



COMMUNITY TRAILS



PLANNER'S PORTFOLIO

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PLANNER'S PORTFOLIO **COMMUNITY TRAILS**

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Planner's Portfolio Series

The Planner's Portfolio Series is an outreach effort developed by Delaware County Council in order to explore the planning concepts available for communities to take advantage of the unique opportunities across Delaware County.

The pattern on the cover page, and found throughout this series, represents the importance of each individual component in the larger network. The Planner's Portfolio Series explores several of these components and how they can support community character in Delaware County.

For more information, contact the Delaware County Planning Department at 610-891-5200 or visit <https://www.delcopa.gov/planning/planningeducation.html> to see the complete Planner's Portfolio series.

OVERVIEW

Pedestrian paths and multi-use trails have become increasingly popular for satisfying transportation and recreational needs. They provide connections between communities and natural and historic resources, enhance recreational opportunities, and often conserve linear open spaces. In doing so, trails also provide a valuable recreational and fitness opportunity for all users.

Delaware County identified a Primary Trail Network as part of its *Open Space, Recreation, and Greenway Plan (2015)* to help create a cohesive trail system. It represents a countywide network of multi-use trails capable of connecting to both regional and municipal trail systems and destinations, such as parks and commercial centers. Municipalities should consider developing their trails in such a manner that they either construct segments of this network or design their internal trails to connect to Primary Trails.

Paths and trails can take a variety of sizes and styles. This issue of the Planner's Portfolio series focuses on the different styles of connections. It also discusses road crossings and trail amenities.



Chester Creek Trail, Middletown Township (Credit: Friends of Chester Creek Branch)



Chester Valley Trail

Trails are an amenity that helps to bring in visitors that support the local economy. At times, they can even spur small businesses (above)!

COMMUNITY TRAILS

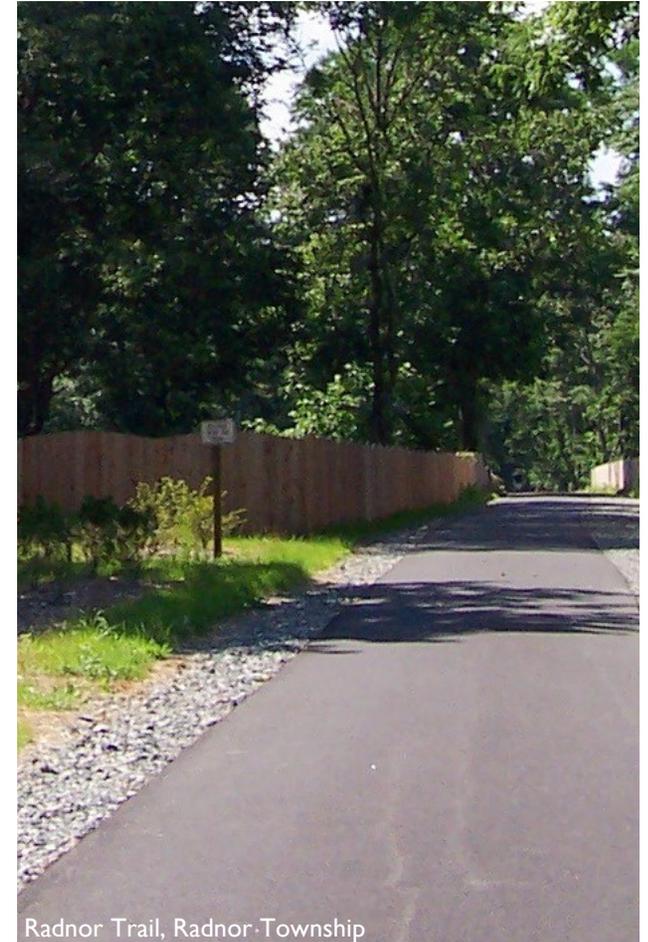
MULTI-USE TRAILS

Multi-use trails are paved paths generally ten- to twelve-feet wide that can be used for non-motorized activities such as walking, running, bicycling, etc. They can be found as internal trails within a park but are most common as linear connections between parks and other destinations. Trailheads, which may include parking, are located at various points along the length of the trail to provide access. Multi-use trails serve as both recreational amenities and transportation corridors for the community. While they primarily serve the communities immediately surrounding the trail, they attract visitors and trail users from other communities as well.

