Southern Alleghenies Planning and Development Commission

2020 Trail Usage Report
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Program Overview

The Southern Alleghenies Region contains hundreds of miles of walking, hiking, and biking trails within its six-county footprint. SAP&DC has infrared counters deployed on nine trails in the region to quantify how many people utilize the natural recreational opportunities in the region.

Counters are located on the following trails:
- Shuster Way Heritage Trail in Bedford, PA.
- H&BT Trail in Bedford County, PA.
  - Riddlesburg Trailhead
  - Cypher Trailhead
  - Tatesville Trailhead
- James Mayer Riverwalk Trail in Johnstown, PA.
- Path of the Flood in South Fork, PA.
- Somerset Lake in Somerset, PA.
- Thousand Steps in Mapleton, PA.
- Prince Gallitzin State Park in Cambria County, PA.
  - Campground Trail
  - Lakeshore Trail
- Lower Trail in Blair and Huntingdon Counties, PA.
  - Alfarata Trailhead
  - Flowing Spring Trailhead
- Nathan’s Divide in Ebensburg, PA.

Figure 1: H&BT Trail near the Cypher trailhead.
Figure 2: Location of trail counters in the Southern Alleghenies Region.
Trail Information

**Shuster Way Heritage Trail** - The Shuster Way Heritage Trail provides a safe and picturesque connection between the Bedford Springs Resort and a nationally recognized downtown. The trail signage borrows from the flag emblem of Fort Bedford, which lies at the northern terminus of the Heritage Trail. The trail invites users to explore the cultural and historic assets of Bedford.

![Figure 3: Deployment at the Shuster Way Heritage Trail.](image)

**H&BT Trail** - The H&BT Rail Trail project is the development of a former railroad right-of-way into a rail trail for public use. The entire property, owned by Broad Top Township, includes 10.6 miles of the Huntingdon and Broad Top Mountain Railroad right-of-way.

![Figure 4: Deployment at the H&BT Riddlesburg Trail.](image)
**James Mayer Riverwalk** - Named after a local conservationist, the Jim Mayer Riverwalk Trail is a 3.1-mile urban trail on the east end of the City of Johnstown. This trail offers beautiful views of the Stonycreek River, Buttermilk Falls, and serenity within an urban setting.

![Figure 5: Deployment at James Mayer Riverwalk.](image)

**Path of the Flood** - In 1889, more than 2,200 people lost their lives in the Johnstown Flood when the South Fork Dam failed. The nine-mile-long trail closely follows the course of the flood waters on their deadly path to Johnstown. Comprised of on- and off-road sections, the trail incorporates the two-mile long Staple Bend Tunnel Trail, managed by the National Park Service.

**Somerset Lake** – The Somerset Lake trail begins at the North Parking Lot area, and meanders through the woods along side the lake up until the corner of Wood Duck Road and Gilmour Road. portion of the trail in which the counter is placed is between .25 and .5 miles in length. The trail is part of a network that will eventually run around the entirety of Somerset Lake. Recently, the counter was relocated to a newly erected wooden post closer to the entrance of the trail.

**Thousand Steps** - Constructed in 1936 during the area’s boom in the brickmaking industry, the steps were used by employees of Harbison-Walker to access ganister and bring the rock down the switchbacks to the refractories where it would be turned into fire bricks used to line steel-making furnaces. After World War II, the need for steel fabrication gradually declined and eventually the quarry above Thousand Steps closed. Today, Thousand Steps is the most popular section of the Standing Stone Trail, which contains over 80 miles of trails and is part of the Great Eastern Trail.
**Prince Gallitzin State Park** – Prince Gallitzin State Park, in northern Cambria County, consists of forested hills surrounding the 1,635-acre Glendale Lake. The lake provides 26 miles of shoreline, complete with recreational beaches, fishing spots, and a marina. There is a total of 36.25 miles of walking and hiking trails in the park. SAP&DC placed trail counters on the Campground Trail and the Lakeshore Trail. The Campground Trail is part of the Point Trailhead/Campground Trails network in the “Central West” portion of the park. The trail is a 2.2-mile easy hiking trail that follows the shoreline of the lake and the main campgrounds. The Lakeshore Trail is part of the Haddie Buck Peninsula Trail network in the “Central” region of the park. The 0.75-mile trail runs from the cabin area to the group tenting area. The trail follows the forested shores of Glendale Lake, offering several scenic views to guests.
Lower Trail – The Lower Trail is a 16.5-mile-long hiking, biking, and horseback riding trail. Part of the Rails to Trails of Central Pennsylvania, the trail runs from Canoe Creek State Park, in Blair County, to Alexandria, in Huntingdon County. The trail is open year-round and includes 6 trailheads or “stations”. SAP&DC placed trail counters on each end of the Lower Trail. A counter is placed at the Flowing Spring station in Blair county, and a counter is placed at the Alfarata station in Alexandria.

