- Local Municipal Parks and Recreation Departments
- Circuit Trails Coalition
- Valley Forge Convention & Visitors Bureau
- Schuylkill River Greenways NHA (Pottstown)
- ACLAMO (Norristown and Pottstown)
- Pottstown Area Regional Recreation Committee (PARRC)

Possible funding sources include:

- DVRPC/William Penn Foundation Regional Trails Program
- PennDOT Multimodal Fund DCED Multimodal Fund
- DCED Greenways, Trails and Recreation Program
- DCED Greenways, Trails and Recreation Program
- Pottstown Area Health and Wellness Foundation Mini-Grant Program
- Transportation Alternatives Set-Aside
- Montco 2040 Implementation Grant Program
- Safe Routes to Parks

Gateway/Trailhead Improvements BACKGROUND

Trailheads are the first place a potential trail user interacts with the trail network. Trailheads that are hard to find and uninviting may discourage potential trail users. Trailheads are also where a trail user first encounters the adjacent neighborhood when leaving the trail network, therefore the physical condition and maintenance of the trailhead also impacts a trail user's opinion of the adjacent neighborhood.

RECOMMENDATIONS

Maintain and program trailheads for community use

Community trailheads should be well maintained and programmed for community use when possible. Trailhead improvements will incorporate the signage and connectivity recommendations detailed above. In addition to signage, the following physical improvements will create more visible and user-friendly connections to the trail network benefiting both trail users and the communities adjacent to the trail.

Name trailheads/access points

Formalize primary and secondary trail access points by naming them. Names should reflect the adjacent street name where possible, so people are easily able to find the trailhead based on their knowledge of the street network. Interpretive information at the trailhead should provide trail users and neighborhood residents with information reflecting the values of the local community. Interpretive signage could highlight important businesses and institutions or beautiful public spaces. When possible, any interpretive information should be developed in partnership with the local community.

Improve the appearance of trailheads from the street

Trailheads should be clearly visible and attractive when viewed from the surrounding street network. Someone standing on an adjacent street should be able to understand that the trailhead connects to an adjacent trail based on clearly visible signage (see recommendations in the Signage and Connectivity section). Based on the space available, trailheads could include amenities such as picnic tables, shade shelters, and benches that create a welcoming space. The trailhead should be designed to be low maintenance. All improvements should be developed in partnership with the local community.

Provide and maintain bike fix-it stations

Bike fix-it stations provide trail users the opportunity to tune up their bike before getting on the trail. They also are an amenity for trail users who are passing through. Free tools and an air pump are especially critical to trail users who cannot afford to take their bike to a bike shop and may not own the tools they need to make a repair. Bike fix-it stations need regular monitoring and maintenance to ensure the tools and air pump are in good working condition. Many communities partner with non-profit organizations who sponsor and maintain fix-it stations for free public use.

Provide bike parking

Secure bike parking makes it easy for someone leaving the trail network to secure their bike before traveling on foot to adjacent destinations. Bike parking encourages trail users to explore the surrounding community and visit destinations including parks and businesses. Bike parking is especially critical when the trailhead is adjacent to a commercial district.

Provide restrooms

Provide public restrooms at major trail gateways. Make sure to indicate on signs and maps where restrooms are available so users can plan their trips accordingly.

Provide water stations

Provide water stations adjacent to the trail where possible. Make sure to indicate on signs and maps where water stations are available so users can plan their trips accordingly and remember to bring a refillable water bottle.

Provide access to bikes via bike share or bike rentals

Provide access to bikes via a bike rental or bike share program at major trailheads. Many potential trail users cannot afford to purchase, maintain, or transport a bicycle. Providing access to low or no-cost bike share or rentals allows people to experience the trail by bike safely and affordably.

Develop new trailheads to connect adjacent destinations that are not able to be connected to the trail via low-stress routes i.e. employment centers, parks, schools, commercial districts

In some cases, adjacent destinations including employment centers, parks, schools, and commercial districts are geographically close to the trail but there is not a good low-stress connection to the trail network via the street and sidewalk network. In these cases, the feasibility of installing a new trailhead should be evaluated. Connecting destinations to the trail via new trailheads increases the chances that the trail will be used for transportation between home and proximate destinations.

SHORT-TERM

Trailhead cleanup and beautification

Work with the community and local organizations to beautify trailheads. Beautification can include regularly scheduled trash clean ups and landscaping. Any landscaping improvements will require a maintenance agreement with Tailhead" program to encourage community ownership of the space.

Work with the community to plan capital improvements for existing trailheads

Once a relationship is developed with the community in support of trailhead cleanup and beautification, facilitate a meeting to discuss what long-term improvements would make the trailhead an asset to the community. Once there is a list of desired amenities, put together a concept design and seek funding (see the long-term section below).

Identify locations for new trailheads

Work with local municipalities, agencies, and non-profits to identify critical adjacent destinations that are not easily connected to the trail network. Develop a system to prioritize new trailhead locations and seek funding (see the long-term section below).

LONG-TERM

Implement capital improvements at prioritized trailheads

Fund and construct capital improvements at prioritized trailheads. Make sure to keep the community engaged after planning is complete by providing them regular updates about project timing. Schedule a ribbon cutting to celebrate and work with the community on regularly scheduled clean-ups after project completion.

Implement new trailhead locations

Fund and construct new trailheads that provide connections to adjacent employment centers, parks, schools, and commercial districts. Make sure to incorporate the recommendations in the signage and connectivity section to ensure that the public is aware of the new trailhead location.

POTENTIAL PARTNERS AND FUNDING SOURCES

Different partnerships will be necessary depending on the location and type of proposed improvement. MCPC and the County Parks Departnent will be involved with any proposed improvements to the trail, but their jurisdiction only includes the trails, accompanying easements, and county park land. Any proposed improvements off the trail corridor will require the involvement of adjacent municipalities. Possible partners include:

- Montgomery County Planning Commission
- Montgomery County Parks, Trails and Historic Sites
- Municipal Parks and Recreation Departments
- Schuylkill River Greenways NHA (Pottstown)
- ACLAMO (Norristown and Pottstown)

Possible funding sources include:

- DVRPC
- DCED Greenways, Trails and Recreation Program
- William Penn Foundation Creative Communities funding area

Corridor Improvements

BACKGROUND

People use trails for transportation and recreation. People may use the trail for a short local trip between adjacent trailheads, or for a longer trip through multiple municipalities. Some people may be starting their fitness journey with a short walk or bike ride, while others may be training for a marathon or on a long distance bike ride. Some people enjoy the trail by themselves, while others travel as a group. The trail network should be designed to accommodate people of all ages and abilities.

RECOMMENDATIONS

Trails provide a safe place to walk or bike away from vehicular traffic, but unlike walking or biking through a street network, they do not offer many places to stop and rest, use the bathroom, or get a drink of water. The following corridor improvements support trail users regardless of how far they are traveling:

Provide places to rest

It is important to provide a place to rest for older trail users, children, or those working up to walking and biking longer distances. Benches should be provided every quarter mile within a two-mile radius of trail access points, especially if those access points are within a municipality that may have people walking to access the trail.

Provide public restrooms

Provide public restrooms adjacent to the trail where possible. Make sure to indicate on signs and maps where restrooms are available so users can plan their trips accordingly.

Provide quarter-mile markers along the trail

Quarter mile-markers provide a convenient way to track progress to a destination especially when they are used in conjunction with the distance information provided on wayfinding signage. Quarter-mile markers also provide a way for those using the trail for recreation to track their fitness goals.

Clear trees to improve sight lines and create scenic overlooks

Portions of the trail network can feel isolated due to dense tree growth on both sides of the trail. Selectively clearing trees to improve sight lines along the trail and create views of scenic views of bodies of water or parks can increase user comfort and increase the appeal of the trail corridor for recreational users.

Explore feasibility of Installing adult exercise equipment

Installing adult exercise equipment adjacent to a trail can turn a walk or bike ride into a free complete workout. Adult exercise equipment is an amenity that people will travel to reach, providing the extra incentive a potential trail user may need to use the trail system.

SHORT-TERM

Identify potential locations for benches and water stations

Focusing on trail segments adjacent to communities with an IPD score of 20 or higher, MCPC and Parks staff should identify potential locations for benches and water stations.

Identify potential locations for scenic overlooks

Focusing on trail segments adjacent to communities with an IPD score of 20 or higher, MCPC, County Parks staff, and Norristown Parks and Recreation and Public Works staff should identify locations where selectively clearing trees can create scenic overlooks.

LONG-TERM

Fund and install benches and water stations

Advertise the locations of new benches and water stations through local organizations that work on public health with seniors and youth.

Expand bike share/bike rentals (Pottstown)

Schuylkill River Greenways currently operates a free bike rental program for people aged 16 and up at their headquarters at Riverfront Park in Pottstown. There is a demand for an expanded program that provides bikes in other parks including Memorial Park. There is also a demand for bikes that can be used by youth. Explore opportunities to create a coalition between non-profit organizations and local agencies to support an expanded bike share program.

Implement bike share/bike rentals (Norristown)

Identify an operator who can implement a free bike rental program for Norristown residents. A potential location for the rentals is the Trail Junction Center building located at the intersection of Lafayette Street and DeKalb Street, adjacent to the Schuylkill River Trail.

Create an overlook into Riverfront Park (Norristown)

Creating an overlook into Riverfront Park has been identified as a way to enhance safety of park users. Thick vegetation currently blocks visibility into the park. Work with Norristown Parks and Recreation staff to develop an overlook platform into Riverfront Park from the SRT.

POTENTIAL PARTNERS AND FUNDING SOURCES

Because trail corridors are under the jurisdiction of Montgomery County, most corridor improvements will not require partnerships in order to be implemented. The only corridor improvement that may require working with adjacent land owners is clearing trees to create lines of sight and scenic overlooks. Opportunities for scenic overlooks will likely only exist where a trail is running through parkland or adjacent to another publicly owned resource. County Parks will be involved with any proposed improvements to the trail, but their jurisdiction only includes the trails, accompanying easements, and county park land. Any proposed improvements off the trail corridor will require the involvement of adjacent municipalities. Possible partners include:

- Montgomery County Parks, Trails and Historic Sites
- Municipal Parks and Recreation Staff

Possible funding sources include:

- DCED Multimodal Fund
- PennDOT Multimodal Fund
- DCED Greenways, Trails and Recreation Program
- People for Bikes
- DVRPC/PennDOT Transportation Alternatives Set-Aside Program

Public Art

BACKGROUND

Public art is art that exists in a public space and is visually and physically accessible to the public. Historically, public art often took the form of a monumental bronze statue, but today, public art can be any size or form whether permanent or temporary, ranging from sculptures or murals to a performance or festival. According to the Association for Public Art, "every public art project is an interactive process involving artists, architects, design professionals, community residents, civic leaders, politicians, approval agencies, funding agencies, and construction teams." Successful public art reflects a collaboration with the community where the art is hosted.

According to the American Planning Association, utilizing arts and culture in planning has several benefits. Organizing public outreach around a public art project enhances community engagement and participation. It is often easier to get the public engaged in the development of a tangible, short-term art project than a long-term planning effort. Collaborating with the public on the form and appearance of the art can strengthen local cultural values and preserve local heritage and history. When the local community is a part of creating something on view to the broader public, it also helps to create and enhance sense of place, both for area residents and visitors. Lastly, public art can enhance economic vitality by facilitating collaboration between the business community and residents and by attracting new visitors to the area.





In 2018 the National Endowment for the Arts released a guide entitled "How to Do Creative Placemaking." This document provides critical guidance on how to successfully engage the community around public art and creative placemaking. By incorporating the best practices detailed in this document, working with the public to create and install art along Montgomery County's trails could play a valuable role in attracting new and diverse users to the trail system.

RECOMMENDATIONS

Work with the public to create public art installations along the trail and at trailheads to integrate the trail with the community it passes through

Identify appropriate locations to host public art installations. Then contact local non-profits, organizations, and individuals who work in the creative arts space and see if they are interested in facilitating a public art project. The facilitating artist(s) should contact residents who live directly adjacent to the installation site as well as local civic groups, organizations, and schools.

SHORT-TERM

Pursue temporary art installations such as trail surface chalk art at gateways

Small temporary projects are a good way to gauge interest in public art projects and begin to engage local residents around planning in their community.

Identify locations for murals on walls adjacent to the trail and identify community partners

A colorful mural can make a space feel more welcoming and walkable. Installing a mural creates a destination that people want to visit. Engaging the community in identifying appropriate locations for public art ensures public buy-in and the long term success of the project.

Identify locations for iconic sculptures or creative bike racks and benches at trailheads and identify community partners

In areas that do not have space for a mural, a sculpture can also create a welcoming space that encourages walking. Art can also be functional. If a trailhead is identified as a location for a bike rack, consider installing a creative rack instead of a standard one. Creative bike racks and benches are available direct from a manufacturer or can be designed and manufactured locally in partnership with an artist or fabricator. Identify an artist or designer who has experience in creating durable and low maintenance outdoor sculptures.

LONG-TERM

Plan, design, fund, and install murals on walls adjacent to trail

Once the site is identified work can begin on mural design. The type of collaboration between the community and the artist will be determined during the planning stages of the project. Seek funding for the installation of murals from public, foundation, and corporate entities. Involve the community in installation as feasible.

Installation of iconic sculptures or creative bike racks at gateways

Once the site is identified work can begin on sculpture design. The type of collaboration between the community and the artist will be determined during the planning stages of the project. Seek funding for the installation of sculptures























from public, foundation, and corporate entities. Involve the community in installation as feasible.

POTENTIAL PARTNERS AND FUNDING SOURCES

Different partnerships will be necessary depending on the location and type of public art installation. County Parks staff will be involved with the installation of any proposed public art within the trail easement. Any proposed improvements off the trail corridor will likely be under the jurisdiction of adjacent municipalities, utilities (e.g. PECO), or private property owners. Community-based arts organizations are likely best positioned to facilitate the development of community-driven public art installations. Possible partners include:

- Montgomery County Parks, Trails and Historic Sites
- CCATE (Norristown)
- Art Fusion 19464 (Pottstown)
- Schuylkill River Greenways NHA (Pottstown)
- PARRC (Pottstown)
- Norristown Art Center
- Brush with the Law (Norristown)
- Hopeworks (Norristown)
- Expressive Path (Norristown)
- ACLAMO (Norristown and Pottstown)
- Abington Art Center

Potential funding sources include:

- William Penn Foundation
- Montgomery County
- Bloomberg Foundation (asphalt art)
- AARP Placemaking grants
- Keep Pennsylvania Beautiful (fresh paint days)
- Pennsylvania Council on the Arts
- Pew Center of the Arts and Heritage
- Dolfinger-McMahon Foundation
- 1675 Foundation
- Independence Foundation
- ArtsPlace
- Americans for the Arts
- Greater Philadelphia Cultural Alliance
- National Endowment for the Arts

Programming and Events BACKGROUND

Physical improvements to the trail system will go a long way towards creating a more visible and accessible network, however some potential users may need more

encouragement or a reason to visit the trail for the first time. Programming activities and events are regularly used to attract new users to the county's park system. Similarly, activities and events can be used to attract new users to the trail system. As detailed in the Literature Review in the appendix, minority ethnic groups often use parks as social spaces, so creating more opportunities for users to walk, jog, or bike was part of a larger group may increase diversity within the trail network.

RECOMMENDATIONS

Increase programming and improve accessibility of existing programming on and adjacent to the trail

Having regularly scheduled activities on and in public spaces adjacent to the trail will expose more potential users to the trail network. Inform the local community about scheduled events by distributing flyers, attending local civic association meetings, and communicating with community leaders and organizations. Make events free and open to the public.

Partner with organizations that work with underserved populations to provide guided opportunities to use the trail

Underserved populations include youth, elderly, ethnic minorities, and the economically disadvantaged. Working with area youth is a great way to introduce new users to the trail system. After visiting the trail with a youth organization or school group, youth may introduce their parents or extended family to the trail. Elderly users may need additional support to use the trail system, including more regular access to shade, water, or places to rest that can be provided in a more structured setting. After introducing someone to the trail for the first time they may consider using it for recreation to stay fit, or for transportation to access destinations more safely.

Expand "self-quided" programming like the Montgomery County Trail Challenge

The Montgomery County Trail Challenge is a passport-style challenge that encourages trail users to collect markers at thirteen participating trails. While this program is a great way to encourage people to visit multiple trails within the County, it does not encourage people to explore along a given trail corridor. People without access to a car may not have the capacity to visit each. Consider partnering with the local municipality to create a local park and trail challenge that encourages residents to explore their own community on foot and by bicycle.

SHORT-TERM

Provide educational walking and biking tours of the trail network

Partner with local cultural and environmental organizations to provide guided educational tours along the countywide trail system. Tours can be tailored to different age groups and skill levels.

Explore the feasibility of developing "self-guided" programming featuring local parks and trails

Connect with local organizations to identify cultural resources or points of interest along the trail.

Host pop-up events or games in spaces adjacent to the trail

Events such as a free movie night, free concert, or outdoor games could attract new users to spaces adjacent to the trail. Event marketing can highlight the proximity of the trail, or even ask attendees to use the trail to get to the event. Events should be a partnership between the County and the local municipality.

LONG-TERM

Invest in pavilions that will support ongoing programming in areas adjacent to the trail

Pavilions provide shade, a place to rest, and a place for groups to gather. They can also be used to support pop-up events. Many residents of urban municipalities have limited outdoor space in which to gather. The availability of a pavilion within walking distance of home creates a bigger backyard and invites people to use the space.

