

Ghost Town Trail
2009 User Survey
and Economic Impact Analysis

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# Ghost Town Trail 2009 User Survey and Economic Impact Analysis

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## **Executive Summary**

The Ghost Town Trail is a multi-use pathway in Pennsylvania traversing 36 miles from Ebensburg in Cambria County to Saylor Park in Black Lick, Indiana County. Along its route, the trail passes through land originally developed by mining companies first iron ore and later coal. The crushed-limestone trail follows the former right-of-way of the Ebensburg and Black Lick Railroad, running parallel to Blacklick Creek. Designated a National Recreation Trail in 2003, the Ghost Town Trail has brought life back to an area once abandoned and neglected.

In 2009, Rails-to-Trails Conservancy (RTC) conducted this study of the users of the Ghost Town Trail under a grant from the Pennsylvania Department of Conservation and Natural Resources. Designed to monitor trail user characteristics and economic impact, the survey utilized a methodology previously tested on Pennsylvania trails and documented in RTC's Trail User Survey Workbook (www.railstotrails.org/resources/documents/resource\_ docs/UserSurveyMethodology.pdf)



Data collected from four infrared counters positioned along the trail from the beginning of April through October of 2009 was analyzed and determined to represent an estimated 75,557 annual user visits.

Spending on soft goods (meals, beverages, ice cream) and overnight accommodations in conjunction with a trail visit was estimated at close to \$1.7 million. These represent annually recurring expenditures that will add to the economic vitality of the communities along the Ghost Town Trail.

Survey forms were available at eight trailhead locations along the Ghost Town Trail. Completed responses were mailed back to RTC's Northeast Regional Office. In all, 441 completed survey forms are included in this analysis.

ZIP codes indicate visitors to the Ghost Town Trail come from a wide variety of locations throughout Pennsylvania, with a concentration from the southwest corner of the state. The majority of survey respondents reside in the two counties the trail passes through; 38.5 percent in Cambria County, and 26.8 percent in Indiana County. Based upon the survey respondents' ZIP codes, another 26.2 percent reside in the regional southwest area of the state represented by visitors from these counties: Allegheny, Armstrong, Beaver, Blair, Butler, Fayette, Huntington, Somerset and Washington. More than seven percent of respondents were traveling to the Ghost Town Trail from areas beyond the southwest Pennsylvania region, including other states.

Nearly 46 percent of respondents indicated they use the Ghost Town trail on at least a weekly basis; 22.2 percent are using the trail on a monthly basis; another 22.9 percent make an annual visit to the Ghost Town Trail; and nine percent indicated this was their first visit.



The age profile of the Ghost Town Trail survey respondents indicates a slightly higher percentage of users older than 46 years of age (74.0 percent) than that found from other trail studies in Pennsylvania and nationally, which trend toward 55 to 60 percent of trail users being over 50 years of age. The higher percentage among Ghost Town Trail users does coincide with regional demographics. The usage of the trail by men (53.9 percent) and women (46.1 percent) is somewhat typical of what has been found during the course of other trail user studies, though trending closer to a 50/50 split than most. Respondents to the survey indicated children under the age of 15 accompanied them 19.5 percent of the time.

The Ghost Town Trail is used primarily for walking and bicycling. Biking (60.1 percent) is the predominant activity, while walkers account for 26.4 percent, and runners 7.4 percent. In the winter, the snow-covered trail is used for cross-country skiing by 4.6 percent of the respondents. Horseback riding was indicated as a primary activity by 1.4 percent, and less than one percent indicated they used the trail to walk their pet.

Respondents were asked if they would participate in these activities if the Ghost Town Trail did not exist, and 74.9 percent indicated they would continue the activity.

The largest percentage of respondents (43.9 percent) indicated they spent more than two hours on a typical trail outing, while 39.1 percent spent between one and two hours on the trail. Visual observations made by the survey team concluded that a number of people use the trail daily for an afternoon or lunchtime walk, particularly at Nanty Glo and Ebensburg. This group of users is likely represented in the 17 percent of survey respondents who indicated they spent one hour or less on the trail.

Nearly 64 percent of the respondents said health is their main reason to use the trail, while 33.1 percent use it for recreation. Other activities on the trail included wildlife viewing (36.1 percent), visiting a historical site (20.1 percent) and bird watching (17.3 percent). Survey respondents did not show a strong preference for weekdays or weekend visits to the trail, with 58.8 percent coming at either part of the week.

