DELAAWRE COUNTY PRIMARY TRAIL NETWORK
CONNECTIVITY RANKING
An Implementation Project of Delaware County 2035
The Primary Trail Network is a countywide system of multi-use trails identified to connect recreational and cultural hubs across the County. It was developed in the County’s Open Space, Recreation, and Greenway Plan to help create a cohesive trail network across the County. Open space and trail planning efforts in the County are guided by the three main goals of the Plan: Conserve open space and natural features; Enhance their environmental and recreational uses; and Connect communities, cultural/historic resources, and natural features. As such, the connectivity ranking, which measures the amount of connections a trail provides, emphasizes links between people and places.

Due to the extensive nature of the County’s Primary Trail Network, the connectivity ranking helps communities plan for trails that are identified as having the most connections. Trails are assigned a “connectivity ranking” based on proximity to people, schools, shopping, jobs, transit, and other criteria. This tool will help communities decide the most effective and impactful trail segments to pursue. The connectivity ranking process was not intended to create a list of set priorities; rather, it is objective data that can be used in conjunction with intangible information, such as community support, to inform planning and implementation efforts.

This project is an implementation effort of the Open Space, Recreation, and Greenway Plan which is a component of the County’s comprehensive plan – Delaware County 2035.
The driving concept behind the Countywide Primary Trail Network was to identify corridors, or spokes, that have the potential to create a connected web of destinations, or hubs.

Hubs are public or private places of interest (i.e., parks, historic sites, downtowns, Central Places, etc.). They can be large open space tracts, such as community and regional parks or nature preserves, but can also include smaller destinations like schools and neighborhood parks. The spokes in the network are the linear corridors that connect the hubs via trails.

The purpose behind creating the Primary Trail Network is to direct the energies of the County and municipalities into developing a cohesive trail network that provides access across the County. As such, municipalities should consider developing their trail systems in such a manner that they either construct segments of the Primary Trail Network or design their internal trail network to connect to Primary Trails. Local trails should link into downtowns, housing developments, and other hubs in a municipality; and trails and paths should be planned as an interwoven network.

The Primary Trails were identified at a large scale; as such, they show potential segments in a countywide network, but not specific alignments. They can be considered “planning corridors” for more detailed trail studies in the future. While several Primary Trails have already been constructed, many are just conceptual. As more detailed studies are completed on these trails, alternate routes may need to be considered.

The Circuit is a multi-use trail network across the nine-county region in Pennsylvania and New Jersey. Delaware County is a proud member of the Circuit Coalition, a collaboration of nearly 65 non-profit organizations, foundations, and agencies working to advance completion of a regional network of multi-use trails.

The Circuit is will connect people to jobs, communities, parks, and waterways in the greater Philadelphia region. It is composed of 300 miles of completed trails with a vision of completing 750 miles of trails across the nine-county region in Pennsylvania and New Jersey.
1: Brandywine Creek Greenway
2: Octoraro Rail Trail
3: PECO Right-of-Way Trail
4: Chester Creek Trail - North Extension
5: Rocky Run Trail
6: Chester Creek Trail
7: Chester Creek Trail - East Coast Greenway (ECG) Connector
8: East Coast Greenway
9: Blue Route Bikeway - East Coast Greenway (ECG) Connector
10: Blue Route Bikeway - Leiper to Kinder Connector
11: Blue Route Bikeway - Leiper-Smedley Connector
12: Media-Smedley Connector Trail
13: Ridley Creek Greenway - North & South Sections
14: Ridley Creek State Park Trails
15: Blue Route Bikeway - Smedley to Darby Creek
16: Darby Creek Trail - Haverford Township
17: Darby Creek Trail - Drexel Hill Connector
18: Newtown Square Branch Rail Trail
19: Route 252 Bicycle Route
20: Blue Route Bikeway - Ithan-Darby Creek Valley
21: Radnor Trail
22: Forge to Refuge Trail
23: Darby Creek Stream Valley Park Trail
24: Cobbs Creek Trail
25: Heinz Refuge Trails
The Primary Trails were divided into smaller planning segments prior to determining the connectivity ranking. Each segment was identified based on sections of trails with similar characteristics, land uses, opportunities, constraints, or other unique defining features. Previous planning efforts were also given consideration in identifying the segments. Each new segment was given a status based on the current standing of the trail: Potential (44 miles); Proposed (47 miles); Design (3 miles); Construction (6 miles); and Existing (29).

The trail planning and development process generally begins when potential trails are identified at a large scale in a comprehensive or open space plan. Trails are then studied in detail for feasibility. When a feasible alignment is identified, design, including preliminary and final engineering, must be completed before construction may begin. However, not all trails follow this general progression. For example, when an alignment or path is clear, some trails may not require a feasibility study and proceed directly to preliminary engineering.