POTENTIAL PARTNERS AND FUNDING SOURCES

Different partnerships will be necessary depending on the location and type of programming. County Parks staff will be involved with event permitting for activities scheduled along the trail. Local municipalities may be involved with permitting for activities scheduled for spaces adjacent to the trail. Possible partners include:

- Montgomery County Parks, Trails and Historic Sites (PTHS)
- Local parks and recreation departments
- Friends of the Pennypack
- Schuylkill River Greenways NHA (Pottstown)
- ACLAMO (Norristown and Pottstown)
- STRIVE Initiative (Pottstown)
- Local healthcare organizations
- Local churches
- Local schools
- Local businesses

Potential sources of funding include:

- People for Bikes
- DVRPC/PennDOT Transportation Alternatives Set-Aside Program

Marketing and Communications

BACKGROUND

Currently, marketing for the Montgomery County Trail system is primarily directed at recreational users who are familiar with the park and trail systems. Maps highlight places for trail users to park their cars, but do not show how walkers or people riding bikes can access the trail system.

During public outreach for this plan, many Norristown residents were unaware of the location of the trail or how to best access it. The available maps for the Schuylkill River Trail show the entire trail which extends across the county. As a result, the map does not provide a sufficient level of detail to show local trailheads where Norristown residents can access the trail. The map does not explicitly show trailheads, and only references the Downtown trailhead. The Schuylkill River Greenway online interactive map also only shows one trailhead to the Schuylkill River Trail in Norristown, at the Norristown Transportation Center.

RECOMMENDATIONS

Develop local trail maps that are easy to read and relevant to local users

A local map showing where trailheads are in relation to the street grid will support local use of trail system by people on foot or on bike. Maps should indicate the amenities available at each trailhead, nearby parks, as well as distances and time between local access points for walking and biking. This information will increase the chance that local users will look to the trail as a transportation option or recreational resource.

Representation matters

When photographs are included as part of marketing for the trail, they should include people of color and people of all ages and abilities. This shows potential trail users that the trail system is not just for "serious" bicyclists or runners.

Provide all trail brochures in English and secondary languages; make sure brochures explain both trail rules and etiquette

For trails located in communities where there is a high percentage of secondary language speakers, trail brochures and maps should be provided in both English and the secondary language. Often second language speakers are unaware of trail rules and etiquette. Brochures should clearly articulate both rules and how to safely use the trail.

Provide marketing materials in print and digital formats

Local maps and brochures materials should be provided and distributed in print and digital formats. Print materials can be distributed via local organizations, schools, parks, transit, and businesses. Digital materials can be distributed via social media and municipal email lists.

Identify media channels where ethnic minorities access information about news and public events and use those channels to market the trail system

Often ethnic minorities depend on their own newspapers, radio stations, or public access channels. Identify the sources where the community gets their information and create marketing materials to suit that media type.

SHORT-TERM

Develop local maps (print and web)

Create local maps for each trail segment that passes through a communty that scores 20 or higher on DVRPC's IPD Index.

Ensure that website content is up to date

Create a directory/list of links to project pages. Ensure that all links are valid and reflect current information.

Send print copies of local maps in English and a secondary language to local residents

Distribute print copies of all maps to all households located within a half-mile radius, or ten-minute walk of the trailhead. Work to distribute print copies to businesses and organizations located within that radius.

Identify social media champions who can promote the local trail system

Many young people rely on social media to access information about their communities. Work with local youth organizations to build awareness about the trail system on social media.

Do an interview with the Norristown School District TV program to promote the trail

A county representative should do an interview with John Doyle for the Norristown School District TV program. The interviewee can focus on teaching school students how to access the trail and benefits of trail use. Ideally, the interview can be used to advertise an upcoming event scheduled along the trail.

Identify media channels where ethnic minorities access information about news and public events

Work with local organizations who work with ethnic minorities to identify channels to promote the trail system.

Explore the feasibility of advertising the trail network where people report for jury duty

People reporting for jury duty reflect a representative section of Montgomery County residents that are a captive audience. Explore the feasibility of advertising the trail system in the waiting area.

LONG-TERM

Develop trail application

Explore the creation or adoption of a mapping application that provides interactive walking and biking routes that integrate the trail network with trips to local destinations. Consider working with the Clean Air Council to expand the Go Philly Go mapping application to include destinations in Norristown, Pottstown, and the Pennypack corridor.

Create content for other distribution channels including tv and radio and use those channels to market the trail system

Develop partnerships with local organizations and youth groups to create multimedia content for distribution to alternate media outlets.

POTENTIAL PARTNERS AND FUNDING SOURCES

Currently Montgomery County produces brochures and maps in house. Expanding the distribution of that marketing may require additional resources that could be provided via partnerships with area non-profits:

- Greater Valley Forge Convention & Visitors Bureau
- Norristown Chamber of Commerce
- Pottstown Chamber of Commerce
- Local school districts
- Local newspapers and television news outlets
- Local media production companies

Potential sources of funding include:

• Greater Valley Forge Convention & Visitors Bureau

Concept Designs for SRT Norristown Study Area

The following concept designs apply the recommendations from the previous section to the SRT Norristown Study Area. This section includes recommendations for corridor-wide improvements and concept designs for the trail at the Haws Avenue Trailhead, Chain Street Trailhead, Norristown Transportation Center vicinity, and Lafayette Street corridor.

Develop new trailheads to connect adjacent destinations that are not able to be connected to the trail via low-stress routes i.e. employment centers, parks, schools, commercial districts.

Corridor-wide Improvements

Implement corridor improvements including benches, restrooms, and water fountains.

The below image provides an overview of the SRT Norristown Study Area, noting locations where corridor improvements such as benches, restrooms, and water fountains should be provided. It also notes the location of each proposed gateway/trailhead improvement further detailed on pages 63 to 72.



Figure 29 · · · SRT Norristown Study Area Overview with Proposed Corridor and Gateway Improvement locations

Explore the feasibility of formalizing the trailhead at Ernest Station Road

Explore the feasibility of establishing a trailhead at Ernest Station Road to the east of Norristown. While access to the SRT already exists at Ernest Station Road, a formal trailhead would provide a connection to the large employment center located south of West Ridge Pike east of I-276 via Conshohocken Road. If on-road bicycle improvements are made to Conshohocken Road, trail users will have a low-stress connection to several employment opportunities. It would also provide safer access to destinations on West Ridge Pike.



SRT at Ernest Station Road - Establish trailhead and strengthen connection from SRT to employment hub.

Explore the feasibility of creating a trailhead west of Port Indian Road

Another large employment and retail center is located west of Port Indian Road off South Trooper Road. Currently, accessing this area from the trail requires traveling on Port Indian Road and Egypt Road, a high-stress and circuitous connection. Establishing a new trailhead to the west of Port Indian Road would provide a direct connection to the back of the employment/retail center at General Armistead Avenue, which is a low stress bike route.



SRT at Port Indian Road - Feasibility study for access point to connect the SRT to employment hub, shopping, centers, and surrounding residential areas.

Haws Avenue Trailhead Improvements

This project proposes improving access to and visibility of the existing trailhead by creating a new entrance space with plantings, public art, gateway and directional signage. Haws Avenue will serve as the main trailhead to the SRT for the west side of Norristown. Phasing improvements is an option. Potential challenges at this location include right-of-way easements/acquisition, access control, and maintenance. The purpose of the project is to:

- create a welcoming environment that encourages all Norristown residents to explore the SRT and Riverfront Park, especially those living within close proximity to the trail,
- improve pedestrian and bicycle safety,
- improve pedestrian and bicycle access through a series of gateway and trailhead enhancements, and
- encourage active recreational use and use as a multimodal transportation alternative for commuting to Philadelphia, Chester County, and other parts of Montgomery County.

Feedback obtained during this study indicated that residents and current trail users have safety and access concerns for the section of the SRT near Riverfront Park. The recommended physical improvements enhance and create a welcoming and accessible route to the SRT and Riverfront Park for an underserved area in Norristown with limited access to recreational space and multimodal options. The graphic on page 64 highlights various physical improvements recommended below.

SIGNAGE AND CONNECTIVITY

Wayfinding signage should be placed along Haws Avenue, Main Street, Marshall Street, and West Washington Street to direct users to the Haws Avenue Trailhead to the SRT. Wayfinding signage should inform users of multimodal routes incorporating the SRT to destinations within Norristown and beyond. Gateway signage should include information such as trail rules and "how to" tips, as well as directions to the future Trail Junction Center and its amenities. At the intersection of Haws Avenue and West Washington Street, signage should distinguish between Riverfront Park access via Haws Avenue and trail access via Haws Avenue. Update information on the existing trail gateway triptych regarding Norristown's Business District, and provide signage alerting trail users to the upcoming trailhead and maps, as the triptych is oriented to people accessing the trail via Haws Avenue. All signage should be multi-lingual (English and Spanish) and include symbols as appropriate. See signage recommendations in the previous section, Corridor-wide Improvements and Connectivity.

GATEWAY IMPROVEMENTS

Gateway improvements include:

 Remove overgrown vegetation and debris to enhance visibility and sightlines along the trailhead to the trail.

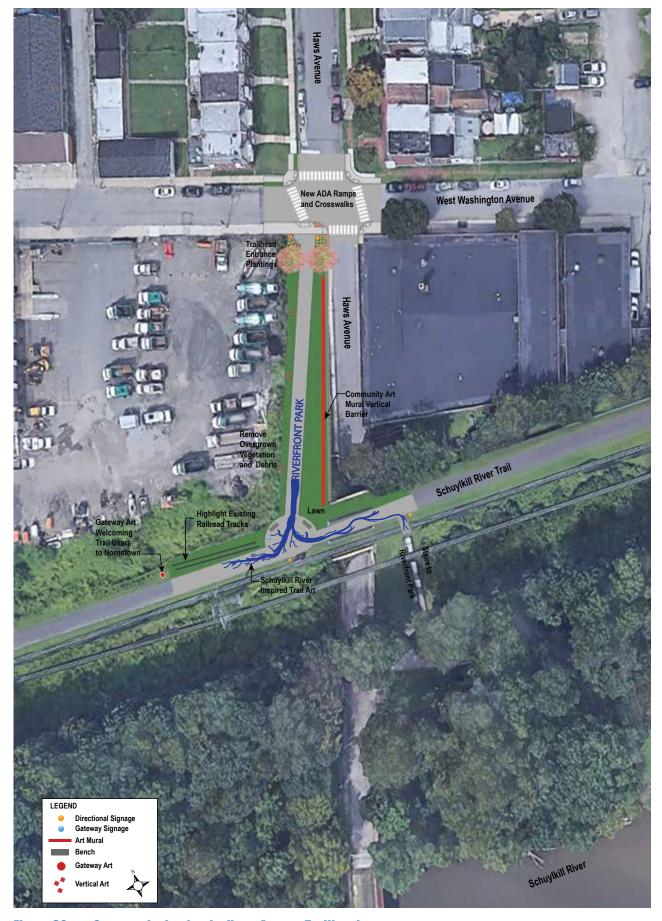


Figure 30 · · · Concept design for the Haws Avenue Trailhead

- Install new ADA ramps and crosswalks along W. Washington Avenue and Haws Avenue intersection.
- Construct a wall or vertical barrier to keep users from edge of Haws Avenue south of intersection with W. Washington Street.
- Add directional signage at the entrance of the trailhead and at intersections surrounding the trailhead entrance including at the stairs to Riverfront Park, Main Street and Haws Avenue, and Marshall Street and Haws Avenue.
- Replace existing asphalt path to trail, as needed.
- Public art as identified below.

CORRIDOR IMPROVEMENTS

See the Corridor-wide Plan recommendation for location of additional amenities including mile markers, benches, bathrooms, and water sources along the SRT. In addition:

- Extend the asphalt adjacent to the north of the Schuylkill River Trail to include an area for benches and gateway signage.
- Highlight existing railroad tracks with information about the corridor's history.

PUBLIC ART

The local community should be engaged around the creation of any public art in order to inspire community ownership of the trail as a community asset. The creation of gateway art, vertical sculptures, and/or a wall mural will provide a visual connection that draw users to and from the trail. Trail surface art on the connecting trailhead pathway and intersection area with the Schuylkill River Trail both beautifies the area and highlights the community connection. A mural on the trail and/or other public art would also encourage trail users to slow down as they pass the trailhead, enabling people to enter the trail system safely.

PROGRAMMING

Due to the small size of the area, no programming is suggested at this location. This trailhead will provide access and support programming at Riverfront Park. A calendar featuring upcoming events should be posted at trailheads and updated monthly.

POTENTIAL CHALLENGES

Montgomery County's easement limits control the extent of improvements that can be implemented. The county holds an easement with PECO. Coordination with PECO and adjacent property owners will be key to implementing physical improvements.

Chain Street Trailhead Creation

This project proposes to formalize trail access at the south end of Chain Street in Norristown through the installation of new paved surfaces, signage, plantings, pavement markings, and off-street parking improvements (see graphic on next page). This project also aims to connect the proposed trailhead to Riverfront Park, located on the south side of the trail. Phasing the proposed improvements is an option. Potential challenges at this location include right-of-way easements/acquisition, ,, maintenance, and approval from PECO to plant trees may be necessary. The purpose of the project is to:

- strengthen the connection between the neighborhood and the SRT,
- improve pedestrian and bicycle access and safety, and
- encourage multimodal transportation and recreation.

Currently, the southern end of Chain Street provides unofficial access to the SRT for the adjacent neighborhood and Riverfront Park as evidenced by worn paths and trail user feedback. Currently no sidewalk or asphalt pathway exists to connect users from the adjacent neighborhood to the trail at this location. Due to a lack of visibility and "eyes on the street," this area is perceived by trail users as unsafe. The recommended physical improvements create an accessible route to the SRT and Riverfront Park for an underserved area in Norristown with limited access to recreational space and multimodal options and increase perceived safety for existing trail users.

SIGNAGE AND CONNECTIVITY

The Chain Street Trailhead represents a major opportunity to increase connectivity within the neighborhood as well as enhance awareness and connectivity to the SRT. The eastern boundary of West Washington Street currently terminates with its intersection at Potts Alley. A 0.35-acre parking lot prevents West Washington Street from connecting with the section identified for the proposed Chain Street trailhead improvements. Creating this connection would help activate a remote area and create a more welcoming environment for potential users of both the SRT and Riverfront Park. This effort would require support and coordination with the Municipality of Norristown.

Proposed short-term improvements include wayfinding signage along West Main Street, Chain Street, Potts Alley, West Lafayette Street, and West Washington Street to direct users to the SRT and Riverfront Park. Wayfinding signage should inform users of multimodal routes incorporating the SRT to destinations within Norristown and beyond. Sharrows along Chain Street will facilitate access to the trail for bicyclists. Gateway signage should include information on trail rules and "how to" tips, as well as directions to Riverfront Park and how to access the future Stony Creek Trail. All signage should be multi-lingual (English and Spanish) and include symbols as appropriate. See signage recommendations on pages 44 and 45.

GATEWAY IMPROVEMENTS

Gateway improvements include:

- Extension of the asphalt roadway (potential future extension of West Washington Street) and curb to connect Chain Street and Pearl Street in the east. This will allow for 11 new on-street parallel parking spaces between Pearl Street and Chain Street. Incorporating landscaping improvements between this new roadway and the trail, including flowering trees, will beautify this area and turn it into an asset for the neighborhood.
- A concrete plaza between the south end of Chain Street and the trail that connects the neighborhood sidewalk and bikeway network with the trail.
- Extension of the sidewalk along Chain Street to connect to proposed plaza, and

