

Trail Types & Surfaces

INTRODUCTION

Trails are essential to local and regional connectivity. Throughout the United States, trails serve as a link between people and their community providing active transportation and healthy recreation routes to public land, educational resources, local businesses, and cultural landscapes.

Trails, in the beginning stages of development, can act as a standalone piece of infrastructure, but as trails expand and connect, they can become part of a larger, interwoven network. Trails within a network most often serve as the “backbone” of a broader system. In other words, trails within a network must follow specific structural design criteria to allow for multiple uses, standardized access and continuity. Trails that do not follow specific guidelines are not necessarily part of a greater network but can still feed into the system and provide different connection points or routes.

While navigating a trail network, it is imperative to designate trail types and their respective surfaces. There are many combinations of trail types and trail material that allow for different recreation, transportation, and geographies. Planning for a specific trail type and trail surface is an effective tool to create a functional community space.



Boardwalk trail in Chadds Ford Township, Chester County



Mowed trail at Waterloo Mills Preserve

TRAIL TYPES

Trails can fall into one category type, or they can fall into multiple. The most common trail types include:

- Multi-Use Trail: any trail that permits more than one use such as biking, walking, hiking, or horseback riding.
- Bike Trail: a non-motorized vehicle trail that prioritizes biking but accommodates pedestrians as well.
- Foot Path: a trail designated for walkers, runners, hikers and other pedestrians.
- Feeder Trail: a trail that connects local facilities, neighborhoods, businesses, schools, and other public spaces to a main trail.
- Rail to Trail: conversion of an abandoned or retired rail line corridor into a public, multi-use trail.
- Rail with Trail: trails within or adjacent to an active railroad corridor.
- *ADA Trail: a trail that meets the standards of the Americans with Disabilities Act to account for patrons with varying ages and abilities.
- Water Trail: a designated route on a waterway such as a lake, coastal bay, river or canal. These trails are for small watercrafts such as kayaks, canoes, or rowboats and must have a designated launch area.

*ADA specification can be applied to any of the other trail types and is accounted for during the planning and design process.

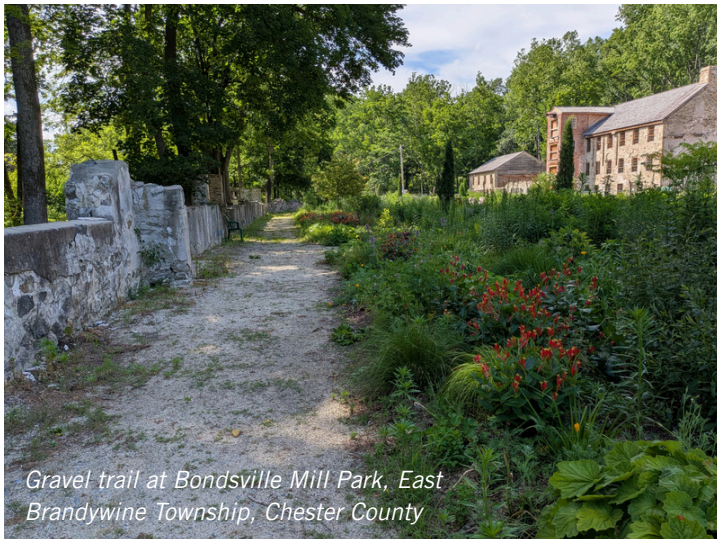


TRAIL SURFACES

The surface of a trail is determined by its use and factors that are associated with the trail type such as ADA accessibility, aesthetic value, cost, and durability. For instance, a bike trail can subscribe to many types of surfaces depending on if it is for recreational biking or mountain biking. One mode requires a stable, more uniform surface while the other can have an uneven, more naturalized feel.

Choosing a surface material is an important step during the planning and design phase of trail development. Common trail surfaces include:

- Hard Surfaces
 - Concrete
 - Asphalt
 - Crushed Stone
 - Soil Cement
 - Resin Material
 - Boardwalk
- Soft Surfaces
 - Compact Dirt
 - Mowed Grass
 - Woodchips



Gravel trail at Bondsville Mill Park, East Brandywine Township, Chester County

For more information, scan the QR code to find additional resources related to recreation and transportation infrastructure.



CASE STUDIES

- Circuit Trail Network – Southeastern Pennsylvania
 - Trail Type: Multi-Use
 - Surfaces: Asphalt, Earthen, Crushed Stone, and Compacted Dirt
 - Length: 500+ miles
- Great Allegheny Passage – Western Pennsylvania
 - Trail Type: Bike Trail
 - Surfaces: Asphalt and Crushed Stone
 - Length: 150 miles
- Appalachian Trail (PA Section) – Central and Eastern Pennsylvania
 - Trail Type: Foot Path
 - Surfaces: Earthen
 - Length: 230 miles
- Ohiopyle State Park Trails – Western Pennsylvania
 - Trail Type: ADA Accessible
 - Surfaces: Finely Crushed Stone
 - Length: 27 miles
- Pine Creek Rail Trail – Central Pennsylvania
 - Trail Type: Rail to Trail
 - Surfaces: Finely Crushed Stone
 - Length: 62 miles
- Delaware and Lehigh (D&L) Trail – Eastern Pennsylvania
 - Trail Type: Rail with Trail
 - Surfaces: Asphalt, Crushed Stone, and Earthen
 - Length: 140+ miles
- Susquehanna River Water Trail – Central and Eastern Pennsylvania
 - Trail Type: Water Trail
 - Waterbody: Susquehanna River
 - Length: 500 miles

1 Hoffman's Mill Road
P.O. Box 141
Chadds Ford, PA
19317

610.388.2700
conservancy@brandywine.org
www.brandywine.org/conservancy