Respondents' knowledge of the trail came primarily from "word of mouth" (32.1 percent), with another 17.3 percent citing roadside signage and driving-by as how they discovered the trail. Information from county park departments (5.5 percent), a tourist bureau (3.6 percent) and bike shops (4.5 percent) accounted for 13 percent of the respondents' knowledge of the trail. Newspapers, Rails-to-Trails Conservancy and other websites together accounted for 30 percent.

In terms of economic impact, 88.4 percent of respondents indicated they had purchased "hard goods" (bikes, bike accessories, clothing, etc.) in the past year in conjunction with their use of the trail. The majority of these purchases were bicycles and bike supplies that resulted in an average expenditure of \$357.63. This amount is close to the average dollar amount spent by users on other trails in Pennsylvania.

Roughly 72 percent of respondents indicated they had purchased some form of "soft goods" (water, soda, candy, ice cream, lunches, etc.) while visiting the trail, with an average dollar amount of \$13.62 spent per visit. This figure is also very typical of the average found from surveys on other Pennsylvania trails over the past several years.

Survey respondents traveled to the Ghost Town Trail from the statewide region, indicating there is



potential for increased economic impact from overnight stays in the trail vicinity. Twelve percent of respondents indicated they had stayed overnight in conjunction with their visit; they spent an average of \$78.04 per night on their lodging.

The majority (89.12 percent) of trail visitors felt maintenance of the trail was good to excellent, and 86.5 percent felt the safety along the trail was also good to excellent. More than 90 percent of respondents felt the cleanliness of the trail environment was good to excellent.

When asked if they would be willing to pay an annual "user fee" to help maintain the Ghost Town Trail, more than 63.7 percent responded they would—a similar percentage to what we have seen reported at other areas of the state. More than 60 percent felt they would be willing to pay a \$10 annual fee.

A question was included at the end of the survey asking if trail users would be interested in using a short extension to the trail (called the C&I Trail) above the Rexis trailhead, if it remained unimproved; 63.8 percent replied they would not want to use this section in an unimproved state.

The sections of the trail that were used the most by the survey respondents were, in descending order: Dilltown to Vintondale (24.8 percent), Nanty Glo to Ebensburg (20.0 percent), Vintondale to Nanty Glo (13.4 percent), and Black Lick to Heshbon (11.6 percent). The most popular trailhead access

points are Dilltown (31 percent), Black Lick (17 percent), Ebensburg (13.6 percent) and Rexis (13.1 percent), followed by Nanty Glo, Heshbon and Wehrum in descending order.

Trail development in the region continues to lead toward connections with Pittsburgh, the Great Allegheny Passage, the Armstrong Trail and eventually Erie. Comparison of the current findings with an Economic Impact Study of the Ghost Town Trail that was completed in 1996\* shows a small change in the number of people traveling to the area and a slight increase in the amount of money the users are spending. With the extensive reconstruction of Route 22 nearly complete, access to many trailheads is easy and lends itself to promotion of the now complete 36-mile Ghost Town Trail as a destination. There are additional trails to be explored in the area and a promotional package, which would include lodging at either end of the trail or in the middle, could attract trail users from a wide geographic area.

Note: During the course of the survey process, the Ghost Town Trail was transformed from two completely separate sections of trail (between Saylor Park and Heshbon, and between Dilltown and Ebensburg) into one continuous, 36-mile length of trail. The bridges that permitted this seamless connection were constructed and opened just at the end of the survey period. Approximately one quarter of the surveys were received after the bridges had opened.

<sup>\*</sup>Strauss, C.H., and B.E. Lord. (1996). Economic Impact of Ghost Town Trail in the Indiana and Cambria Counties Region. State College: Pennsylvania State University.

## **Historical Perspective**

Five different railroads once operated in the Blacklick Valley, most notably the Cambria & Indiana Railroad, the Pennsylvania Railroad's Blairsville Secondary, and the Pennsylvania Railroad's Ebensburg & Blacklick line—together, the three lines have become the Ghost Town Trail. The mining companies in Cambria and Indiana counties had established as many as eight small "company" towns, a lumber mill and three iron furnaces in the valley during the late 19th and early 20th centuries. Much of the coal mined in this area was used to produce coke for the steel industry in western Pennsylvania and New York.

As the smaller mines closed, nearby homes and offices were abandoned as well. Today, foundation remnants of several of these mine-supported "ghost towns" remain, hence the unique name for the trail.