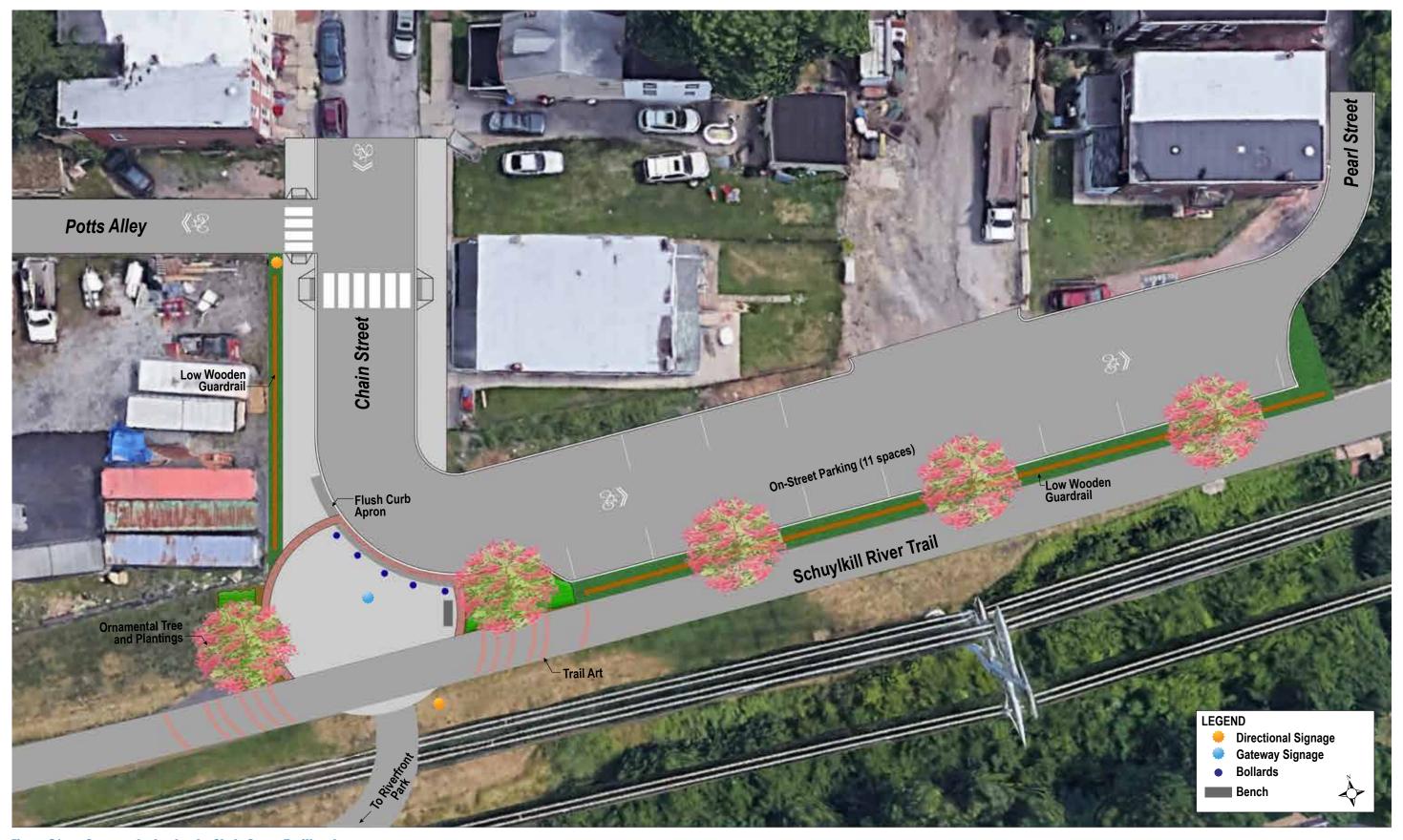


Figure 31 · · · Concept design for the Chain Street Trailhead

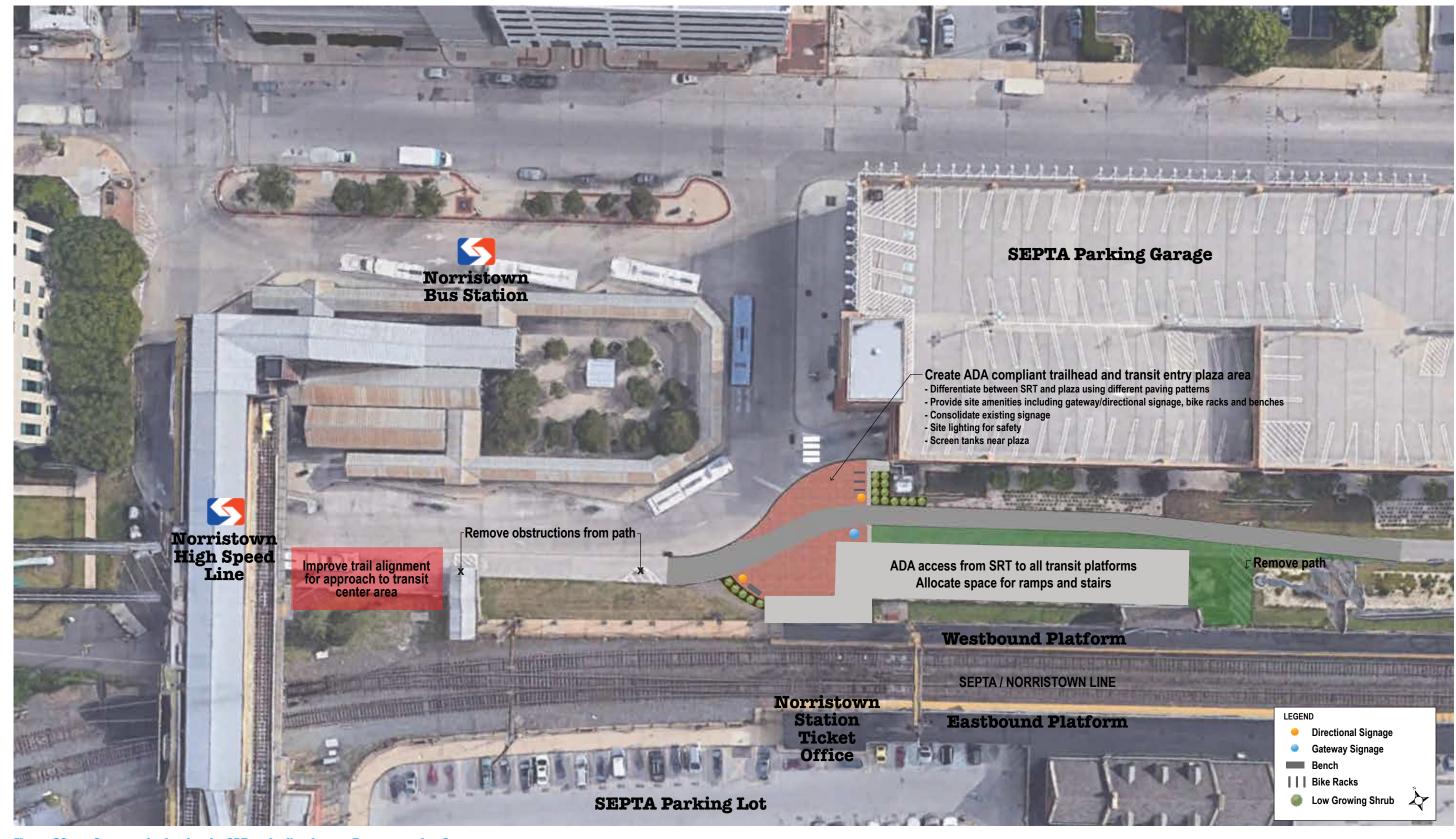


Figure 32 · · · Concept design for the SRT at the Norristown Transportation Center

- an addition of a low wooden guardrail along Chain Street between Potts Alley and the trailhead.
- Bollards between the plaza and roadway that allow bicycle and pedestrian traffic
 to enter the trail but protect the trail from vehicular traffic. Bollards will be
 placed to discourage vehicle access while still allowing for emergency vehicle to
 access the trail without removing the bollards.
- A bench that provides a place for trail users to sit and rest.
- A low wooden guardrail (instead of a fence) encourages trail users to enter the trail at the plaza and separates the trail from vehicular traffic. A drainage swale may be necessary between proposed parking and the Schuylkill River Trail.

CORRIDOR IMPROVEMENTS

See the Corridor-wide Plan recommendation on page 61 for the location of additional amenities, including mile markers, benches, bathrooms, and water sources along the Schuylkill River Trail.

PUBLIC ART

The local community should be engaged around the creation of any public art in order to inspire community ownership of the trail as a community asset. A mural on the trail and/or other public art would also encourage trail users to slow down as they pass the trailhead, enabling people to enter the trail system safely.

PROGRAMMING

Due to the small size of the area, no programming would be suggested at this location. This trailhead will provide access to and support programming at Riverfront Park.

Norristown Transportation Center SRT Improvements

This project involves upgrading access, visibility, and circulation of the SRT within the vicinity of the NTC. Potential challenges at this location include the fact that space for signage adjacent to the trail may be constrained due to the provisions of the existing 12-foot trail easement with PECO, encroachment into SEPTA right-of-way, and maintenance considerations. The purpose of this project is to:

- improve pedestrian and bicycle access and safety by reducing conflicts between trail users and transit users in the vicinity of the NTC,
- improve access and visibility to transit, and
- encourage multimodal transportation and recreation.

Currently, the trail in the vicinity of NTC has obstructions within the trail that cause conflicts between trail users and transit users. The recommended physical improvements enhance and improve the safety of Schuylkill River Trail users and enhances accessible routes to and from transit.

COORDINATION

MCPC should function as the lead agency, with agency partners including SEPTA, PECO, the Municipality of Norristown, and Montgomery County Parks staff. Local community organizations, non-profits organizations, and the general public should be engaged before advancing this project to design.

SIGNAGE AND CONNECTIVITY

Wayfinding signage should be placed throughout the NTC, and along Swede Street, East Main Street, East Lafayette Street and DeKalb Street. Wayfinding signage should inform users of multimodal routes incorporating the SRT to destinations within Norristown and beyond. Gateway signage should include information on-trail rules and "how to" tips, as well as directions to the Trail Junction Center and its amenities.

All signage should be multi-lingual (English and Spanish) and include symbols as appropriate. See signage recommendations in the Corridor-wide Plan section.

GATEWAY IMPROVEMENTS

Provide updated pavement and markings, access, amenities and plantings for trail and transit users.

CORRIDOR IMPROVEMENTS

See the Corridor-wide Plan recommendation for location of additional proposed amenities, including mile markers, benches, bathrooms, and water sources along the SRT.

PUBLIC ART

Public art in this area is being concentrated in the Lafayette Street Gateway area (see next section).

PROGRAMMING

Due to the small size of the area and use of this area, no programming would be suggested at this location. This trailhead will provide access and support programming at Lafayette Street Gateway.

Lafayette Street Gateway and Programming Opportunities

This project involves activating the trail and Lafayette Street Gateway area through a series of enhancements including improved trail access, gateways, trail amenities, signage, and public art projects. This project will provide a safe and welcoming gathering space large enough for small community events and other programming. Enhancing the Lafayette Street trailhead will strengthen the connection between the neighborhood and the Schuylkill River Trail by increasing the visibility of the trail, which will raise awareness of the trail. Potential Challenges at this location include right-of-way easements/acquisition, access control, and maintenance.

The purpose of this project is to:

- activate the open space along the Schuylkill River Trail for passive recreation, and
- improve pedestrian and bicycle access through a series of gateway and trailhead enhancements.

Recent studies have indicated that minority populations would be more likely to use trails if opportunities for passive recreation were provided. Creating spaces that can be programmed for larger events, family gatherings or other cultural celebrations will provide an increased awareness of the trail.

The recommended physical improvements will activate the linear open space created

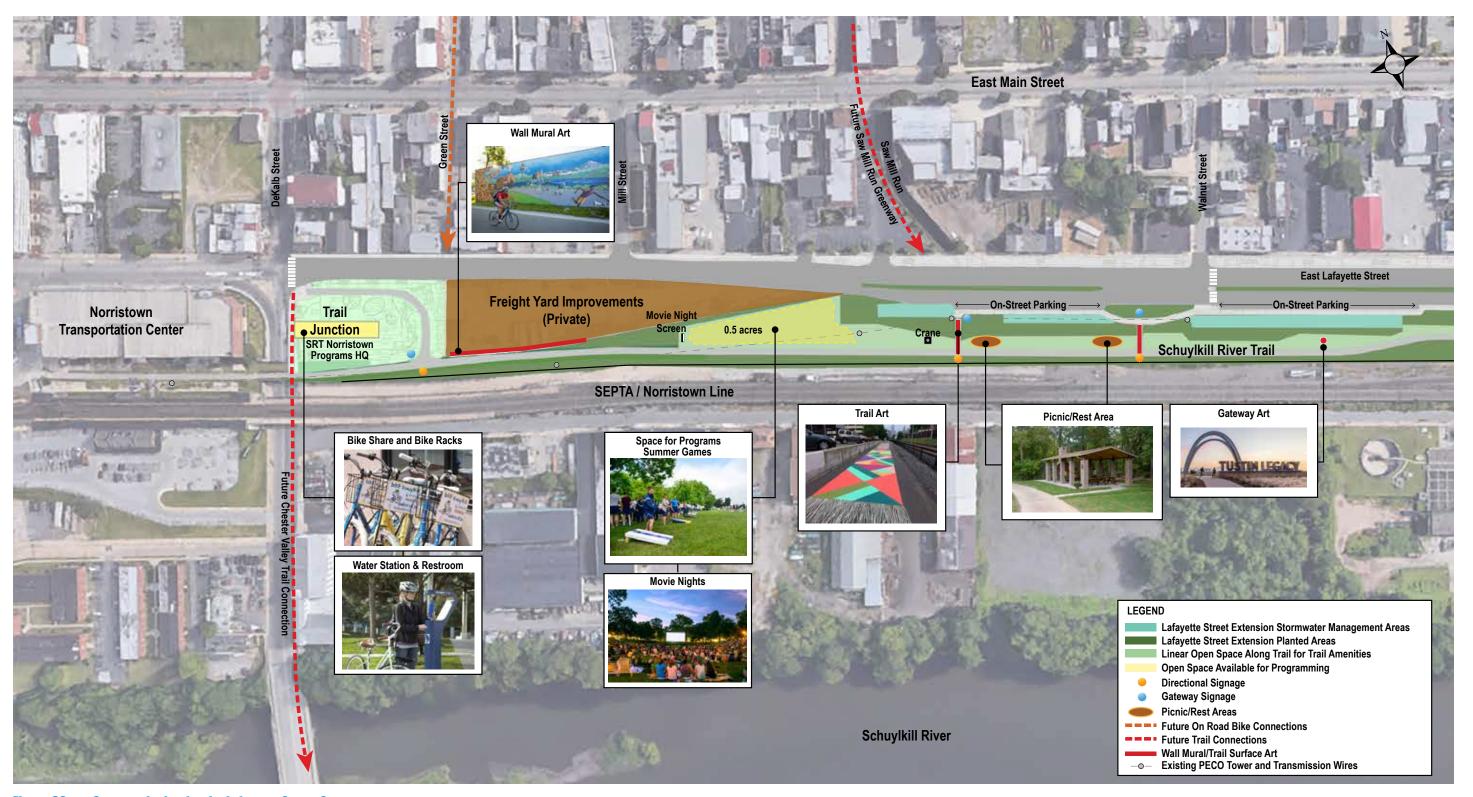


Figure 33 · · · Concept design for the Lafayette Street Gateway

by the Lafayette Street Extension project adjacent to the Schuylkill River Trail and enhance accessible routes to the Schuylkill River Trail.

COORDINATION

MCPC should function as the lead agency, with agency partners including adjacent property owners, PECO, Norristown Municipality, and Montgomery County Parks staff. County Parks provide permitting for events along the trail and within county-owned/maintained land adjacent to the trails. Local community organizations, non-profits organizations, and the general public should be engaged before advancing this project to design.

SIGNAGE AND CONNECTIVITY

Wayfinding signage should be placed along East Main Street, DeKalb Street, Mill Street, Walnut Street, and East Lafayette Street to direct users to the SRT. Wayfinding signage should inform users of multimodal routes incorporating the Schuylkill River Trail to destinations within Norristown and beyond. Gateway signage should include information on trail rules and "how to" tips, as well as directions to the Trail Junction Center and its amenities. The future Chester Valley Trail and the future Saw Mill Run Greenway should also be included as part of the gateway signage.

All signage should be multi-lingual (English and Spanish) and include symbols as appropriate. See signage recommendations in the Corridor-wide Plan section.

GATEWAY IMPROVEMENTS

The Lafayette Street corridor has three separate gateways to the trail: at the Trail Junction Center off DeKalb and Lafayette Street, at the base of Saw Mill Run, and at the base of Walnut Street. Improvements at each gateway include signage, trail surface art, and directional signage. Installing picnic/rest areas covered by a pavilion would create a place the community could use to gather and socialize while accessing the trail for recreational opportunities.

CORRIDOR IMPROVEMENTS

See the Corridor-wide Plan recommendation for location of additional amenities including mile markers, benches, bathrooms, and water sources along the SRT.

PUBLIC ART

The local community should be engaged around the creation of any public art in order to inspire community ownership of the trail as a community asset. Trail surface art on connecting pathways to the Lafayette Street Extension improvements provides a visual connection to draw users both to and from the trail. The remaining section of viaduct wall has been identified as location for a potential wall mural. A mural on the trail and/or other public art would also encourage trail users to slow down as they pass the trailhead, enabling people to enter the trail system safely.

PROGRAMMING

This plan identifies a 0.5-acre lawn area between the Trail Junction Center and the Saw Mill Run access point that could be used for seasonal programming. Programming could include summer games, movie nights, or live concert events. The plan also identifies appropriate locations for picnic/rest areas that could also be used for public events. Explore developing a partnership with Norristown's Park and Recreation Department to host programming in the areas adjacent to the trail.

Conclusion

The County continues to prioritize the extension of its trail network, understanding the numerous benefits that trails provide in terms of health and well-being, as an important transportation alternative, and in response to public demand. While trails have proven to be a popular amenity for cyclists, runners, and dog walkers, it is clear from this plan's findings that there is untapped potential for use by non-traditional user groups. To be a truly equitable amenity, it is imperative that trail design incorporates the recommendations contained within this plan.

This year, measures implemented in response to the Covid-19 pandemic limited options available for entertainment and leisure, such as access to public parks, shopping centers, and restaurants. Because trails remained open to the public, they experienced an unprecedented rise in usage almost overnight. Counts in Montgomery County cited at least double the number of users compared to previous years. Similar results were reported throughout the Greater Philadelphia region and beyond. The idea that people who had never used the trail before were open to exploring this option is encouraging.

Montgomery County has been a leader in developing a trail system that is designed to be accessible for all. It is now time to expand the vision to ensure that residents of all ages and backgrounds are aware that the trails are available to them, and that they feel safe while using the trail. To be truly effective, this will require strong partnerships with local officials and organizations.

The county is committed to providing space to foster community involvement in initiatives, such as public events and art, but will need the support of local stakeholders, including municipal government, to implement these efforts. There are numerous roles to be filled, which provides great opportunity to honor stakeholders' unique backgrounds and experiences. With this in mind, the county endorses this plan and pledges to be open to implementing ideas proposed by the community.

Appendices

Appendix A: Literature Review

INTRODUCTION

This literature review has been prepared in support of the Montgomery County Trail Access, Diversity, and Awareness Plan. The overarching goal of this plan is to cultivate new users of the SRT in Norristown and Pottstown, as well as the Pennypack Trail through Abington Township, Bryn Athyn Borough, and Upper and Lower Moreland Townships. This literature review aims to identify relevant data and information that will support the development of the plan and its implementation, and includes the review of existing plans, policies, and initiatives that provide best practices and guidance for the development of objectives and recommendations.

Planning Background

The Trail Access, Diversity and Awareness Plan is being completed to address goals included in three recent plans: *Montco 2040: A Shared Vision, the Comprehensive Plan for Montgomery County* (2015), *Walk Montco: Montgomery County Walkability Study* (2016), and *Bike Montco: The Bicycle Plan for Montgomery County* (2018). One of the goals of *Montco 2040* is to "Expand and connect county trails, local trails, greenways, natural areas, and parks." Performance measures include miles of trails added to the system, an increase in trail usage, amenities added to trails, and public art added to trails. A related goal is to "provide more opportunities for residents to exercise and have healthy lifestyles." The performance measure for this goal is an increase in the number of park users. This goal also calls for coordinating with local stakeholders to make communities more walkable.