Figure 8: Deployment at the Alfarata station of the Lower Trail.

Nathan’s Divide – SAP&DC placed a trail counter at the Nathan’s Divide Watershed Education Center in Ebensburg, PA. The organization was founded to become the region’s destination for environmental education, outdoor recreation, and wellness. The organization’s mission is to encourage environmental stewardship for the community. There is a series of trails surrounding the city reservoir that are frequented by fishers, bird watchers, berry pickers, hikers, and other citizens taking part in outdoor recreational activities.

Data Collection Methods

The SAP&DC deployed 13 TRAFx Infrared Trail Counters on the trails listed above. The infrared counters were placed in 9” x 5” x 2.5” General Electric metal cases (as seen in Figures 2-7 above) to protect the counters from tampering and the elements. The counter boxes were strategically placed near trailheads (fastened on to trees, posts, or signs) to get an accurate count of people utilizing the trails. The counters work most accurately when they are within 20 ft of the main trail activity (Figure 9) and were placed accordingly. The counter records a count each time the infrared beam is broken by an object. It is important
to note possible errors in the count, due to non-human objects breaking the beam or trail users being too far from the counter for the count to register.

<table>
<thead>
<tr>
<th>Distance away</th>
<th>2m (6.5 ft.)</th>
<th>4m (13 ft.)</th>
<th>6m (20 ft.)</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of view diameter</td>
<td>0.3m (1 ft.)</td>
<td>0.7m (2.3 ft.)</td>
<td>1.0m (3.3 ft.)</td>
<td></td>
</tr>
</tbody>
</table>

IR scope

Figure 9: Diagram from TRAFx Manual explaining the field of view of infrared counters.

Most of the counters were installed in the spring of 2019, between the months of March and May, however some were deployed in 2018. More recent deployments occurred in the summer of 2020. This report will only include the 2020 data for the counters. After deployment, counter data was collected and analyzed monthly. Monthly collection of the counters served to ensure that the counters were functioning properly. Data was collected from the counters using a TRAFx Dock, which plugs in to the counters’ motherboards and downloads the data. The data from the dock was then downloaded and uploaded to TRAFx DataNet for processing. The total counts for each trail were divided by two to eliminate double counting visitors as they entered and exited the trailheads. Some trails will have gaps in the data. This is caused by routine maintenance of counters, resulting in them being pulled from the field and redeployed following the necessary maintenance.

An ArcGIS Online (AGOL) Dashboard was created and published to the SAP&DC AGOL homepage to publicly display the trail count data. The dashboard displays the location of all the monitored trailheads with point shapefiles. Clicking on a trail name in the legend will zoom to the trailhead location and display monthly counts, as well as a to-date yearly total for the trail. The dashboard is updated monthly as counts are collected from the field. The dashboard can be viewed at the following URL: http://sapdcgis.maps.arcgis.com/home/index.html.
COVID-19 Impact on Trail Usage

The COVID-19 pandemic caused statewide lockdowns beginning in March of 2020. Indoor facilities, such as restaurants, retail spaces, and indoor recreation venues, were closed. Work from home orders were also instituted for most non-essential workers. The lockdown and subsequent closures left citizens of the Commonwealth looking for outdoor recreational opportunities where social distancing could be achieved. The trails in the Southern Alleghenies region saw a dramatic increase in visitors during the periods of the lockdown (*Table 1*).