There has been a strong interest in access to trails in recent years. Some communities in the region have worked with developers to build segments of trails as part of the land development process. In other places, developers have installed short trails to provide connections to existing or planned trails.



Chester Creek Trail, Middletown Township



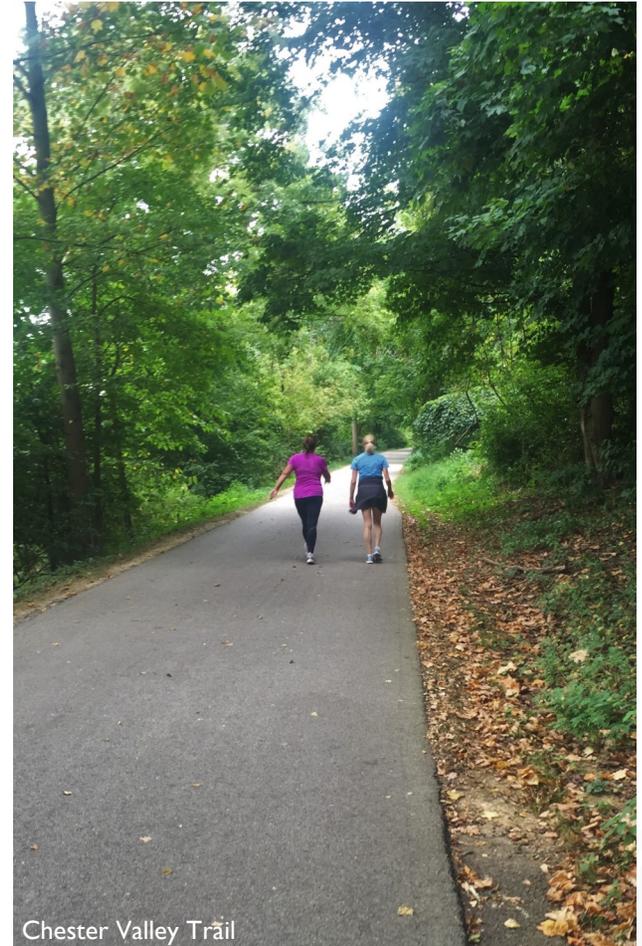
Radnor Trail, Radnor Township



Riverwalk, Wilmington, Delaware



Sleighton Park, Middletown Township



Chester Valley Trail



DuPont Environmental Center, Wilmington, Delaware

Trail facilities can be designed to fit in with the surrounding context. This can include formal plantings similar to the Riverwalk, a park-like setting as seen in Sleighton Park, or a heavily wooded buffer such as that along portions of the Chester Valley Trail.

Some sections of trails may require unique design solutions, such as a wetland crossing. A raised boardwalk can provide a connection through a wetland while limiting environmental impacts. These can also be used as an educational opportunity to inform visitors about the importance of wetlands and waterways.