Walk Montco supports the goals of *Montco 2040* and aims to improve walkability in the county. The plan features multiple case study and includes sidewalk and trail design guidelines. It identifies Norristown and Pottstown as two of the most walkable communities within the County, with 7.5% and 8.0% of residents who walk to work, respectively.

Bike Montco identifies physical improvements that will expand the county's bicycling network with a focus on county-wide mobility needs. This document also includes a diversity section that highlights the fact that Montgomery County is becoming more diverse, and that minorities represent the fastest-growing bicycling populations across the United States. The plan identifies this demographic change as an opportunity to increase bicycle transportation mode share as well as bicyclebased recreation and tourism. A survey was completed as part of the public outreach for *Bike Montco*. One question that directly relates to this plan is in reference to the factors that most discourage bicycling in Montgomery County. The top four factors identified among survey respondents were: roads too busy/too much traffic (79.6%), lack of bicycle lanes and trails (68.4%), personal safety concerns (60.4%), and lack of information about bicycle lanes and trails (37.9%). However, 84.5% of the respondents were white, 92% had a post-high school education, and 74% were between the ages of 35 and 64. The background of these respondents is in stark contrast with the demographic characteristics of the three focus areas of this plan, Norristown, Pottstown, and Abington, which are much more racially, ethnically, and economically diverse.

Purpose

The goal of this literature review is to identify barriers to trail use that are unique to

minority populations, so that future outreach and trail improvements account for trail access, diversity, and equity. These groups include low-income, racial minority, ethnic minority, youth, and senior populations. This literature review attempts to address the following questions:

What are potential causes of lack of diversity on the Schuylkill River Trail and Pennypack Trail, and what are potential solutions?

What are the disparities in how people from different racial, age, and socioeconomic backgrounds use parks/ trails/open space?

What has been successful in overcoming the obstacles to park/trail use in other places?

What are the health benefits of trail use for the target audiences?

What are the transportation benefits of trail use for commuters?

For further reading on factors that impact the recreational use of parks by minorities see *Parks and Underserved Audiences: An Annotated Literature Review* by James L. Pease (Pease 2011). For further reading on the relationship between trails and physical activity, see *Trails and Physical Activity: A Review*, which covers public health, leisure sciences, urban planning, and transportation literature, and states that further research is needed on groups including youth, seniors, and minorities (Starnes 2011).

REVIEW

What are potential causes of lack of diversity and what are potential solutions?

Montgomery County residents use trails for both recreation and for transportation. The Schuylkill River Trail and Pennypack Trail are directly adjacent to multiple residential neighborhoods, yet most trail users do not originate from those neighborhoods. A review of the literature discussing parks and diversity shows that a variety of factors contribute to a lack of diversity in trail users. These factors may differ depending on race, ethnicity, gender, and social class, and further differ based on age. Therefore, different strategies may need to be employed to address the needs of each sub-group.

According to Floyd, there are four generally accepted theories that account for lack of diversity in in parks. Although his analysis is directed at wildland recreation, the theories can also be applied to urban outdoor recreation.

- 1. Marginality hypothesis: minority groups lack socioeconomic resources to participate due to historic discrimination (this does not include the impact of current discrimination)
- 2. Subcultural hypothesis: different racial and ethnic groups have different value systems, which result in different preferred recreation types
- 3. Assimilation theory: parks are most used by the dominant (white) culture; therefore park use reflects an acquisition of the dominant culture's characteristics
- 4. Discrimination hypothesis: park use is impacted by actual or institutional discrimination whether real or perceived (Floyd 1999)

Since these trail systems are both free and physically proximate to the subject populations, the marginality hypothesis is not as relevant, but the remaining three

theories each offer insight into what may be impacting the subject areas. Drawing on these theories, Roberts developed five concepts of primary barriers to park use:

- 1. Access limitations: cost, transportation, fear of outdoors
- 2. Communication challenges: printed materials such as signs or brochures are only in the dominant language
- 3. Fear of discrimination: cultural, verbal and non-verbal messages from other visitors, overwhelming posted park rules, marketing materials do not reflect the subject population's culture/race
- 4. Lack of knowledge, experience, awareness: prospective visitors may not know what to do, where to go, how to get there, or the type of equipment that is needed
- 5. Lack of diversity of staff: not represented or only represented in maintenance positions (N. Roberts 2007)

Any plan to increase diversity along the trail system needs to address each of these five major barriers. Are local communities aware that the trail is there, and that it is free for them to use? Can individuals afford a bicycle and helmet? Are the sidewalks and roads leading to trailheads easy and safe to navigate? Are brochures and signage in both English and Spanish? Does the trail feel safe? How each barrier is best addressed will depend on feedback from the communities that live along the trail.

It is important to note that racism was identified in many sources as a major deterrent to prospective trail users. Institutional racism can come from differential upkeep of facilities or professional park staff. Interpersonal racism can come from other park users, a fear of racism, socialization from historic racism, and social effects incurred from past economic discrimination (Blahna 1993). Institutional racism can be addressed through hiring minority staff, upgrading community trailheads, and making sure signage and marketing materials are in languages in addition to English. Signage and park staff can also serve to educate current trail users that diverse populations are welcome on the trail. Interpersonal racism is more difficult to address, however, activities that are developed in partnership with local civic associations or organizations can be leveraged to give target populations a positive first experience on the trail that may lead to future independent use.

What are the disparities in how people from different racial, age, and socio-economic backgrounds use parks/trails/open space?

The literature identifies some major differences in how people from different backgrounds use parks, trails, and open space. In general, there is a measurable relationship between trail traffic and neighborhood characteristics. There is a significant positive correlation between trail use and "income, neighborhood population density, education, percent of neighborhood in commercial use, vegetative health, area of land in parking, and mean length of street segments in access networks." There is a significant negative correlation with percentage of residents in age groups greater than 64 and less than 5 (Lindsey 2006). This means that low-income populations with low-levels of educational attainment do not use trails as much as higher-income, more educated populations.

Different ethnic groups also use park spaces in different ways. A 2002 study by Gobster found that non-white users travelled further to access the park, used the park less frequently, and visited in larger family-friendly groups than white park users. Minority groups were more likely than whites to engage in passive recreation activities including socializing, festivals, and watching sports. The white population was more likely to engage in active recreation, and the most popular recreation

types were activities that could be done as an individual including jogging, walking, and biking. Minority groups preferred different active sports: blacks preferred basketball, Latinos preferred soccer, and Asians preferred volleyball and golf. Although whites were twice as likely to mention safety concerns, all three minority groups reported discrimination by other users and police. Despite these generalizations, the author warned against stereotyping by racial group because there is often more variation within than between groups. There are also similarities across all users in that everyone wants a beautiful, clean, and safe place to recreate (P. Gobster 2002). Although the trail system is not a park, identifying the ways different populations use public open space is an important factor. If stakeholder interviews and public outreach show that these same preferences exist for local minority communities, connecting the trail system, which is better suited to jogging, walking, and biking, with other amenities including parks, benches, and picnic areas may attract more diverse users.

Additional studies explore the fact that ethnic groups primarily use parks as a social gathering place. A 2004 study by Sadisharan mailed questionnaires to residents of Philadelphia and Atlanta. It found that few members of ethnic groups reported visiting parks alone. Whites, Hispanics, and Chinese were most likely to visit parks with one or two companions, while Black, Hispanic, and Korean users were more likely to visit with three or more companions. The most popular activities for all groups were social, physical exercise, and food-related, and the least popular activity were educational and experiential. Again, minority groups indicated visiting parks to participate in larger family group activities. This study also found that that gender, age, education, and income do not affect park usage (Sasidharan 2004). Because ethnic groups use parks as social spaces, creating more opportunities for users to jog, walk, and bike as part of a larger social group may increase diversity within trail networks.

Expanding on the use of parks as a social gathering space, a variety of sources focus on the Hispanic population's use of parks and other recreational amenities with large extended family groups. Hong and Anderson interviewed 15 Latino community leaders and 10 Latino parents to determine why they were not using a local nature center. Some reasons given for not using the center included lack of familiarity, cultural differences (especially no Spanish speaking staff or Spanish signage/materials), and cost. In order to increase Hispanic visitation, it was recommended that the center collaborate with other organizations working in the Latino community, develop a relationship with the community via community events, offer family pricing, hire Spanish speaking staff, offer Spanish language signage and brochures, and issue personal invitations (Hong 2006). Although cost is not an issue in our study area, the importance of personal interactions between staff and the Hispanic population is notable. Building relationships between the individuals who work on behalf of the trail system, whether they are local municipal officials or non-profit employees, and the local Hispanic community will be critical to cultivating new trail users.

Through interviews and interactive mapping, Madsen found that Hispanic populations often seek a "bigger backyard" for recreational space that can accommodate family and larger groups. Particularly relevant to our outreach to the Hispanic community, this study also explored what the word recreation means to Hispanic participants. Only two of 30 individuals interviewed defined recreation as having a physical activity component (J. Madsen 2011). A trail network does not fit well into the "bigger backyard" concept. It will be important to ask how the local Hispanic population views the trail as it relates to recreation, physical activity, and transportation needs. A translator may be necessary to explore the distinctions between uses, and to determine how to best market the trail system.

There were very few studies focusing specifically on Asian groups, instead they are included in cross-cultural studies of park users. According to Pease's review of the literature, many authors warn that Asian sub-cultures are distinct and have differing priorities, but nonetheless end up lumping together all Asian sub-cultures in their studies. Studies did reveal similarities to Hispanic patterns of use in parks, in that they often visit with large extended family groups (Pease 2011).

Because minority populations often visit parks as multi-generational groups, working with youth through schools and other youth organizations is a good strategy to encourage park use. If youth are excited to visit a park, their parents and other family members will follow suit (N. Roberts 2007). Older youth may also utilize the trail system on their own, both for recreation and transportation.

According to Cohen et al, seniors only represent 4% of park users, although they represent 20% of the general population (D. A. Cohen 2016). Matalovich explores the fact that seniors are underrepresented at parks and attributes the disparity to a lack of age-friendly infrastructure in parks (Matlovich 2017). Along a trail, the inclusion of shaded places to rest may increase use. The York Urbanist breaks out types of senior-friendly infrastructure based on senior demographics, including grandparent, 50+, 60+, 70+, 80+, and 90+. All senior age groups need access to shelter/shade, benches/picnic tables, facilities for interactions between generations, information on the nearest health center, and public washrooms (York Urbanist 2011).

Cohen also examined the fact that parks were used less in low-income neighborhoods than in high-income neighborhoods. The research showed the discrepancy could be attributed to a lack of supervised activities and marketing/outreach efforts in low-income neighborhoods. Cohen's team found that programming led to a 37% increase in moderate to vigorous physical activity per week in parks, while marketing resulted in a 63% increase (D. A. Cohen 2016). These studies show that multiple approaches will be required to encourage different groups to utilize the trail system, including infrastructure improvements, programming, and marketing. Additional strategies to increase trail use are detailed in the next section.

What has been successful in overcoming the obstacles to park/trail use?

Partnerships/Communications

The overwhelming consensus in the literature is that increasing diversity in park use requires cultivating partnerships in the communities that are underrepresented. As Pease summarizes, outreach implies dominance, while partnership "implies that the communities have something to offer the institution, giving those communities some implied ownership in the institution and encouraging change" (Pease 2011).

Chavez concurs with the partnership approach to public engagement, stating that the solution is to "invite, include, and involve" members of different socio-economic groups. She suggests surveys to understand the needs of distinct user groups but acknowledges that even if administered in their primary language, surveys may not be the best approach, and recommends partnering with elders or existing community groups as a survey alternative. She also suggested educating existing staff on the needs of different park user groups and hiring minority staff. In addition to making sure traditional communication materials are available in the group's first language, she highlights the value of communicating personally with certain groups to make sure they feel welcome in the space (D. J. Chavez 2000). Roberts and Chitewere also advocate for communications strategies that are proactive and intentional, and that all efforts should include multilingual signage. They also emphasize the importance of incorporating more representative hiring practices and responding to complaints of discrimination (N. S. Roberts 2011).

An earlier study by Roberts entitled *Visitor/Non-Visitor Use Constraints* concludes with a series of recommendations on how to increase visitation in the parks (N. Roberts 2007). In addition to cultivating community partnerships, recommendations that are relevant to the trail access in Montgomery County include:

- Designate a community liaison or advisory group with a goal of developing a joint outreach program
- Make sure advertising, marketing, signage, and informational materials feature people of color and are published in other primary languages
- Connect with journalists from ethnic news sources, use those channels to distribute information and marketing
- Do not assume communities know where to find information, identify local newsletters and postings in visible locations located within target community
- Organize tour groups

As technology evolves, so are effective communications strategies. A study by Mackenzie et al explores the use of social media to connect underserved urban youth to nature. They study found that social media provides a way to engage youth, but it must be combined with the resources necessary to physically access the resource. Additionally, it suggests that the social media account be operated by someone from that community, so that content is in tuned with that groups needs and cultural norms (Mackenzie 2017).

Design

Beyond building partnerships and sound communications channels, the physical design of trail access points are also a critical consideration, especially when target audiences live adjacent to the resource. Dobrowolski tackles this issue in her master's thesis *Designing Trailheads to Support Diverse Users*. Although her focus is on wildlands, specifically trailheads along the Florida National Scenic Trail, she recommends some practical design strategies that encourage more diverse usership. Relevant planning strategies include:

- Community Trailheads: Should be well maintained and programmed for community use.
- Celebrate Urban Trails: Information available should appeal to both intentional and incidental users, and "should allow users to interpret the values of the communities through which [the trail] passes highlighting important businesses, beautiful residential and civic areas, and public open spaces."
- Cluster Site Amenities: include other amenities like picnic tables, shade shelters, benches, and informational kiosks so that they are connected to the trail and work to create a positive space.
- Build for Low Maintenance
- Hierarchy of Signs
 - ♦ Special Attraction Signs: these signs celebrate the resource and should be something visitors could take a photo with. The local community could be involved in designing and creating these signs.
 - Orientation Panel: Include the trail and significant locations between trailheads, as well as locations of other trailheads. Include the time required to get to the next trailhead, as well as emergency contact information.
 - ♦ Informational and Interpretive Sign: Can be used to educate users about trail use and interpret the site.

What are the health benefits of trail use for the target audiences?

The U.S. Department of Health and Human Services recommends levels of daily activity for all age groups in *Physical Activity Guidelines for Americans*. Children ages 6-18 should do 60 minutes or more of moderate-to-vigorous physical activity daily, while adults should do 150 to 300 minutes of moderate-intensity or 75 minutes of vigorous-intensity aerobic activity per week, spread throughout the week (Services 2018). Walking briskly constitutes moderate-intensity activity, while jogging or running constitutes vigorous intensity activity. Biking also constitutes aerobic activity and can be moderate or vigorous depending on the rider's level of exertion. Paved multi-use trails are a perfect place to walk or bike because they are protected from automobile traffic but still accessible to local communities without a car. However, the barriers to park and trail use detailed above may prevent residents from using the trail to improve their health.

Starnes et al prepared a review of the literature examining the impact of trails on physical activity in 2011. They looked at studies in public health, leisure sciences urban planning, and transportation and found that the relationship between trails and physical activity varied over the 39 studies summarized. They found that most research focused on barriers to trail use, but not on the impact of new trails on community physical activity. Further, they concluded that further research is needed on groups including youth, seniors, and minorities.

Since 2011, a variety of public health studies have examined the efficacy of walkability in increasing health outcomes in low-income and/or minority communities. A 2011 study focused on adults 66 and older across multiple income groups found that living in walkable neighborhoods was associated with high levels of active transport (walking and biking for errands) and moderate to vigorous physical activity, as well as lower body mass index than those living in less walkable neighborhoods. This conclusion holds across regions and neighborhood income (King 2011). A 2009 study that looked at neighborhoods in Seattle, Washington and Baltimore, Maryland concurred, finding that daily minutes of moderate-to-vigorous physical activity was higher in high- versus low-walkability neighborhoods but did not differ by neighborhood income. Although rates of being overweight or obese was lower in high-walkability neighborhoods, higher-income neighborhood residents had lower body mass index (BMI) and a higher physical quality of life (Sallis 2009).

A 2017 study focused on older black females in low-income predominantly black neighborhoods in Greenville, SC. This study reinforced the findings of King's study in determining that most residents reported walking, in this case, despite barriers within their communities such as drugs and safety. The study found that most participants wanted neighborhood-based opportunities for increasing physical activities, including walking tracks and walking groups. Groups also reported personal and social benefit to walking (Child 2017). Organizing a social walking "club" may aid in increasing levels of activity.

Another 2017 study focused broadly on low-income African American adults. It found that although middle-aged low-income African Americans in urban communities get very few daily minutes of moderate-to-vigorous physical activity (MVPA), neighborhood walkability may play a stronger role on MVPA than accessible greenspace or crime. However, it clarifies that walkability impacts residents differently depending on their age and sex and suggests tailoring public health policy design and implementation according to neighborhood demographics to improve activity for all (A. S.-D. Richardson 2017).