SAP&DC was able to compare the numbers of users on 5 trails in the region during lockdown months and the year prior (the counter at Thousand Steps was deployed on 3/27/19 and did not record full March 2019 data). Comparing the months of March, April, and May from 2019 to 2020, the increase in trail users is apparent. While other factors, such as good weather, may have contributed to the rise in trail usage, it is clear that citizens of the region used trails more frequently for outdoor recreation when other options were limited. Trail usage was up **190.86%** (9,743 more users) in the months of March, April, and May 2020 than in the same months during 2019.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shuster Way Heritage Trail</td>
<td>122</td>
<td>1,351</td>
<td>949</td>
<td>1,593 (+1,471)</td>
<td>1,301 (-50)</td>
<td>1,685 (+736)</td>
</tr>
<tr>
<td>H&amp;BT Riddlesburg</td>
<td>128</td>
<td>169</td>
<td>205</td>
<td>287 (+159)</td>
<td>380 (+211)</td>
<td>374 (+169)</td>
</tr>
<tr>
<td>H&amp;BT Cypher</td>
<td>43</td>
<td>296</td>
<td>307</td>
<td>209 (+166)</td>
<td>250 (-46)</td>
<td>65 (-242)</td>
</tr>
<tr>
<td>H&amp;BT Tatesville</td>
<td>120</td>
<td>572</td>
<td>637</td>
<td>571 (+451)</td>
<td>650 (+78)</td>
<td>753 (+116)</td>
</tr>
<tr>
<td>Thousand Steps</td>
<td>N/A</td>
<td>2,712</td>
<td>2,815</td>
<td>4,540</td>
<td>4,443 (+1,731)</td>
<td>7,241 (+4,426)</td>
</tr>
</tbody>
</table>

*Table 1: COVID-19 pandemic trail usage statistics and comparison.*
Trail Count Table and Reports

The information presented below is the data collected for the 2020 calendar year. *Table 2* shows the date in which the counter began counting for the year 2020. As stated earlier, most of the counters were deployed in previous years, and have a full year of coverage. However, five additional counters were deployed in the late summer and fall of this year. *Table 2* also shows valuable data, such as average daily total (ADT), total users, and the peak usages of the trails.

*Figures 11-23* are TRAFx generated reports for each trail counter. The reports show all of the data the counter has collected since its deployment to a particular location. The reports show a line graph showing the weekly totals throughout the year(s). A pie chart is presented showing which days of the week recorded the most users, as well as presents the ADT for the trail. The reports also generate a series of bar graphs. The graphs depict the hourly, monthly, and yearly ADT recorded on the trail.

Figure 10: Deployment at Campground Trail in Prince Gallitzin State Park.
<table>
<thead>
<tr>
<th>Trail/Trailhead</th>
<th>Count Start Date</th>
<th>Average Daily Total</th>
<th>Average Visitors Per Month</th>
<th>2020 Total*</th>
<th>Peak Usage Month (Count)</th>
<th>Peak Usage Day of the Week (ADT)</th>
<th>Peak Usage Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shuster Way Heritage Trail</td>
<td>1/1/20</td>
<td>44.085</td>
<td>1,335.4</td>
<td>16,135</td>
<td>September (1,758)</td>
<td>Sunday (60.5)</td>
<td>9-11 AM, 2-5 PM</td>
</tr>
<tr>
<td>H&amp;B T Riddlesburg</td>
<td>1/1/20</td>
<td>7.576</td>
<td>229.4</td>
<td>2,773</td>
<td>March (380)</td>
<td>Sunday (10.6)</td>
<td>9-11 AM, 1-3 PM</td>
</tr>
<tr>
<td>H&amp;B Cypher</td>
<td>1/1/20</td>
<td>4.339</td>
<td>132</td>
<td>1,584</td>
<td>April (250)</td>
<td>Sunday (8.5)</td>
<td>10 AM, 2-4 PM</td>
</tr>
<tr>
<td>H&amp;B Tatesville</td>
<td>1/1/20</td>
<td>11.053</td>
<td>300.5</td>
<td>4,045</td>
<td>May (753)</td>
<td>Sunday (18.3)</td>
<td>2 PM–5 PM</td>
</tr>
<tr>
<td>James Mayer Riverwalk</td>
<td>1/1/20</td>
<td>18.370</td>
<td>805.1</td>
<td>6,724</td>
<td>May (1,515)</td>
<td>Sunday (40.8)</td>
<td>1-4 PM</td>
</tr>
<tr>
<td>Path of the Flood</td>
<td>1/1/20</td>
<td>15.808</td>
<td>481.3</td>
<td>5,786</td>
<td>May (749)</td>
<td>Sunday (22.2)</td>
<td>9-11 AM, 2-5 PM</td>
</tr>
<tr>
<td>Somerset Lake</td>
<td>1/1/20</td>
<td>1.014</td>
<td>29.2</td>
<td>371</td>
<td>September (100)</td>
<td>Tuesday (2.2)</td>
<td>9-11 AM, 1-3 PM</td>
</tr>
<tr>
<td>Thousand Steps</td>
<td>1/1/20</td>
<td>114.964</td>
<td>3,503</td>
<td>42,077</td>
<td>May (7,241)</td>
<td>Saturday (223.2)</td>
<td>1–3 PM</td>
</tr>
<tr>
<td>PGSP Campground Trail</td>
<td>8/24/20</td>
<td>10.39</td>
<td>318</td>
<td>1,590</td>
<td>September (632)</td>
<td>Saturday (26.3)</td>
<td>10-11 AM</td>
</tr>
<tr>
<td>PGSP Lakeshore Trail</td>
<td>8/24/20</td>
<td>11.752</td>
<td>380.7</td>
<td>1,903</td>
<td>September (559)</td>
<td>Saturday (20.7)</td>
<td>1-3 PM</td>
</tr>
<tr>
<td>Lower Trail Flowing Spring</td>
<td>9/30/20</td>
<td>24.663</td>
<td>756.3</td>
<td>2,269</td>
<td>October (1,048)</td>
<td>Saturday (41.4)</td>
<td>12-2 PM</td>
</tr>
<tr>
<td>Lower Trail Alfarata</td>
<td>9/30/20</td>
<td>46.902</td>
<td>1,438.3</td>
<td>4,315</td>
<td>October (2,257)</td>
<td>Saturday (85.2)</td>
<td>1-4 PM</td>
</tr>
<tr>
<td>Nathan’s Divide</td>
<td>8/24/20</td>
<td>14.217</td>
<td>460.7</td>
<td>2,304</td>
<td>September (872)</td>
<td>Tuesday (26.9)</td>
<td>8-11 AM</td>
</tr>
</tbody>
</table>