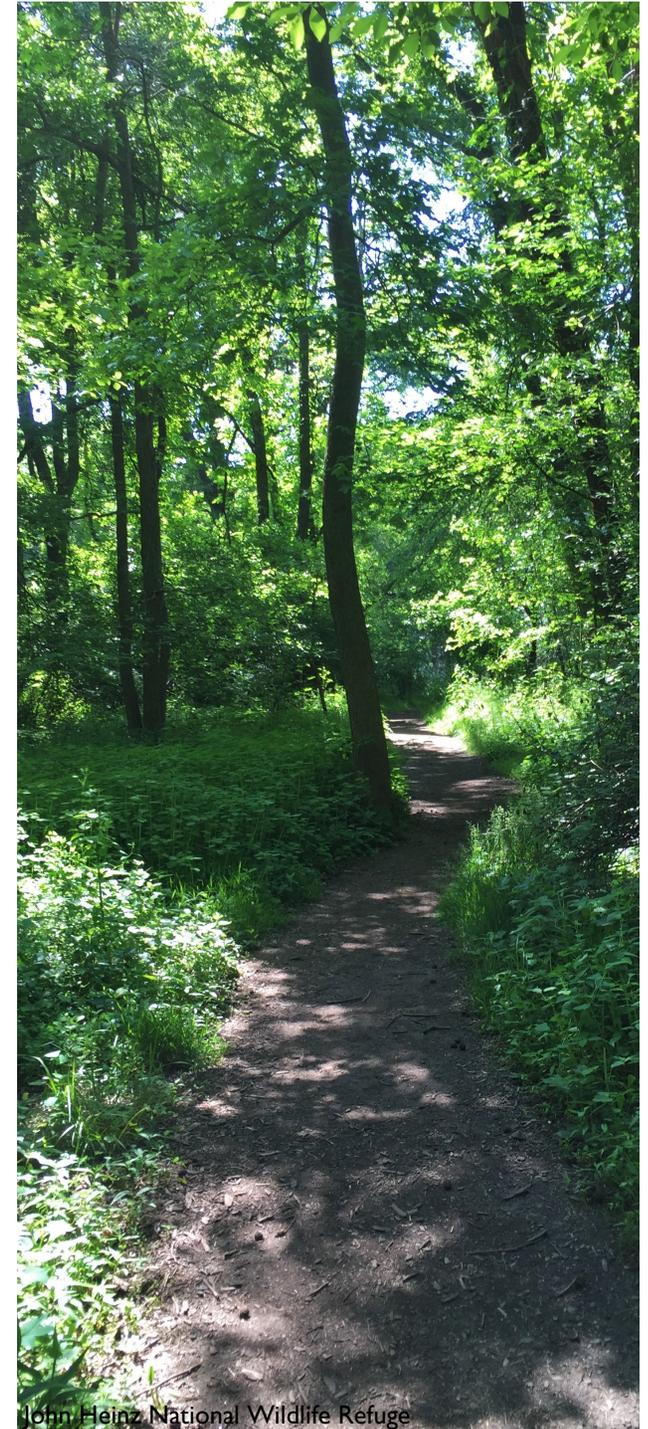
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EARTHEN TRAILS

Earthen trails are generally less formal paths designed mainly for walking and running. Common surface materials include grass, dirt, and mulch. Because these trails are less intensive to build, they are a great option for providing access to and through sensitive environmental features. Earthen trails are generally easier and less costly to implement and maintain than paved trails. Some grass trails can be implemented by simply altering mowing patterns to create a path through taller grasses. Similarly, dirt trails in wooded areas can be created by clearing the understory. As such, earthen trails can provide a great deal of exercise and educational opportunities at relatively low cost. However, earthen trails are not universally accessible to all potential users, which limits usage.



Darlington Trails, Middletown Township



John Heinz National Wildlife Refuge



First State National Park, Chadds Ford Township



John Heinz National Wildlife Refuge



Darlington Trails, Middletown Township

Earthen trails require a less-invasive construction process than paved, multi-use trails. This can help preserve environmental features, such as tree canopy, which are important because they provide habitat for wildlife and can infiltrate stormwater runoff.

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CYCLE TRACK

Due to the density of some communities in Delaware County, connected space for an off-road trail may not be an option. Cycle tracks parallel a roadway but are completely separated from vehicular traffic and most often complement a typical sidewalk. Cycle-tracks integrate a trail-like design into the roadway but still provide significant protection from vehicles. Cycle tracks are beneficial to users of a variety of riding skillsets and comfort levels because they are separate from standard traffic flow. They are often developed as part of larger regreening and streetscape improvement efforts along a corridor. Cycle tracks may be preferable over sidepath trail design along corridors where high pedestrian volume creates a need to maintain separated pedestrian and bicycle movements.



Penn Street Trail, Philadelphia (Credit: philly.curbed.com)



Penn Street Trail, Philadelphia (Credit: greenway.org)



Penn Street Trail, Philadelphia (Credit: uwishunu.com)

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ON-ROAD BICYCLE LANES

On-road bicycle lanes are portions of roadways that are delineated specifically for cyclists. This five-foot wide space allows cyclists the opportunity to ride at a safe speed safely separated from faster moving automotive traffic. Special consideration of existing traffic patterns is necessary to determine the appropriateness of a bicycle lane. On-road bicycle lanes can provide important bicycle connections to trails. In some locations, such as where off-road trails are not feasible, bicycle lanes can be used to provide connections between trail segments. Bicycle lanes complement trails by providing safe connections to and from local destinations. Clear signage and road striping is critical along bicycle lanes to create a safe corridor. Informational and wayfinding signage should be used to direct users when bicycle lanes are used to close a gap between trail segments.