Although Richardson's team found that walkability may have a stronger impact on MVPA than crime, another study by the same group of researchers found that crime does negatively impact body mass index (BMI). This study focused on

African American Adults living in low-income Pittsburgh, PA neighborhoods. The study determined that "long-term exposure to crime was positively associated with a lack of perceived safety," and that "lack of perceived safety was positively associated with BMI." Therefore, although physical activity generally improves BMI, this relationship was negatively impacted by the association between crime and physical activity. This decrease in perceived safety and physical activity may explain why neighborhood crime is associated with greater BMI (A. S.-D. Richardson 2017). Deguzman's study examining the impact of neighborhood walkability on women living in low-income urban neighborhoods seemed to reinforce this finding. Her team found that changing the walkability characteristics of a neighborhood may not affect the health of residents of high crime, low-income neighborhoods, i.e. walkability efforts will fail if crime is not addressed first (DeGuzman 2013). During stakeholder interviews and public outreach for the Diversity Plan, questions should not lead participants to suggest crime as a barrier to walkability, but if it is identified by a participant as an issue, it is important to identify the type of crime so a strategy can be developed to address it.

In acknowledgement that the planning process and built environment can positively impact the health of a community, the American Planning Association has released two documents aimed at addressing the relationship between the two fields, Planning Active Communities and Integrating Planning and Public Health. The former document provides a framework for connecting planners with public health advocates. It outlines the benefits of active living and includes five points of collaboration between fields: visioning and goal setting, plans and planning, implementation tools, site design and development, and public facility siting and capital spending (Morris, Planning Active Communities 2006). Integrating Planning and Public Health expands upon Planning Active Communities report by exploring issues in public health including obesity and inactivity, crime, and pedestrian safety. It also includes ideas for launching and maintaining a planning/public health partnership and action planning worksheets (Morris, Integrating Planning and Public Health: Tools and Strategies to Create Healthy Places 2006). Local partners working in the public health field should be identified and engaged. There may be resources available for infrastructure improvements and programming that may increase walkability.

What are the transportation benefits of trail use for commuters?

The trail system serves as a place to recreate, but it also provides a low stress route for active commuting where walkers and bicyclists are protected from automobile traffic. Using walking or a bike for transportation benefits both physical and financial health. In Norristown, the trail connects to the Norristown Transit Center where trail users can access bus and regional rail connections. The southern end of the Pennypack Trail is less than a mile from the Fox Chase SEPTA Train Station. Trails can increase the rate of bike commuting, however, some of the same factors that prevent minority populations from using the trail for recreation can also prevent them from using it for transportation.

A 2003 study commissioned by the Center for Community Change and The Civil Rights Project at Harvard University took a broad look at U.S. transportation policy and how it perpetuates inequities. The document includes a section on minority and low-income participation in transportation planning and policy recommendations. Although this document does not spend much time discussing active transportation, one recommendation that is transferable to this effort is to "support efforts to identify and remove barriers to minority and low-income community participation in transportation planning and decision making." In support of that recommendation, it recommends actively partnering with community groups (Sanchez 2003). As early

as 2004, Federal Highway Administration (FHWA) was published a report concluding that design guidelines may need to be revised to incorporate the needs of emerging (minority) road and trail users (Federal Highway Administration 2004).

Without addressing connectivity surrounding, trails may only be used for recreation instead of transportation. A 2010 study looked at the impact of an urban greenway trail that was retrofitted in a neighborhood lacking connectivity. Although physical activity increased within the neighborhood, it did not translate to use of the trail for active transportation (Fitzhugh 2010).

A ten-year longitudinal study in Minneapolis showed that proximity to off-road infrastructure increased rates of bicycle commuting, especially when those trails connect a city's population and employment centers (Hirsch 2017). A 2015 study examined whether home neighborhood environment, worksite neighborhood environment, and worksite policies and supports influence commuting mode among employees. It found that a higher commuting distance results in a decrease in active commuting. Free or low-cost recreational facilities around the worksite and having bike facilities to lock bikes up at a worksite were associated with active commuting (Yang 2015). Any effort to increase the use of the trail for commuting will have to look at origin and destinations of local workers. Although municipalities may be able to influence local businesses to add bike facilities at their locations, they may not be able to do the same for destinations outside of the study area.

Bike parking is also a critical concern at home. A 2017 study looked at bicycling practices and bicycle-environment preferences in lower-income minority neighborhood. Surveys showed that respondents prefer to park bikes inside their homes due to concerns about theft. The study also found that the cycle track was considered the safest type of infrastructure by black, white, and Hispanic respondents out of 6 infrastructure types, while a multi-use trail was considered second safest. Minority populations also shared that would be more likely to ride with family and friends (A. C. Lusk 2017). Increasing rates of commuting by bike may need to address bike parking and storage in low-income neighborhoods.

Commuting to work is not the only way to use a trail for transportation. The trail can also be used to travel to other community assets to obtain goods or services. A 2016 Health and Equity Analysis of the City of Dover and Kent County DE reviewed and analyzed existing bike and pedestrian plans to identify strategies that promote equity and support active transportation for residents to access community assets including grocery stores, schools, and parks. It identified locations for improvements to on road bike infrastructure that would enhance connectivity in both urban and rural settings (Eichinger 2016). It is important to assess the route communities take to reach the trailhead to see if they can be made more bike and pedestrian friendly.

The 2014 report *Dangerous by Design*, published by Smart Growth America found that children, older adults, and people of color are much more likely to be a victim of traffic violence. Each of these demographic groups is disproportionately represented among pedestrian fatalities. In Pennsylvania, the state pedestrian fatality rate per 100,000 persons among people of color between 2003-2010 was 1.2 for Asian/Pacific Islander populations, 2.23 for black or African American populations, 1.87 for Hispanic populations, and 1.50 for white, non-Hispanic populations, compared to the national average of 1.49, 2.65, 2.37, and 1.66 respectively (Smart Growth American and the National Complete Streets Coalition 2014).

A 2016 study conducted by the Alan M. Voorhees Transportation Center (VTC) found that "the fear of being robbed and assaulted while bicycling ranked as the number two barrier to bicycling, second only to the fear of a traffic collision" in a study of bicycle access and use by Blacks and Hispanics in 34 neighborhoods in throughout New Jersey. Charles Brown, a researcher with the VTC advocates that transportation

professionals should be responsible for all aspects of safety when designing transportation infrastructure and should consider both crime statistics along with crash statistics. Brown also recommends that transportation professionals receive training in crime prevention through environmental design, inquire about public safety issues during public engagement processes, adopt and implement a complete streets policy, and hire diverse transportation professionals (Brown 2016).

A 2019 study had a goal of collecting lower-income predominantly-minority resident feedback on what contexts are safest from both crashes and crime. The researchers interviewed a "community-sense" group comprised of church and YMCA representatives, and a "street-sense" group comprised of halfway house/homeless shelter/gang members. Community-sense ranked shared-use paths least safe for crime and safest for crashes. Street-sense groups ranked all types except shared-use paths higher for crime and crashes (A. C. Lusk 2019). In addition to connecting to the trail with infrastructure, it is equally important to assess whether the communities along the trail are concerned about crime occurring on the trail, and if so, why they are concerned.

If concerns about safety are addressed, a trail may be used even if the trail commute takes more time than a commute along an alternate route. A 2007 study compares a more attractive facility with higher travel time to a less attractive facility with a lower travel time. It found that respondents are willing to travel up to 20 minutes more to travel on a trail instead of an unmarked on-road facility with side parking (Tilahun 2007).

Conclusions

The health benefits of walking and biking are well established, and the literature shows that trails can provide a low stress place for those activities. Although utilizing a trail for transportation or recreation will lead to significant health benefits, people must be comfortable using the trail in order to realize those benefits. Increasing the usage of the trail, especially among diverse user groups, will require a strategic approach to community engagement that addresses access limitations, communications challenges, fear of discrimination, and a lack of awareness. Agencies need to build genuine partnerships with diverse groups within the community to understand the specific barriers limiting trail uses, and to develop collaborative solutions. When trail users and local agencies work together to implement these solutions, the relationship between the two becomes even stronger. As more individuals have positive experiences using the trail, they will share their experiences with family, friends, and neighbors, which will increase awareness and decrease fear, resulting in a resource that is truly open for all to enjoy.

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Appendix B: Stakeholder Matrix

LEVEL	STUDY AREA	ORGANIZATION	CONTACT AND TITLE
	Norristown	Municipality of Norristown	Crandall O. Jones, ICMA-CM, Municipal Administrator
	Norristown	Municipality of Norristown	"Jane Musonye, Director of Planning and Municipal Development"
	Norristown	Norristown Recreation Center	Erica Genuardi, Recreation Manager
	Norristown	ACLAMO Family Center	Nelly Jimenez-Arevalo, Executive Director
	Norristown	Norristown School District Board	Shae Ashe, President
	Norristown	Plymouth Township	Karen Weiss, Township Manager
	Norristown	Plymouth Township	Karen S. Franck, Parks and Recreation Director
	Norristown	Plymouth Township	G. Philip Brady, Assistant Parks and Recreation Director
	Norristown	Conshochocken Borough	Stephanie Cecco, Borough Manager
	Norristown	Conshochocken Borough	Lauren Irizarry, Director of Recreation Services
	Norristown	Center for Culture, Art, Training, and Education (CCATE)	Obed Arango Hisijara, Executive Director
	Norristown	Montgomery County Diversity Committee	Deborah Wilson, Assistant Director of Human Resources
	Norristown	Zumo Bikes	Steve Oliver
	Pottstown	Borough of Pottstown	Justin Keller, Borough Manager
ers	Pottstown	Borough of Pottstown	Michael Lenhart, Director of Parks & Recreation
Primary Stakeholders	Pottstown	Pottstown Area Health & Wellness Foundation	Craig Colistra, Program Officer for Recreation and Health
	Pottstown	Pottstown Area Regional Recreation Committee (PARRC)	Michael Lane, Regional Recreation Coordinator
	Pottstown	Schuylkill River Greenways National Historic Area	Elaine Paul Schaefer, Executive Director
	Pottstown	Schuylkill River Greenways National Historic Area	Julia Hurle, Trails Program Coordinator
	Pottstown	Schuylkill River Greenways National Historic Area	Sarah Crothers, Education Director
	Pottstown	Schuylkill River Greenways National Historic Area	Miika Patterson, Communications Director
	Pottstown	Pottstown School District	Stephen Rodriguez, Superintendent
	Pottstown	YWCA Tri-County Area	Stacey Woodland, Chief Executive Officer
	Pottstown	Centro Cultural Latinos Unidos, Inc. (CCLU)	Rita Paez, Executive Director
	Pottstown	Strengthening Tomorrow Requires Initiative and Vision Everyday (STRIVE)	David Charles
	Pottstown	NAACP	Jonathan Corson, Pottstown Chapter President
	Pottstown	Trek Bikes	Brooke Martin, Women's Ambassador
	Pennypack	Jewish Community Center/Klein Life	Sue Aistrop, Vice President of Active Adult Services
	Pennypack	Ukranian Educational and Cultural Center	
	Pennypack	Abington Township	Steven Kline, Abington Township Commissioner (through 2019)/MCPC Board of Directors

Pennypack	Latinas in Motion	Elaine Gonzales Johnson, Founder
		Richard Manfredi, Township Manager
Pennypack	Abington Township	. 1
Pennypack	Abington Township	Tara Wehmeyer, Assistant Township Manager
Pennypack	Abington Township	Ken Brodsky, Township Commissioner
Pennypack	Bryn Athyn Borough	Victoria S. Trost, Borough Manager
Pennypack	Lower Moreland Township	Christopher Hoffman, Township Manager
Pennypack	Lower Moreland Township	Loreen Montagnon, Assistant Township Manager
Pennypack	Upper Moreland Township	Pat Stasio, Director of Parks and Recreation
Pennypack	Upper Moreland Township	David Dodies, Township Manager
Pennypack	Rockledge Borough	Grace Metzinger, Borough Manager
All	Montgomery County Parks, Trails, and Historic Sites	Dave Clifford, Director
Pennypack	Montgomery County Parks, Trails, and Historic Sites	Scott Morgan, Region 3 Manager
Norristown/Pott- stown	Montgomery County Parks, Trails, and Historic Sites	Michelle Harris, Region 1 Manager
Norristown	Norristown Chamber of Commerce	Kym Ramsey, President
Pottstown	TriCounty Chamber of Commerce	melissa@tricountyareachamber.com
Pennypack	Resident	Steve Spindler
Pottstown		Scott Exley, MCPC Board of Directors
Pennypack		Jill Blumhardt, Lower Moreland Township Commissioner and MCPC Board of Directors
Norristown	Siloam Baptist Church	Reverend John H. West III, Pastor
Norristown	First Baptist Church of Norristown	Shelle Lawson, Administrator
Norristown	Grace Baptist Church	
Norristown	Cavalry Baptist Church	"Hector Villaveitia, Jr."
Norristown	First Presbyterian Church	Rev. Peter Martin, Pastor
Norristown	St. John's Episcopal Church	Deacon Dennis E. Coleman
Norristown	Jefferson Apartments	164-unit senior housing community
Norristown	Sandy Hill Terrace	174-unit senior housing community
Norristown	Montgomery Park	50-unit senior housing community
Norristown	Rittenhouse School Apartments	48-unit senior housing
Pottstown	TriCounty Active Adult Center	
Norristown	Montco Senior Adult Activities Center	Linda Collins, Executive Director
Pottstown	Pottstown Cluster of Religious Communities	Ryli Meyer
Pottstown	Mt. Olive Baptist Church	
Pottstown	Bethel Community Church of Pottstown	
Pottstown	Jefferson School Apartments	48-unit subsidized senior housing
Pottstown	Sidney Pollack House	100-unit subsidized senior housing
Pottstown	Robert P. Smith Towers	80-unit senior housing
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	Pennypack	First Baptist Church of Huntingdon Valley	
	Pennypack	Korean Presbyterian Church	
	Pennypack	Rydal Park Retirement Community	322-unit senior apartment community
	Pennypack	Gloria Dei Towers	175-unit retirement community housing
	Pennypack	Gloria Dei Farms	143-unit senior retirement community
	Pennypack	Gloria Dei Manor Court	110-unit senior apartment community
	Pennypack	Maple Village Apartments/Wesley Enhanced Living	100+ senior apartments and townhomes
	Pennypack	Samuel A. Green House	85-unit senior housing community
	Pennypack	Park View at Cheltenham	75-unit senior housing community
	Pennypack	Mission Green	61-unit senior housing community
	Pennypack	Sunrise of Abington	retirement community
	Pennypack	Redeemer Village	200-unit senior housing community
	Pennypack	Second Home Adult Day Care	
	Pennypack	Salem Adult Citizens Senior Center	
	Pennypack	Salba Apartments Senior Community	17-unit senior housing community
	Norristown	Norristown Library	"Asha Verma, Director of Circulation Kathy Yarger, Director of Library System"
	Pottstown	MOSAIC Community Land Trust	Daniel Price, Garden Manager
lders	All	Montgomery County Health and Human Services	Joe Coyle, Community Traffic Safety Program Coordinator
Tertiary Stakeholders	All	Montgomery County Office of Aging and Adult Services	
ry S	All	Montgomery County Cultural Center	
ertia	All	Genesis Housing	
Te	Norristown	Times-Herald	
	Pottstown	Pottstown Mercury	
	All	Bicycle Coalition of Greater Philadelphia	Leonard Bonarek, Regional Planner

Appendix C: Notes from Stakeholder Interviews

NORRISTOWN STAKEHOLDER INTERVIEW

Norristown interviews were held on June 7, 2019 at Montgomery County Planning Commission Offices. Interviews were conducted by Leah Kacanda (WRA) and Donna Fabry (Montco Planning Commission). Interviews were held with two representatives from the Municipality of Norristown and one representative from Montgomery County OIC.