The development status is not factored into the connectivity ranking, but it is helpful information for tracking the progress of the overall trail network.
General corridor has been identified but not further studied

The corridor was studied for feasibility and a more detailed alignment has been identified

Detailed design and construction documents are in progress or complete; ready for construction.

Trail is currently under construction

Trail is open!
CONNECTIVITY RANKING

The Primary Trail Network was designed to provide connections between communities, cultural/historic resources, and natural features. As such, the connectivity ranking is an objective classification based on the number of connections that a given trail segment provides. It uses a set of criteria (see table below) that were identified as important trail connections. These destinations play an important role in the character of Delaware County, as seen in Delaware County 2035, the County’s comprehensive plan. Due to the size of the proposed network, the connectivity ranking is an important tool that will help communities determine the most effective and impactful trail segments.

Closed questions (those that can be answered with a yes/no or a clear quantity) were developed for each criterion to keep the data objective. In the process of identifying criteria, however, two less direct criteria became noticeably important. The first is a “trail junction,” which is located where several primary trails intersect at one major hub, such as a large park or train station. Due to the critical connections provided, it is important that all segments within a trail junction be studied together. This may take the form of a park master plan that emphasizes trail connections. While connections are rightfully emphasized in this system, it is also important to consider the variety of the connections provided. The second of these less direct criteria is a “mixed-use trail,” which connects two or more of the primary land uses in this system: parks, commercial centers, schools, and major employers.

The table below lists all of the criteria identified and values assigned to answers. In summary, the criteria emphasized segments that connect people and places together and segments that connect to existing trails.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points System</th>
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<tbody>
<tr>
<td>Official Circuit Segment</td>
<td>Yes (1), No (0)</td>
</tr>
<tr>
<td>Connect to an Existing Trail</td>
<td>Yes (1), No (0)</td>
</tr>
<tr>
<td>Extend the Existing Primary Trail Network</td>
<td>Yes (1), No (0)</td>
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<tr>
<td>Close a Gap in the Primary Trail Network</td>
<td>Yes (1), No (0)</td>
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<tr>
<td>Included in a Comprehensive Plan</td>
<td>Yes (1), No (0)</td>
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<tr>
<td>Trail Junction Segment*</td>
<td>Part of a Junction (3), Connects to a Junction (1), No (0)</td>
</tr>
<tr>
<td>Population Density Surrounding Trail Segment</td>
<td>6,000+ People/mi² (3), 3,000-6,000 People/mi² (2), 1,000-3,000 People/mi² (1), &lt;1,000 People/mi² (0),</td>
</tr>
<tr>
<td>Public Parks</td>
<td>Three or more (3), Two (2), One (1), Zero (0)</td>
</tr>
<tr>
<td>Parks Greater than 25 acres</td>
<td>Yes (1), No (0)</td>
</tr>
<tr>
<td>Transit Stations</td>
<td>Three or more (3), Two (2), One (1), Zero (0)</td>
</tr>
<tr>
<td>Schools</td>
<td>Three or more (3), Two (2), One (1), Zero (0)</td>
</tr>
<tr>
<td>College or University</td>
<td>Yes (1), No (0)</td>
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<tr>
<td>Conservation Organization Protected Lands</td>
<td>Yes (1), No (0)</td>
</tr>
<tr>
<td>Commercial Centers</td>
<td>Three or more (3), Two (2), One (1), Zero (0)</td>
</tr>
<tr>
<td>Indoor Recreational Facility</td>
<td>Yes (1), No (0)</td>
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<tr>
<td>Private Recreational Facility</td>
<td>Yes (1), No (0)</td>
</tr>
<tr>
<td>Libraries</td>
<td>Yes (1), No (0)</td>
</tr>
<tr>
<td>Major Employers</td>
<td>Three or more (3), Two (2), One (1), Zero (0)</td>
</tr>
<tr>
<td>Historic Sites</td>
<td>Yes (1), No (0)</td>
</tr>
<tr>
<td>Mixed-Use Trail**</td>
<td>Four (3), Three (2), Two (1), One/Zero (0)</td>
</tr>
</tbody>
</table>

*Trail Junctions: Where several primary trails intersect at one major hub, such as a large park or train station
**Mixed-use Trail: Connect two or more of the primary land uses in this system: parks, commercial centers, schools, and major employers.
It is important to recognize that the connectivity ranking process was not intended to create a list of set priorities; rather, it is objective data that can be used in conjunction with tangible information, such as community support, to inform planning and implementation efforts.

The connectivity ranking assigned is based on the percentile rank of the connectivity score for a given segment. The percentile rank groupings are:

- Top 20%: Outstanding Connectivity
- 50%-80%: Excellent Connectivity
- 20%-50%: Very Good Connectivity
- Bottom 20%: Good Connectivity

All trails on the Primary Trail Network provide a level of regional connectivity that surpasses typical local trails. Therefore, even if a trail is in the “good” connectivity ranking category it is still an important trail segment for the County Network.