Table 2: 2020 trail count data and statistics.
*Counts may vary due to maintenance on counters.
Figure 11: Trail report for the Shuster Way Heritage Trail.
**H&BT Riddlesburg**

Site report: from 2018–01–01 to 2021–01–01
Made by: mbjorkman@sapdc.org on 2021–01–27
Made with: TRAFx DataNet (www.trafx.net)
Divide 2 (Yes)

---

**Weekly Totals**

**Daily**

Avg. daily traffic: 5.0

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**Hourly**

---

**Monthly**

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**Yearly**

Figure 12: Trail report for the H&BT Riddlesburg Trailhead.
Figure 13: Trail report for the H&B Cypher Trailhead.
**H&B Tatesville**

Site report from 2018-01-01 to 2021-01-01
Made by: mbjorkman@sapdc.org on 2021-01-27
Made with: TRAFx DataNet (www.trafx.net)
Divide 2 (Yes)

*Weekly Totals*

![Weekly chart]

*Daily*  
- Sa (20%)  
- Su (18%)  
- Fr (12%)  
- Th (12%)  
- Mo (13%)  
- We (12%)  
- Tu (14%)

Avg. daily traffic: 11.4

*Hourly*

![Hourly chart]

*Monthly*  
- Mar 28  
- Apr 0  
- May 0  
- Jun 0  
- Jul 0  
- Aug 0  
- Sep 0  
- Oct 0  
- Nov 0  
- Dec 0

*Yearly*

![Yearly chart]

*Weekly and Daily are calculated from Average Daily Traffic (ADT); Monthly and Yearly show ADT values.*

**Figure 14: Trail report for the H&B Tatesville Trailhead.**

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Figure 15: Trail report for the Jim Mayer Riverwalk.
Path of the Flood

Site report from 2019-01-01 to 2021-01-01
Made by: mnbjorkman@sapdc.org on 2021-01-27
Made with: TRAFx DataNet (www.trafx.net)
Divide 2 (Yes)

Figure 16: Trail report for the Path of the Flood.
Figure 17: Trail report for Somerset Lake.
Figure 18: Trail report for Thousand Steps.
Campground Trail PGSP

Site report: from 2020-01-01 to 2022-01-01
Made by: mbjorkman@spadc.org on 2021-01-27
Made with: TRAFx DataNet (www.trafx.net)

Figure 19: Trail report for the Campground Trail in Prince Gallitzin State Park.
Lakeshore Trail PGSP

Site report: from 2020-01-01 to 2022-01-01
Made by: mbjorkman@sapdc.org on 2021-01-27
Made with: TRAFx DataNet (www.trafx.net)
Divide 2 (Yes)

Figure 20: Trail report for the Lakeshore Trail in Prince Gallitzin State Park.
Figure 21: Trail report for the Flowing Spring station of the Lower Trail.
Figure 22: Trail report for the Alfarata station of the Lower Trail.
Nathans Divide

Site report: from 2020-01-01 to 2022-01-01
Made by: mbjorkman@sapdc.org on 2021-01-27
Made with: TRAFx DataNet (www.trafx.net)
Divide 2 (Yes)

Figure 23: Trail report for Nathan’s Divide.