Activity/Interest in trail

- 1. Please tell us about you/your organization's interest in the study area. (e.g. current activities or future plans in/adjacent/through the study area? How do you/your organization use it? How does it impact you/your organization?)
- Spring/Summer Soccer Clinics: Ackey's Field
- Youth & Teen Basketball Leagues: Eisenhower Middle School (winter) and Simmons Park (summer)
- Norristown Recreational Baseball Association: McPherson and Corson Fields (across from Latshaw Field)
- Summer Day Camp: Elmwood Park Zoo or Hancock Elementary
- Summer Concert Series: Elmwood Park Bandshell
- Norristown Recreation Center: under construction. at old PAL building on Harding Boulevard
- Riverfront Park

♦ Events

- » Trails on Tap Event: partnering with Schuylkill River Greenways, FCM Hospitality, and Mainstay Independent Brewery, will be at Riverfront Park from July 31-August 4; requiring guests to park at MCIU lot and walk to Riverfront Park to realize connectivity, ability to use trail to move around locally; goal of event is awareness, will feature kayaking, food trucks, beer vendors
- » Hope to hold Riverfest again in the fall, goal bring awareness to Schuylkill River, engage "Keep Norristown Beautiful" group, partner with Audubon Bird Sanctuary, Norristown Council, kayaking component
- ♦ Updating Riverfront Master Plan
- Beginning to implement recommendations from Riverfront Master Plan; got approval for signage to indicate open and closing hours, a picnic grove, tables, greenery, redoing the dock, renovating parking lot including speed bumps, striping
- ♦ Historically Planning handled park planning but Recreation is getting more involved
- Recreation does programming and capital improvements, maintenance is shared between Parks and Public Works (who handles daily maintenance/ operations)
- ♦ Collecting feedback on family-oriented activities and picnicking
- ♦ Nielson Contracting purchased Barbadoes Island, voltage on island is too

- high so use is limited, suspects may be used as a parking lot
- ♦ The Schuylkill River Trail travels above the eastern section of the park which is privately owned and known as Crawford Park
- Planning Department is responsible for development in Norristown, focus on revitalization; thinks things are taking off as evidenced by large number of property transfers, thinks revitalization will require focus on housing, parks, infrastructure, and economic development
- Funding for activities comes from a variety of sources; majority of parks improvements were done by CDBG money, DCNR (State) money, and County
- Cited Lafayette Street improvements as being a catalyst to development
- Looking to recruit millennials to live in Norristown; recent development (coffee shop, distillery, two theaters) supports this demographic; economic diversity is critical, need mixed-income population
- Large Hispanic population, lots of new businesses as a result
- Fighting negative perceptions of Norristown/stigma
- Greenways
 - Planning greenway connector along Arch Street, starting form trail at Saw Mill Run, goal to connect all the way up to Germantown/East Norriton
 - ♦ Stony Creek Greenway, also in planning phases, easement for trail exists
- Vision for the Riverfront Feasibility Study just completed
 - ♦ Will include setback requirement of 100 feet from river to maintain public access
 - ♦ Market rate housing/mixed-use for area between trail and river, east of Stony Run
 - ♦ Goal to incorporate river into Norristown, instead of keeping back to river
 - ♦ Already received proposal for 200-unit apartment building
 - ♦ Already have EPA funding for Phase I and II assessments
- DeKalb Street/Trail Junction
 - ♦ considered Arts Hill District, with studios gallery, recording company
 - ♦ Sees potential of Trail Junction
 - Asked about possibility of mural, conversation about differing meaning of murals, public art vs. covering decay; recommended engaging CCATE who organizes an arts program with Hispanic Families: https://www.ccate.org/mural-arts/
 - ♦ DCNR Assistant Secretary visited site for "Restore PA" initiative
- Branding/Signage
 - ♦ Just got funding to do a branding/signage study which will be funded by the amusement tax
 - Dedicated to rebranding and Marketing Norristown
- Uses the trail a lot for riding, noted bicyclist's get tunnel vision if nothing pops out to make you stop, usually stops in Conshohocken and Manayunk; A frame signage advertising drinks/food/bike shops; gap between Valley Forge and Conshohocken doesn't have that

- Lafayette Street renovation will help attract users to Norristown; having amenities like water and bathrooms at Trail Junction will help
- Market Norristown Transportation Center as a place to park to access trail for weekend riders

Events

- ♦ Girls on the Run
 - » Organized in local elementary schools, 8-week long spring program for runners; practices held in schools/playgrounds, culminates with 5k at Montgomery County Community College (Pottstown)
- Possibility of doing 5k in Norristown? One Montgomery Plaza only a few blocks from trail access, maybe county could sponsor
- Norristown Running Club runs at Farm Park, could they do a special meet up along trail?
- First Friday event- after work run followed by event at Timshel or Five Saints for happy hour or open mic

Youth

- ♦ Does not think many youths know about the trail or would be interested in using it
- ♦ Benefit of working through schools would be to get youth onto trail
- ♦ If you don't live directly by a trailhead there is no reason to use it
- 2. Is there anything that prevents you/your organization from using the trail?
- Riverfront Park
 - ♦ Perception of safety a big problem
 - No one under the age of 18 uses the park; lots of illegal activity, drinking, smoking, loitering etc.
 - Police becoming more active, installing lighting and cameras
 - ♦ Grade separated and feels unsafe

Trail

- ♦ "All you see is athletes"
- ♦ High volume of bicyclists on Saturday mornings, makes it hard to run on the trail much less walk
- Many communities adjacent to trail don't necessarily run/jog/bike; enjoy picnicking and enroll their youth in soccer (Hispanic community) and basketball (AA community)

Operational

- ♦ Limited staff (Erica, an assistant, two part time high school students)
- ♦ Interest in traditional sports and programming, i.e. basketball, soccer etc.
- ♦ Currently building a Rec Department from scratch for each programming area
- Currently has 6 staff people, hoping to expand because there is a lot of work
- Population

- ♦ Issue of being home to too much Section 8 housing, got HUD to put a cap on the number of units; also has resulted in a transient population
- ♦ Community of working poor with no time for recreation
- Generational usage on trail: millennials encouraged to use outdoor recreation, bike/walk/dog walk, older generations don't have the same value system
- Lots of older residents along Lafayette Street, having a pavilion area or concert area might appeal to them, currently Elmwood Park concerts are attending primarily by older folks, can Trail Junction also host concerts to attract older listeners?

Funding

- Is County thinking of creating a fund to support work on the trail?

 Norristown budget is very tight, \$1.5M hole out of \$33M budget
- Rely a lot on grants and outside funding, especially CDBG which is now in question
- When DVRPC or County provide grants, matching funds can be a problem when the community is extremely poor, is there a way to address the ranking formula? CDBG addresses this
- ♦ For example, not applying for Montco 2040 grants because no matching funds are available

Amenities

- ♦ Lack of businesses to stop at (hours M-F 9-5 aren't helpful to after work or weekend users)
- ♦ Lack of lighting along trail, are you allowed to use trail in the evenings?
- Norristown isn't bike friendly, no facilities, no signage-if you were riding around Norristown you wouldn't know how to find it
- ♦ Trail access at Norristown Transit Center is difficult
- ♦ Unsure whether parking at the SEPTA garage is free on weekends

Safety

- Never had any issues but there is a perception the trail is unsafe through Norristown
- ♦ Theaters are great, but not enough to stay in town 24/7, need to encourage businesses to stay open, tables and chairs on sidewalks, music/entertainment/nightlife

Visioning/Goals

- 3. What would be a 'win' for you in this (process/for future projects)?
- Increased awareness of the trail, how to access, where it goes, i.e. better signage, trail heads, maps, etc.
- Better connections between trail and park resources where programming happens, i.e. Riverfront Park, Farm Park, Simmons Park
- Right now Schuylkill River Connector (Haws Avenue) between Farm Park and Trail is unsafe feeling because the street looks rough, recommends large signage to help riders feel safe
- Signage in English and Spanish

- Norristown Main Street or Downtown, not Business District, make the sign more friendly and welcoming
- Quarter mile markers for local users/people working out
- Interest in doing programming in partnership with other local organizations, i.e. walking/running club
- Currently bikes and skateboards in the community not on the trail
- Interest in free bike program at the Trail Junction like the program in Pottstown
- Access to funding, assistance from County on necessary matches required to access grant funding
- People choose Norristown to live due to a sense of community and because there are a lot of great things happening, the trail is an attraction not just because of recreation but because it is part of a high quality of life in Norristown
- The trail shows what Norristown has to offer, youth involvement, arts, and murals included with signage show there is a community here
- Promote the trail as an alternative to walking along Main Street in Norristown
- Have local businesses advertise along the trail to get people to stop (example of Conshohocken Brewing Company along trail in Conshohocken)
- 4. What is your vision for the trail in 5 years? In 10 years?

Concerns

- 5. To what extent does the current Schuylkill River Trail reflect your priorities for a public space? What is missing? What is the most important to you in this design?
- Views as a public space for walking/running/biking
- In conversation seemed like sharing with users who are not athletes would require existing users sharing the space, viewing Norristown as a destination not just place to pass through
- 6. Are there immediate issues along the corridor that should be evaluated and addressed? (e.g. replacing signs, adding a bus stop, replacing a street lamp, etc.)
- The trail head at Haws Avenue
- 7. What is your **greatest** concern along the trail corridor?

Process (guiding principles and stakeholder outreach)

- 8. [Hand out copies of the goals/objectives table; take a few minutes to explain the purpose and to allow interviewee to process them] Are your objectives for the trail captured here? Do these goals capture your desires for the trail? What is missing?
- 9. [Hand out copies of the draft survey questions] Will these questions engage members of your community? Do you have any edits/additional questions to add?
- Too many words, map hard to read, "make it more cartoony" liked map from West Chester, recommended using icons to represent uses, i.e. basketball and soccer ball for parks with programming, bikes on trail, crosses at churches, boat at Riverfront Park, etc.
- 10. Who else should we include as part of the stakeholder group for this project?
- Churches have a huge amount of influence with the community [will send us list of churches]



- Shiloh, Ebenezer, and Zion Churches are trusted providers of information
- Norristown Chamber of Commerce Kym Ramsey, Chamber Founder and President https://www.norristownchamber.org/
- John George Five Saints Distillery (129 E. Main Street)
- Ellie Redinger Timshel Coffee Shop (104 E. Main Street)
- 11. Are you willing to help us distribute surveys as part of our public outreach process? Are there any upcoming events in your community where we can talk with the community about the trail and distribute surveys and information?
- Recommends promoting with social media, through schools, offered assistance with promotion
- Create a Facebook page for the Norristown portion of the trail; make it relatable, don't use the SRT logo
- For public outreach event recommends National Night Out; held on Willow Street, captures Norristown's neighborhoods; water company comes, Police, Fire, vendors are local; recommends bringing giveaway items (maybe blinky lights?)
- Feedback on free movie night at Trail Junction very positive; warned if event is free and has food will get a huge turnout and be prepared
- School District willing to be involved
 - John Doyle runs TV program, always looking for people to interview, can come out to trail, get a video snap shot of what is happening and how to get engaged
 - ♦ School board meetings can invite guests, but presentations must relate to schools
 - ♦ Would be welcomed at back to school events
 - ♦ Could use school's robo-call system or emails to promote event

POTTSTOWN STAKEHOLDER INTERVIEW

Two Pottstown interviews were held on June 18 at the interviewee's offices, one interview was held on June 28, 2019 at TPD Offices, and two interviews were held on July 23 at Schuylkill River Greenways offices. Interviews were conducted by Randy Waltermeyer (TPD), Lou Hufnagle (TPD) and Donna Fabry (Montco Planning Commission). Interviews were held with representatives from the Tri-County Area YWCA, Pottstown School District, The STRIVE Initiative, Pottstown NAACP, and Schuylkill River Greenways.

Activity/Interest in trail

- 1. Please tell us about you/your organization's interest in the study area. (e.g. current activities or future plans in/adjacent/through the study area? How do you/your organization use it? How does it impact you/your organization?)
- Middle school kids do not have much to do around their neighborhoods and need to have events planned for them to expose them to different things
- Trying to partner with the community as much as possible to unite Pottstown, bring different organization/groups of people together; branch is very diverse
- Focused on health and wellness for community, for example, the YMCA was going to shut down, NAACP advocated it keep it open, viewed potential closure

- as a civil rights issue, conducted an awareness campaign and kept the Y open, has the best ratings out of all Y's in the area
- Working with Pottstown Police Department to bring NOBLE (National Organization of Black Law Enforcement Executives) to work with kids on engaging with Police and break down barriers between minority youth and law enforcement
- In order to improve on current bike share program it would have to be in different locations; currently at SRG office and at Manatawny Green, and another location up in Hamburg; decent usage throughout the day, especially during lunch hours by adults and teens (must be 16+), biggest limit is close at 4:30; Tri-County Cycles just closed (local bike shop), if there were more partners willing to host, SRHA would be willing to maintain the bicycles.
- 2. Is there anything that prevents you/your organization from using the trail?
- The YWCA preaches peace, justice and freedom for all. General comments about the community include:
 - ♦ People of color can live here but they cannot thrive here
 - People of color are not in a position to utilize the trail or other amenities, only people who are thriving can access, primarily due to lack of free time
 - ♦ Pottstown has many people of color, there are no people of color in any positions of power, not even working with public works
 - ♦ Transportation is somewhat of a barrier for both youths and adults.
 - Unsure how many kids own or have access to bikes, but recommend surveying to find out
- Students are not very aware of the existence of the trail
- Middle school kids use bikes, however bike maintenance is very expensive and the cost of bikes is an overall impediment
- Minority students are afraid to leave their neighborhood or go too far from their house
- People do not know about the trail, or understand how to use the trail
- Some events are not very well advertised, people find out about great events that happened in Pottstown after the event in the newspaper, need for more advertising
- Would be a great facility for kids but awareness is low, why would kids use it and for what activity? Need to have sustainable activities for kids and good marketing to increase trail usage.
- Many kids in Pottstown can't afford bikes, so if all the white kids have bikes they
 perceive it as a white thing
- Kids develop these mindsets when they are young, changing that mindset by engaging the kids in multi-cultural activities is essential
- People are just trying to make ends meet, and there may be no time or money for recreation
- The community wants change badly, but it cannot be forced upon them, they want to be part of the change
- Events such as Trails on Tap may be open to public, however beers are \$6 each
 and are cost prohibitive to many in Pottstown making the residents feel a sense
 of "I do not belong at these kinds of events"



- Kids need something to look forward to, they don't have a place to go like a community center, there are no destinations for kids; although there are programs for kids without a central location, they are scattered around
- Riverfront Park is the key to the trail. Many kids go to Memorial Park for events, having events at Riverfront Park instead could help. i.e. Latin Festival will be held at Riverfront park on September 21st, that is the kind of event where there would be a couple hundred kids at the park; often SRG is closed during these events
- Would be good to host other events at Riverfront Park to expose kids and teenager to nature, biking, kayaking
- When he was young there were camps throughout community, grew up on Sherman Street, important to get the kids when they are young, expose them when they are young, bring them down for nature walks, Sarah can engage with the youth
- Sarah clarified she is on the board for Centro Cultural Latinos Unidos a local nonprofit who advocates for Latinos, she makes a point of having the exhibit open during the Latin Festival, however, acknowledges there is a need to translate it into Spanish; kids are bilingual, parents often aren't
- Recommends more guided events/walks, for mom's with strollers, would help dispel people's perception of the park as run-down and unsafe
- Sarah suggested signage that is relatable to the average person (instead of distance, use time)
- NAACP a non-profit, 501(c) 4, so everything comes from the National office, capacity is also limited because most involved with NAACP are volunteers with other jobs, barrier is finding people to take time to volunteer, and it is tough to motivate people when other people are getting paid

Visioning/Goals

- 3. What would be a 'win' for you in this (process/for future projects)?
- There should be more education and marketing on the bike share program [at Schuylkill River Greenway NHA] – people have different impressions about what it is and may be unaware that it is free of charge
- Programming for youth is important, however, it should focus on sustainable
 activities. It is great to introduce things like kayaking, but it isn't a sustainable
 activity since kayak's are unaffordable and kids in the borough probably don't
 have a place to store it safely
- Plan an event that would be meaningful to the kids to draw them to the trail, maybe a presentation about the underground railroad
- Need to advertise events on the trail and events in general much better, possibly create an attractive pamphlet with basic information, a great map and plaster the town with it
- There are multiple opportunities to hold events or engage youth with technology, such as an app that gives badges for achievements; scavenger hunts could be a way to get youth interested in the trail
- As a society we need to take little steps to make progress, start community gatherings, somehow engage adults to ride bikes with kids and students. Kids in general need more positive mentors and kids need consistency in their lives
- Many African Americans have never been exposed to the activities that are along the trail such as kayaking, it is important to expose youth to these kinds of activities
- There is a disconnect among so many non-profits in the area. Organizations

- need to focus on what they specialize in and are good at. When there is a pot of money available, they all chase it and try to create a program to use the money
- Some of things talking about are low cost, what is Planning Commission willing to contribute? Is county willing to help with funding? (Donna Fabry replied yes, goal is to identify gaps so County can assist)
- Municipality has a good attitude but no money
- Free music in the park would be a great, jazz, country-western, different genre's that would engage people to stroll and walk and explore the park
- 4. What is your vision for the trail in 5 years? In 10 years?
- Use the trail to create programming for kids like a summer camp with trail activities exposing them to the trail and things to do like exercise, fishing, biking etc. Everything must be multi-cultural based such as bike clubs
- Kids love being outside, and need activities for them, and students need to have adults in their lives
- We must integrate multi-culturalism at a young age
- Events and food trucks
- ADA accessible trails (currently fixing Hanover Street crossing)
- Open clearings on trails so people, feel safer, less vulnerable, and there is higher visibility from the road
- Provide Signage, brochures, and advertisements in different languages (English/Spanish)
- Bigger text on signs for those who are visually impaired
- Marketing is representative (includes people of color)
- Hosting local walks for those who may be intimidated by walking alone (a fear from college students especially)
- Advertisement beyond the internet
- Trail education, make people feel empowered and educated (both on natural concerns like ticks and poison ivy, as well as trail etiquette)
- Benches along the trail for those who need a break
- Water refill stations, make sure people are hydrated, cut down on waste
 - ♦ Already have trail ambassadors, the biggest issue they encounter is dehydration
 - ♦ Educate people the effects of heat stroke/heat stress
- Need to work with school district, get in at the elementary school level, emphasis on getting kids out of the classroom for physical fitness, have field trips to the trail, SRG can provide services free to Pottstown Community, why is there such a disconnect between SRG and municipality.
- Part of the issue is the trail is owned by different organizations, but agrees there should be better coordination between SRG and Montco

Concerns

5. To what extent does the current Schuylkill River Trail reflect your priorities for a public space? What is missing? What is the most important to you in this design?



- 6. Are there immediate issues along the corridor that should be evaluated and addressed? (e.g. replacing signs, adding a bus stop, replacing a street lamp, etc.)
- 7. What is your **greatest** concern along the trail corridor?
- Kids do not have a good relationship with police in Pottstown, and a lot of
 the fault is on the school district for involving police on non-police issues like
 excessive absenteeism or other problems that really do not concern the police
- There is a perception from children that they may not want to use the trail because they do not feel safe. We should be prepared to answer questions from the kids such as: "how will I be safe on the trail?" or "What do I do if someone accuses me of something I didn't do like littering?"
- The trail needs to have mile markers added to it, sports activities and clubs are always well attended, and having distance markers for runners/wrestlers would help them define activities
- Kids do not wear helmets
- People are afraid of the trail to a degree, used to be a homeless population in some areas
- Disagree that people don't feel welcome, just thinks people with different backgrounds are not aware of the trail, awareness and education is the issue, people may be unfamiliar and uncomfortable but do not feel unwelcome; the biggest fear is from sexual deviants in the vicinity of Riverfront Park and on the trail, hasn't heard of other types of crimes
- Agreed, biggest issue is homeless people, drugs, lewd behavior; attempting to address with more signage, increasing trail awareness

Process (guiding principles and stakeholder outreach)

- 8. [Hand out copies of the goals/objectives table; take a few minutes to explain the purpose and to allow interviewee to process them] Are your objectives for the trail captured here? Do these goals capture your desires for the trail? What is missing?
- 9. [Hand out copies of the draft survey questions] Will these questions engage members of your community? Do you have any edits/additional questions to add?
- 10. Who else should we include as part of the stakeholder group for this project?
- The NAACP in Pottstown for ideas and to hear their concerns about the trail and trail usage
- Heather Daly 21st Century Coordinator, grant writer, develops before and after school programs for kids
- Team up with Pottstown Area Health and awareness program
- Attempt to connect with Matt Miller Environmental club
- 11. Are you willing to help us distribute surveys as part of our public outreach process? Are there any upcoming events in your community where we can talk with the community about the trail and distribute surveys and information?