The most common bicycle lane is a striped section of roadway located to the right of moving traffic (left). When the roadway conditions provide enough space, bicycle lanes should be buffered from moving vehicular traffic (top). “Sharrows,” which are markers painted on the roadway to delineate where people should cycle, can be used on narrow roadways or streets that have a low volume of traffic (above).

ROAD CROSSINGS

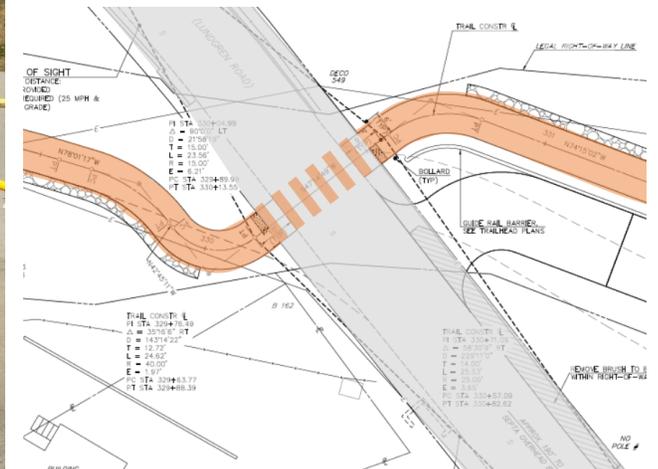
As multi-use trails are developed to provide connections, it is inevitable that they will cross roadways. When the crossing is not located at a signalized intersection, it should be designed to be extremely visible and provide adequate warnings to trail users as well as vehicles and pedestrians along the roadway. Signage along the both the roadway and trail should provide notice along the approach to the intersection. Stop signs and street name signs should be placed along the trail approach. On many roadways, flashing signals can be activated by trail users to warn vehicles of cross-traffic on the trail. Painted crosswalks and other traffic-calming devices, such as medians, can help to slow down vehicular traffic and provide safer crossings.

Gates are installed across the trail to limit unauthorized vehicles while still providing space for trail users. The gates can be opened by first responders in the event of an emergency or for routine maintenance access.



Chester Valley Trail

Trails should be designed to meet roadways at right angles to provide adequate sightlines at the intersection (below).





Chester Valley Trail



Chester Valley Trail



Bonner Park, Thornbury Township

When a trail crosses a low-volume roadway, particularly in a residential setting, a simple, highly-visible crosswalk can still be safe and effective. Low-volume crossings will need to meet ADA standards, including detectable warning strips in the pavement, and should include gates to restrict unauthorized motor vehicles.

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TRAIL AMENITIES

As with any public facility, there is a range of amenities that can be provided along the trail based on need. Perhaps the most common amenities are simple rest areas with benches and bicycle racks at trail heads, particularly near destinations such as commercial centers and employers. Bicycle “fix-it” stations, which include repair tools and an air pump, can be installed along heavily used stretches of trails. Some trail providers work with local businesses to offset the cost and brand the station with the company’s logo and colors. Amenities can make the user’s experience more enjoyable and safer; however, care should be taken to place them in appropriate locations.



Riverwalk, Wilmington, Delaware



Grant Wood Trail, Iowa (Credit: homemadeiowalife.blogspot.com)



Chester Valley Trail (Credit: tmacc.org)



Riverwalk, Wilmington, Delaware



Haverford Reserve, Haverford Township



Riverwalk, Wilmington, Delaware



Darlington and Cornicopia Trails, Middletown Twp.



Riverwalk, Wilmington, Delaware

Consistent signage along a trail can provide clear directions and information to visitors. It can range from simple trail markers (bottom left) to more elaborate systems with space for community postings/event announcements (top left). Educational signage can be added along trails to highlight some of the features along the trail (left).

Signage can also be used to reinforce some of the health benefits of using a trail. The Riverwalk in Wilmington (above) features “tips” every quarter-mile along the trail sponsored by local health providers.

OTHER PLANNER'S PORTFOLIOS:



CHARACTER AREAS

March 2016



COMPLETE STREETS

April 2016



FUNDING SOURCES

April 2016



Court House and Government Center
201 West Front Street
Media, Pennsylvania 19063

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