PENNYPACK STAKEHOLDER INTERVIEW

Pennypack interviews were held via conference call. Interviews were conducted by Leah Kacanda (WRA) and Donna Fabry (Montgomery County Planning Commission). Interviews were held with an Abington Township Commissioner, a representative from Montgomery County Parks, Trails, & Historic Sites, and a local bike advocate.

Activity/Interest in trail

- 1. Please tell us about you/your organization's interest in the study area. (e.g. current activities or future plans in/adjacent/through the study area? How do you/your organization use it? How does it impact you/your organization?)
- Fair number of people ride to access trail as well
- Primary use recreational
- Is responsible for northern part of County owned parklands
- Never anticipated the trails would be so successful
- First section opened in 09, second section in 2013; old rail line so easy to construct, mostly wooded
- 50/50 walking/biking
- If live within 1 mile or so, will bike in
- Great place to walk or bike
- Strength is the shade, people prefer walking or biking in the shade especially in the summer
- Question is how to bike to the trail safely
- A lot of seniors use the trail every day
- A lot of kids use the trail
- Often seniors bring kids (especially in summers)
- Good place to access nature quickly from trail head
- Families on weekend, all age groups
- Groups of mentally disabled adults, lots of wheelchairs, baby carriages
- Lorimer Park sees more diversity in park users than on the trail
- A lot of Pennypack trail users are families and older
- Very popular for walking
- Lots of access points
- Older community can get into trail immediately
- Most neighboring areas are aware of trail, often used, well connected to community
- Byberry Trail Head
 - ♦ Parking at Byberry good, just in full sun, never seen full, needs shade
 - ♦ Byberry trail head lot expanded 27 to 52 spaces, normally 75% full, 60k visits a year
 - ♦ Connection to Masons Mill Park on Byberry, talk of making a connection there, along Creek or through business park
 - ♦ Will be extended the trail north of the Byberry parking lot by 0.75 miles next spring, will hit Bucks County



- Byberry parking lot is congested, extension of trail will move that congestion north, hoping to have additional parking at abandoned business park at County Line and New Road
- ♦ Recently placed port-a-pots
- Residential access at northern point is easy

• Bryn Athyn Trail Head

- ♦ Popular end of trail to use
- ♦ Parking near the Bryn Athyn Post Office is least successful; part of problem is bridge closure
- Parking lot is gravel, unsure who controls space, need for improvements
- ♦ Off of Huntington Pike to get to Bryn Athyn
- ♦ Post Office allows trail parking when closed on Sunday
- ♦ If you buy food at the All-Aboard Café (located in gravel parking lot across from Bryn Athyn Post Office) they allow you to park
- Bryn Athyn connections are easy; walk down street and join trail at post office
- ♦ Recently placed port-a-pots (post office requested)

Welsh Road

- Welsh road is good because it has pedestrian crossings
- ♦ Welsh Road is unpleasant to bike on
- ♦ Parking lot at the car wash always full, especially on weekends, need to identify more space
- ♦ Welsh Road trail head lot has 42 spots, will provide us with exact figures
- People might bike on Valley Road, but no parent wants their kids biking there. Between Valley Road and the Trail head is high stress despite bike lanes
- ♦ County gave grant to Lower Moreland to connect from Welsh Road, bike lanes on Washington lane, sidewalk connectivity
- Better connection into Beth Ayres section of Huntington Valley, not far from Welsh Road, shops, Huntington Pike, restaurants, for wayfinding connections, for Lower Moreland to take on with the County
- Old Huntingdon Pike Trail Head
- Lorimer Park Trail Head
 - ♦ provides a nice anchor
 - ♦ Parking at Lorimer is good, high usage
 - ♦ Success of trail is evidenced by success of parking lot; i.e. Lorimer Park Parking lot, before trail was installed averaged 75k visits a year, since trail was installed do over 200k visits a year, recently expanded lot (184 spaces) is still sometimes insufficient
 - ♦ Over 900 cars on opening day of Trout season in March
 - ♦ Average on any given weekend day is 400-600 cars
 - ♦ Lorimer has amenities including bathrooms and drinking water
 - ♦ All trails in Lorimer Park are open to biking; Once rail trail opened most bikers switched to riding that

Rockledge

- ♦ Southern end of Lorimer against the neighborhood and Rockledge Borough, see people walking in
- A lot of people fixate on going to the Rockledge end of the trail, invisible access point, mid-block sidewalk, people need to know where to park
- In one year will connect to Philadelphia, ½ mile from Rockledge to Fox Ridge Train Station, current trail will continue south on rail grade; already pulled rails and ties, need more funding to do top coating and pull out debris, will connect to Philadelphia
- Parking at a premium at rail station, may see people park at Rockledge and walk the half mile

Trail users

- More people walking, and a lot of regular trail users (daily/weekly walks)
- Vast number of trail users are from Montco, Picnic users are from City (easy to tell, depending on direction they turn out of the parking lot)
- Very comfortable with age diversity
- Ethnic diversity; most groups in picnic area will use the trail at some point, they know the trail is there, if with a group they are picnicking, if with family may go up to trail, a lot of groups from Northeast Philadelphia
- Picnic area a big issue, many groups coming out of the City do not speak English, very hard to communicate simple things, i.e. where to park, music volume, if they follow rules not a big deal at all
- ♦ A lot of Asians use the trail, seeing more Indian/Pakistani professionals (lots of hospitals, medical staff)
- When first started, saw a large influx of Koreans (various churches in Philadelphia area did missions in Korea)
- ♦ In the 80s Russians and those form Soviet Union came to the area, Lower Moreland has very large Russian Population
- ♦ Used to see a lot of Italians and Poles
- ♦ 8-9 different ethnic groups on a given afternoon
- Don't have a lot of African American visitors but it is a growing group of users

Other user groups

- ♦ Special events must get a permit from Montgomery County; Require permit from anything beyond a picnic, picnic area is first come first serve, if they get a call they limit group size to 50 people
- ♦ Boy Scout Troops conducts cleanups along the trail
- Bike safety groups use the trail for bike training
- ♦ Bird watchers, tours
- Wyncote Audubon Society conducts bird walks on the trail
- SoMont Youth MTB Team, formed club for junior high and high school kids, teach bike safety and racing; mostly use single track trails in park, not Pennypack Trail
- A number of charity 5ks and walks that use the trail, early spring and fall



- ♦ Would not allow a formal bike race on trail, too busy
- "Walk Park Train Abington" study for seven train stations in Abington, discuss connectivity to community, some is related to trails in the county, assembled to promote connection to public transport
 - ♦ If you can get to bike lanes on Valley Road the trail will be connected to Meadowbrook, Rydal, and Noble train station
 - ♦ Look into bike parking at train stations
- "Abington Bike Master Plan" has multiple routes planned that connect to Pennypack Trail
 - ♦ Route #16 Old Huntingtdon Trail (Valley Road to Pennypack Trail)
 - ♦ Route #18 Moredon Trail (Moredon Road to Pennypack Trail)
 - ♦ Route #20 Meadowbrook Trail (Valley Road to lower Moreland Township)
 - ♦ Route #23 Pennypack Connector (Jenkintown Road to Pennypack Trail))
- Abington and Jenkintown teamed up to do sidewalk and roadway connections (sidewalks, sharrows, bike lanes); work is well-funded, to start in next year
- 2. Is there anything that prevents you/your organization from using the trail?

Visioning/Goals

- 3. What would be a 'win' for you in this (process/for future projects)?
- People want to bike loops that incorporate the trail
- Two audiences: people who want to drive to the trail and ride, people who want to bike to the trail
- Last Tuesday tabled at Town Square on behalf of the Environmental Action Committee in Jenkintown, mostly retired people who are interested, their concern "is it flat," "is it paved," showing people the Circuit Map doesn't help, need an existing conditions map not a future conditions map, people are willing to travel further since it is a recreational activity, interested in learning about DC trail network, approaching this as an event/destination
- Focus on connection between Lorimer Park Parking lot to Pine Road along the creek; a lot of people don't know about the connection, crossing over Pine Road is unmarked, better marking will improve access for a broader (more diverse) population
- For families recreational bicycling is often unbalanced-one spouse is a biker, the
 other is along for the ride, requires investment in bike rack, a lot of people do
 Washington Crossing and bike to New Hope because New Hope has amenities
 and is a destination; i.e. not biking for the sake of it. Pennypack needs to be
 connected to amenities to broaden appeal
- A lot of people don't have sidewalks and don't have places to walk; so the more people can use trails on a daily basis, the better
- People from Jenkintown want to access by bike, if driving they park at Lorimer Park, if biking Fox Chase Road is terrible so bicyclists use Beverly Road and Fairy Hill Road, avoid Washington Lane; should implement planned trail connection between Jenkintown and Pennypack Trail (not on Circuit Map)
- 4. What is your vision for the trail in 5 years? In 10 years?
- Wish there was a better connection between Meadowbrook Apartments (owned

by Lindy Properties) and the trail; directly next to an abandoned golf course, potential to connect via Pennypack Trail with Valley Road in Abington (this connection is identified in the Abington Master Bike Plan)

- Possible new trail access at Huntingdon Pike
- West side of Huntingdon Pike has exit ramp off the highway that was never developed, considering using that as a parking lot and then walking under the highway to access the trail, owned by a real estate company
- Access from Meadowbrook Apartments, trail connection from north side of Pennypack creek



- Recommendation to add information to the Trail webpage about the number of parking spaces available at each lot
- As trail ties into Philadelphia and Bucks, more folks will bike in, park proximate
- Connections made north towards Newtown and South into Philadelphia; once connected people may commute into Philadelphia and people who work from home may bike into Newtown Square to take advantage of coffee shops, etc.
- Once it connects to Fox Chase in the south it may spur bike to train, take train in
- Accommodating e-bikes should be considered; ebikes revolutionizing the industry, changing ridership levels and distances; some bikes will go 70+ miles on a charge, can get a cargo e-bike for less than \$2k
- Recommendation promote trails with letterboxing, geocaching, can take a small park and turn it into a multi-mile walk

Concerns

- 5. To what extent does the current Pennypack Trail reflect your priorities for a public space? What is missing? What is the most important to you in this design?
- Portion of Pennypack that goes through City has more racial diversity than Montgomery County. Huntington Valley, Meadowbrook, Bryn Athyn, etc. are not that diverse

- There is no goal to repave the trail, personally prefers it unpaved, although unpaved status makes it difficult for wheelchair users
- Provide directional signage on major roadways showing how to get to Lorimer, directional to get to park (hard to find from nearby roads)
- Perkiomen trail is great because you can leave main gravel trail and do side trails
- Get an adaptor for one of the vehicles at Lorimer for cross country ski tracks
- Connecting the area around Moredon Road is challenging
- Moreland Road is the most difficult point for access: there is park access via a
 gate on Moreland Road at Packard Avenue, but provides access to the wrong
 side of the creek
- In the spring Pennypack can have a lot of water underneath the trail, can be
 very muddy, riding it can hurt the trail, trail surface is important to people, riders
 seeking a paved trail go to the Powerline Trail in Horsham, park in Willow Grove,
 the Route 202 trail can be hilly in parts but it is exposed,
- 6. Are there immediate issues along the corridor that should be evaluated and addressed? (e.g. replacing signs, adding a bus stop, replacing a street lamp, etc.)
- Montco is responsible for maintaining everything along trail
- Add signage to relative street locations to indicate what is in what direction, to encourage transportation use, identify assets
- Needs to replace signs because they are faded, but doesn't see a need for additional signs
- Pennypack Trail has mile-markers every ¼ mile, useful for emergency vehicles, also used by joggers and walkers
- Try to avoid bollards and gates (to allow access to emergency vehicles); but have had issues with delivery trucks on trail during holiday season)
- Have a lot of benches (mainly donated in memoriam or to celebrate event); Some people think there are too many benches, seniors request more benches
- Don't get any complaints (unless tree comes down), planning is looking at connections to other neighborhoods
- A little bit of graffiti occasionally, paint over any instance right away
- Coming from south, difficult to pick up Montco Trail section from Philly, Riders don't know to get off on Rockledge Ave, need signage at corner of Shady Lane and Rockledge Avenue to direct bicyclists back onto trail
- 7. What is your **greatest** concern along the trail corridor?
- Normal complaints you would get anywhere
- Biggest problem are dogs, especially off leash or mean dogs
- Dog walker with ear buds blocking trail
- Have some horseback riders
- Every group thinks it should be their trail only, people think they should be the priority

- Conflict between bikers and walkers- signs up require signaling; there are some issues with speed, hoped that gravel surface would slow down riders
- Majority of trail is patrolled by Bryn Athyn Police and Montco Rangers, good to patrol and be seen, gives assurance to visitors
 - Concerned about night time activity, parking lots closed at dusk, not all have physical barriers
 - ♦ Entire system is closed at sunset, which means there is no patrol
 - ♦ Park opens by 7, trail is usually in use before they open park
 - Have had no serious crime since trail opened
- Problem is cars and bicyclists need to go to the same place, i.e. Plymouth
 Meeting crossing turnpike, who needs to walk on Ridge Pike, connection
 between cross county trail and SRT, signage for bicyclists/peds in and around
 476/Ridge Pike

Process (guiding principles and stakeholder outreach)

- 8. [Hand out copies of the goals/objectives table; take a few minutes to explain the purpose and to allow interviewee to process them]
- 9. Are your objectives for the trail captured here? Do these goals capture your desires for the trail? What is missing?
- 10. [Hand out copies of the draft survey questions] Will these questions engage members of your community? Do you have any edits/additional questions to add?
- Who else should we include as part of the stakeholder group for this project?
- 11. Steve Spindler, very involved in bike and trail connections in Jenkintown Abington, involved with Wikimaps
- Are you willing to help us distribute surveys as part of our public outreach process? Are there any upcoming events in your community where we can talk with the community about the trail and distribute surveys and information?
- Social media is preferred means of communication
- Township does a newsletter quarterly that is online and emailed
- Event recommendation: National Night out in Abington, stations set up, Target
 Parking lot, good location to set up a table with information, gets a lot of
 attendees; contact Abington Community Policing; Roger Gillespie
- Talk to Jill about events in Lower Moreland, good resource for other events
- Recommends coming to Lorimer Park to do outreach on a nice weather weekend
- Initial thoughts, all municipalities surrounding the trail have email lists, taking
 the flyer in the kiosk (Pennypack Trail Flyer), make it a PDF, distribute to all email
 lists. That is all the information they need, shows distance and everything they
 need to know about the trail

Appendix D: Proposed Project Tables

PROJECT NAME	HAWS AVENUE TRAILHEAD TO SCHUYLKILL RIVER TRAIL
Responsible Party	Montgomery County
Project Partners	Adjacent Property Owners, PECO, City of Norristown, Montgomery County
Project Description	Improve existing trailhead access to and visibility with new entrance space with plantings, public art, gateway and directional signage. Remove overgrown vegetation and debris to enhance visibility and sightlines along the trailhead to the trail. If needed, replace existing asphalt path to trail. Install new ADA ramps and crosswalks along West Washington Avenue and Haws Avenue intersection. Construct a wall or barrier to keep users from edge of Haws Avenue south of intersection. Extend the asphalt adjacent to the north of the Schuylkill River Trail to include an area for benches and gateway signage. Highlight existing railroad tracks with signage about the corridor's history and add gateway art to welcome trail users to Norristown. Possible art could include trail surface art, a mural on proposed wall, or vertical sculptures. Add directional signage at the entrance of the trailhead and at intersections surrounding the trailhead entrance including at the stairs to Riverfront Park, Main Street and Haws Avenue, and Marshall Street and Haws Avenue. Approval from private property owners may be needed to install improvements. Phasing improvements is an option.
Purpose	To improve pedestrian and bicycle access and safety. To improve pedestrian and bicycle access through a series of gateway and trailhead enhancements. To encourage multimodal transportation and recreation.
Need	Recent studies have indicated that residents and users have safety and access concerns for the section of the Schuylkill River Trail near Riverfront Park.
Vision/Goals	The recommended physical improvements enhance and create an accessible route to the Schuylkill River Trail and Riverfront Park for an underserved area in Norristown with limited access to recreational space and multimodal options.
Signage & Connectivity	Wayfinding signage should be placed along Haws Avenue, Main Street, Marshall Street, and West Washington Street to direct users to the Haws Avenue Trailhead to the Schuylkill River Trail. Wayfinding signage should inform users of multimodal routes incorporating the Schuylkill River Trail to destinations within Norristown and beyond. Gateway signage should include information on trail rules and "how to" tips, as well as directions to Trail Junction and its amenities.
Gateway Improvements	Formalizing the Haws Avenue trailhead will strengthen the connection between the neighborhood to trail and Riverfront Park. Haws Avenue would serve as the main trailhead to the Schuylkill River Trail for the westside of Norristown.
Corridor Improvements	See the Overview Plan recommendation for location of additional amenities including mile markers, benches, bathrooms, and water sources along the Schuylkill River Trail.
Public Art	The local community should be engaged around the creation of any public art in order to inspire community ownership of the trail as a community asset. The creation of gateway art, vertical sculptures, and/or a wall mural provides a visual connection that draw users to and from the trail. Trail surface art on the connecting trailhead pathway and intersection area with the Schuylkill River Trail both beautifies the area and highlights the community connection. A mural on the trail and/or other public art would also encourage trail users to slow down as they pass the trail head, enabling people to enter the trail system safely.
Programming	Due to the small size of the area, no programming would be suggested at this location. This trailhead will provide access and support programming at Riverfront Park.
Potential Challenges	Right-of-way; access control; maintenance

Cost	Medium ADA curb ramp design and installation New crosswalks Gateway and directional signage Site amenities and plantings
	Public art

PROJECT NAME	CHAIN STREET TRAILHEAD TO SCHUYLKILL RIVER TRAIL			
Responsible Party	Montgomery County			
Project Partners	Adjacent Property Owners, PECO, City of Norristown, Montgomery County			
Project Description	Extend asphalt roadway and curb to connect Chain Street and Pearl Street. Create trailhead space at southern end of Chain Street with pavement, bollards, benches, gateway signage and plantings. Extend sidewalk along Chain Street to connect to proposed trailhead. Add directional signage and sharrows at Chain Street and Potts Alley. Add a low wooden guardrail along Chain Street between Potts Alley and the trailhead. Add 11 new on-street parallel parking spaces on new asphalt roadway between Pearl Street and Chain Street. Add low wooden guardrail and/or drainage swale (if necessary) between proposed parking and Schuylkill River Trail. Create connection from proposed trailhead to Riverfront Park to the south of the trail. Approval from PECO may be needed to plant trees in this area. Phasing improvements is an option.			
Purpose	To improve pedestrian and bicycle access and safety. To encourage multimodal transportation and recreation.			
Need	The southern end of Chain Street currently provides unofficial access to the Schuylkill River Trail for the adjacent neighborhood. Worn paths are evident from Chain Street and Pearl Street to the Schuylkill River Trail and to the Riverfront Park area. Currently no sidewalk or asphalt pathway exists to connect users from the adjacent neighborhood to the trail at this location.			
Vision/Goals	The recommended physical improvements create an accessible route to the Schuylkill River Trail and Riverfront Park for an underserved area in Norristown with limited access to recreational space and multimodal options.			
Signage & Connectivity	Wayfinding signage should be placed along West Main Street, Chain Street, Potts Alley, West Lafayette Street and West Washington Street to direct users to the Schuylkill River Trail and Riverfront Park. Sharrows will facilitate access to the trail for bicyclists. Wayfinding signage should inform users of multimodal routes incorporating the Schuylkill River Trail to destinations within Norristown and beyond. Gateway signage should include information on trail rules and "how to" tips, as well as directions to Riverfront Park and how to access the future Stony Creek Trail.			
Gateway Improvements	Formalizing the Chain Street trailhead will strengthen the connection between the neighborhood and the Schuylkill River Trail. Improvements include the creation of a concrete plaza that connects the neighborhood sidewalk and bikeway network with the trail. A bench provides a place for trail users to sit and rest. Landscaping improvement including flowering trees and a low wooden guardrail instead of a fence beautify the area, turning it into an asset for the neighborhood. Bollards allow bicycle and pedestrian traffic to enter the trail but protect the trail from vehicular traffic. Bollards will be placed to discourage vehicle access while still allowing for emergency vehicle to access the trail without removing the bollards.			
Corridor Improvements	See the Overview Plan recommendation for location of additional amenities including mile markers, benches, bathrooms, and water sources along the Schuylkill River Trail.			

Public Art The local community should be engaged around the creation of any public art in inspire community ownership of the trail as a community asset. A mural on the t or other public art would also encourage trail users to slow down as they pass the head, enabling people to enter the trail system safely.						
Programming	nming Due to the small size of the area, no programming would be suggested at this location trailhead will provide access and support programming at Riverfront Park.					
Potential Challenges	Right-of-way easements/acquisition; access control; maintenance					
Cost	High Potential right-of-way acquisitions/coordination Roadway and curb adjustments ADA curb ramp design and installation New sidewalk connections Site amenities					

PROJECT NAME	SCHUYLKILL RIVER TRAIL NEAR NORRISTOWN TRANSPORTATION CENTER
Responsible Party	Montgomery County
Project Partners	SEPTA, PECO, City of Norristown, Montgomery County
Project Description	This project involves upgrading access, visibility, and circulation of the Schuylkill River Trail and trailhead at the Norristown Transportation Center.
Purpose	To improve pedestrian and bicycle access and safety by reducing conflicts between trail users and transit users. To improve access and visibility to transit. To encourage multimodal transportation and recreation.
Need	The Schuylkill River Trail near the Norristown Transportation Center has obstructions within the trail as well as conflicts with transit users.
Vision/Goals	The recommended physical improvements enhance and improve the safety the Schuylkill River Trail and creates accessible routes to and from transit.
Signage & Connectivity	Wayfinding signage should be placed along the Norristown Transportation Center, Swede Street, East Main Street, East Lafayette Street and Dekalb Street. Wayfinding signage should inform users of multimodal routes incorporating the Schuylkill River Trail to destinations within Norristown and beyond. Gateway signage should include information on trail rules and "how to" tips, as well as directions to Trail Junction and its amenities.
Gateway Improvements	Provide updated pavement, access, amenities and plantings for trail and transit users.
Corridor Improvements	See the Overview Plan recommendation for location of additional amenities including mile markers, benches, bathrooms, and water sources along the Schuylkill River Trail.
Public Art	Public art in this area is being concentrated in the Lafayette Street Gateway area.
Programming	Due to the small size of the area and use of this area, no programming would be suggested at this location. This trailhead will provide access and support programming at Lafayette Street Gateway.
Potential Challenges	Private property owners; maintenance

Cost	High	
	ADA curb ramp design and installation	
	New crosswalks and plaza area	
	Gateway and directional signage	
	Site amenities and plantings	
	ADA ramp and stairs	

PROJECT NAME	LAFAYETTE STREET GATEWAY AND PROGRAMMING OPPORTUNITIES
Responsible Party	Montgomery County
Project Partners	Adjacent Property Owners, PECO, City of Norristown, Montgomery County
Project Description	Activating the trail and Lafayette Street Gateway area through a series of enhancements including improved trail access, gateways, trail amenities, signage, and public art projects. This project will provide a gathering space large enough for small community events and other programming.
Purpose	To activate the open space along the Schuylkill River Trail for passive recreation and to improve pedestrian and bicycle access through a series of gateway and trailhead enhancements.
Need	Recent studies have indicated that minority populations would be more likely to use trails if opportunities for passive recreation were provided. Creating spaces that can be programmed for larger events, family gatherings or other cultural celebrations will provide an increased awareness of the trail.
Vision/Goals	The recommended physical improvements will activate the linear open space created by the Lafayette Street Extension project adjacent to the Schuylkill River Trail and enhance accessible routes to the Schuylkill River Trail.
Signage & Connectivity	Wayfinding signage should be placed along East Main Street, DeKalb Street, Mill Street, Walnut Street, and East Lafayette Street to direct users to the Schuylkill River Trail. Wayfinding signage should inform users of multimodal routes incorporating the Schuylkill River Trail to destinations within Norristown and beyond. Gateway signage should include information on trail rules and "how to" tips, as well as directions to Trail Junction and its amenities. The future Chester Valley Trail and the future Saw Mill Run Greenway should also be included as part of the gateway signage.
Gateway Improvements	Enhancing the Lafayette Street trailhead will strengthen the connection between the neighborhood and the Schuylkill River Trail by increasing the visibility of the trail raising awareness. The Lafayette Street corridor has three separate gateways to the trail: at the Trail Junction off DeKalb and Lafayette Street, at the base of Saw Mill Run, and at the base of Walnut Street. Improvements at each gateway include signage, trail surface art, and directional signage. Installing picnic/rest areas covered by a pavilion would create a place the community could use to gather and socialize while accessing the trail for recreational opportunities.
Corridor Improvements	See the Overview Plan recommendation for location of additional amenities including mile markers, benches, bathrooms, and water sources along the Schuylkill River Trail.
Public Art	The local community should be engaged around the creation of any public art in order to inspire community ownership of the trail as a community asset. Trail surface art on connecting pathways to the Lafayette Street Extension improvements provides a visual connection to draw users both to and from the trail. The remaining section of viaduct wall has been identified as location for a potential wall art mural. A mural on the trail and/or other public art would also encourage trail users to slow down as they pass the trail head, enabling people to enter the trail system safely.

Programming	This plan identifies a 0.5-acre lawn area between the Trail Junction and the Saw Mill Run access point that could be used for seasonal programming. Programming could include summer games, movie nights, or live concert events. The plan also identifies appropriate locations for picnic/rest areas that could also be used for public events.				
Potential Challenges	Right-of-way easements/acquisition; access control; maintenance				
Cost	Medium				
	Trail amenities/Picnic shelters/Benches				
	Gateway signage				
	Trail directional signage				
	Enhancement landscape				
	Trail art and mural				
	Programming items and staff				

Appendix E: Cost Estimates

MONTGOMERY COUNTY TRAIL DIVERSITY

Chain Street Trailhead Concept

Conceptual Construction Cost Estimate

Unit	Item Description		Quantity	Unit Cost	Item Cost
LS	CLEARING AND GRUBBING		1	\$10,000	\$10,000
CY	CLASS 1B EXCAVATION (Ex. sidewalk, curb and asphalt by curb)		60	\$30	\$1,800
LF	SAWCUT ASPHALT		220	\$ 15	\$3,300
CY	TOPSOIL FURNISH AND PLACE		10	\$155	\$1,550
SY	SEEDING AND MULCHING		110	\$5	\$550
SY	MILL/OVERLAY		280	\$15	\$4,200
SY	FULL DEPTH ASPHALT PAVEMENT		690	\$75	\$51,750
SY	DRIVEWAY ADJUSTMENT		66	\$75	\$4,950
LF	PLAIN CEMENT CONCRETE CURB		740	\$50	\$37,000
SY	BRICK PAVERS		15	\$250	\$3,750
SY	CEMENT CONCRETE SIDEWALK		250	\$150	\$37,500
LF	4" PAVEMENT MARKINGS		130	\$2.0	\$260
LF	12" PAVEMENT MARKINGS		54	\$7.0	\$378
LF	24" PAVEMENT MARKINGS		54	\$13	\$702
LF	BIKE SYMBOLS		4	\$500	\$2,000
LF	WOODEN GUARDRAIL		230	\$75	\$17,250
EACH	BENCHES		1	\$2,500	\$2,500
LS	ROADWAY SIGNAGE		1	\$750	\$750
LS	TRAILHEAD SIGNAGE		1	\$2,500	\$2,500
EACH	BOLLARDS		5	\$2,000	\$10,000
LS	SURFACE ART		1	\$2,500	\$2,500
LS	ART/ STRUCTURE		1	\$10,000	\$10,000
LS	LANDSCAPE PLANTINGS		1	\$5,000	\$5,000
EACH	DETECTABLE DOMES		4	\$500	\$2,000
LS	MAINTENANCE AND PROTECTION OF TRAFFIC		1	\$6,400	\$6,400
LS	EROSION AND SEDIMENTATION CONTROLS		1	\$6,400	\$6,400
LS	DRAINAGE		1	\$7,500	\$7,500
LS	MOBILIZATION		1	\$4,300	\$4,244
		Total			\$236,734
		Escalation @		3%/year Through 2022	\$21,960.00
		Subtotal			\$258,693.80
		Contingencency@		20%	\$51,800
		Total Construction Cost			\$310,494
		Constructuction Oversite @		12%	\$37,300
		Subtotal			\$347,794
		Engineering Design			\$42,500
		Utility Relocation			\$10,700
		Right-of-Way Acquisition			_
		Total Cost			\$401,000
		SAY			\$410,000

MONTGOMERY COUNTY TRAIL DIVERSITY

Haws Avenue Trailhead Concept Conceptual Construction Cost Estimate

Unit	Item Description		Quantity	Unit Cost	Item Cost
LS	CLEARING AND GRUBBING		1	\$5,000	\$5,000
CY	CLASS 1B EXCAVATION (Ex. sidewalk, curb and asphalt by curb)		184	\$30	\$5,520
LF	SAWCUT ASPHALT		230	\$15	\$3,450
CY	TOPSOIL FURNISH AND PLACE		8	\$155	\$1,240
SY	SEEDING AND MULCHING		632	\$5	\$3,160
SY	MILL/OVERLAY (MAIN STREET)		400	\$15	\$6,000
SY	FULL DEPTH ASPHALT PAVEMENT		311	\$75	\$23,325
LF	PLAIN CEMENT CONCRETE CURB		215	\$50	\$10,750
SY	CEMENT CONCRETE SIDEWALK		240	\$150	\$36,000
LF	12" PAVEMENT MARKINGS		312	\$7.0	\$2,184
LF	24" PAVEMENT MARKINGS		44	\$13	\$572
LS	RAILROAD TRACK RESTORATION		1	\$1,000	\$1,000
EACH	BENCHES		2	\$2,500	\$5,000
LS	ROADWAY SIGNAGE		1	\$750	\$750
LS	TRAILHEAD SIGNAGE		1	\$2,500	\$2,500
LS	SURFACE ART		1	\$2,500	\$2,500
LS	ART/ STRUCTURE		1	\$10,000	\$10,000
LS	LANDSCAPE PLANTINGS		1	\$7,500	\$7,500
LS	DRAINAGE INLETS		1	\$17,500	\$17,500
EACH	DETECTABLE DOMES		8	\$500	\$4,000
LS	MAINTENANCE AND PROTECTION OF TRAFFIC		1	\$4,500	\$4,500
LS	EROSION AND SEDIMENTATION CONTROLS		1	\$4,500	\$4,500
LS	DRAINAGE		1	\$5,200	\$5,200
LS	MOBILIZATION			\$3,000	\$2,959
		Total			\$165,110
		Escalation @		3%/year Through 2022	\$15,320.00
		Subtotal			\$180,430.02
		Contingencency@		20%	\$36,100
		Total Construction Cost			\$216,530
		Constructuction Oversite @		12%	\$26,000
		Subtotal			\$242,530
		Engineering Design			\$29,600
		Utility Relocation			\$7,400
		Right-of-Way Acquisition			-
		Total Cost			\$279,600
		SAY			\$280,000

MONTGOMERY COUNTY TRAIL DIVERSITY

Lafayette Street Gateway Concept Conceptual Construction Cost Estimate

Unit	Item Description		Quantity	Unit Cost	Item Cost
EACH	BENCHES		5	\$2,500	\$12,500
LS	ROADWAY SIGNAGE		1	\$750	\$750
LS	TRAILHEAD SIGNAGE		1	\$2,500	\$2,500
LS	SURFACE ART		1	\$2,500	\$2,500
LS	ART/ STRUCTURE		1	\$10,000	\$10,000
LS	PICNIC PAVILLION		2	\$15,000	\$30,000
LS	BIKE AMENITIES		1	\$10,000	\$10,000
LS	LANDSCAPE PLANTINGS		1	\$7,500	\$7,500
LS	MAINTENANCE AND PROTECTION OF TRAFFIC		1	\$2,300	\$2,300
LS	EROSION AND SEDIMENTATION CONTROLS		1	\$2,300	\$2,300
LS	DRAINAGE			\$2,700	\$2,700
LS	MOBILIZATION			\$1,600	\$1,515
		Total			\$84,565
		Escalation @		3%/year Through 2022	\$7,850.00
		Subtotal			\$92,415.00
		Contingencency@		20%	\$18,500
		Total Construction Cost			\$110,915
		Constructuction Oversite @		12%	\$13,400
		Subtotal			\$124,315
		Engineering Design			\$15,200
		Utility Relocation			-
		Right-of-Way Acquisition			_
		Total Cost			\$139,600
		SAY			\$140,000

MONTGOMERY COUNTY TRAIL DIVERSITY

SRT near Norristown Transportation Center

Conceptual Construction Cost Estimate

Unit	Item Description		Quantity	Unit Cost	Item Cost
LS	CLEARING AND GRUBBING		1	\$5,000	\$5,000
CY	CLASS 1B EXCAVATION (Ex. sidewalk, curb and asphalt by curb)		333	\$30	\$9,990
LF	SAWCUT ASPHALT		120	\$15	\$1,800
CY	TOPSOIL FURNISH AND PLACE		50	\$155	\$7,750
SY	SEEDING AND MULCHING		413	\$5	\$2,065
SY	FULL DEPTH ASPHALT PAVEMENT (PATCHING)		40	\$75	\$3,000
SY	FULL DEPTH ASPHALT PAVEMENT (TRAIL)		525	\$75	\$39,375
LF	PLAIN CEMENT CONCRETE CURB		110	\$50	\$5,500
SY	BRICK PAVERS		210	\$250	\$52,500
LF	12" PAVEMENT MARKINGS		24	\$7.0	\$168
LS	SITE AMENITIES		1	\$30,000	\$30,000
LS	LANDSCAPE PLANTINGS		1	\$2,000	\$2,000
EACH	DETECTABLE DOMES		2	\$400	\$800
EACH	STAIRS AND RAMP		1	\$250,000	\$250,000
LS	MAINTENANCE AND PROTECTION OF TRAFFIC		1	\$12,300	\$12,300
LS	EROSION AND SEDIMENTATION CONTROLS		1	\$12,300	\$12,300
LS	DRAINAGE		1	\$14,400	\$14,400
LS	MOBILIZATION		1	\$20,500	\$20,497
		Total			\$469,445
		Escalation @		3%/year Through 2022	\$43,540.00
		Subtotal			\$512,985.40
		Contingencency@		20%	\$102,600
		Total Construction Cost			\$615,585
		Constructuction Oversite @		12%	\$73,900
		Subtotal			\$689,485
		Engineering Design			\$61,500
		Utility Relocation			\$20,500
		Right-of-Way Acquisition			
		Total Cost			\$771,500
		SAY			\$800,000



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