Founded in 1901, Wehrum was built by the Lackawanna Iron and Steel Company to be a company town with as many as 230 homes and 60-foot-wide streets when it was prosperous. The town was deserted by 1932 and today is the largest of the ghost towns in the area. A historical marker now indicates the site of the former mine-built town and provides a brief background of the village.

Along the trail at the town of Vintondale stands the remnants of a 19th century iron smelting furnace named Eliza Furnace. Beginning in 1846, iron ore was mined and smelted here and then transported by wagon and canal barge into Pittsburgh. The furnace operated until 1849 and is on the National Register of Historic Places. The Cambria County Historical Society currently leases the furnace to

Indiana County Parks and Trails. Interpretive signage along the trail denotes the history surrounding the furnace. Another 19th century iron furnace that is still standing, the Buena Vista Furnace, is located along the trail three miles east of Heshbon.

By 1892, the Vinton Colliery Company had established itself as the largest mining operation in the Blacklick Valley. The company built the town of Vintondale in 1894 and was running as many as six mines and 152 coke ovens at the height of its operation. The mining company managed Vintondale as a closed company (non-union) town for many years and in fact was known as the toughest company town in western Pennsylvania, tightly maintaining control over the workers' lives. In 1922 the town was the site of a formidable protest between mine workers, union representatives and company management.\* The struggle continued for years until the United Mine Workers of America Local 621 was finally organized in 1934. The Vinton Coal



<sup>\*</sup>The Struggle for Civil Liberties and Unionization in the Coal Field: The Free Speech Case of Vintondale, Pa., 1922. Elizabeth Ricketts, 1998.



and Coke Company continued mining operations in the valley until 1968, when the last mine closed. Unlike the surrounding "ghost towns," Vintondale remains a small residential community along the trail. A detailed history of the area can be found in Delano's Domain: A History of the Mining Towns of Vintondale, Wehrum, and Claghorn, by Denise Dusza Weber.

The town of Ebensburg at the eastern end of the trail was founded by Welsh migrants and named the county seat of Cambria County in 1804. Early

accounts describe it as a stopping point for Conestoga wagons heading west. By the late 19th and early 20th century, Ebensburg had become a small resort town for the wealthy families of Pittsburgh, Philadelphia and New York who built large summer homes and frequented the local natural springs. Today it is the largest residential and retail center near the trail.

Other towns the trail passes through include the borough of Nanty Glo (Welsh for "stream of coal"), where mining operations began around 1894. The community was serviced by the Pennsylvania Railroad. First opened as the Dunwiddie Mine, operations were eventually taken over by Bethlehem Steel in the 1900s.

Named for its founder, Colonel Matthew Dill, Dilltown is a small residential area at the center of the trail and has become one of the primary trailheads. Three iron furnaces were operated in the area along with a grist mill that was powered by water flow in Blacklick Creek.



## **Location Analysis**



The Ghost Town Trail is situated approximately 60 miles from the center of Pittsburgh. The most populous municipality along the trail is Ebensburg borough (population 3,091) in Cambria County. Johnstown, Pa. (pop. 23,906), and Altoona, Pa. (pop. 46,954), are the largest population centers in the near vicinity, each approximately 15 miles from an access point to the Ghost Town Trail.

Running east to west, the trail bisects Cambria and Indiana counties in west-central Pennsylvania. It is located in two different tourism regions as officially designated by the state: "The Alleghenies and Her Valleys" and "Pittsburgh and Its Countryside." At the western end of the Ghost Town Trail near Saylor Park in Black Lick, Pa., the trail connects to the 10-mile Hoodlebug Trail, which travels north into Indiana, Pa. (population 14,895), the county seat and the most populous area that can be reached via a connecting trail.

The Ghost Town Trail is surrounded by steep wooded hills and valleys and passes through large sections of Pennsylvania State Game Lands (public hunting areas maintained by the Pennsylvania Game Commission). The pathway climbs slightly more than 1,000 feet heading west to east. The elevation changes gradually between Black Lick and Dilltown, rising 370 feet over 13 miles as it runs parallel to and high above Blacklick Creek. Wildlife sightings of white-tailed deer and black bear are common along this stretch.

Though much of the water runs clear, the stream bed of Blacklick Creek is stained orange from the effects of acid mine drainage (AMD), and stream vegetation is non-existent. As an offshoot of the work being done to create the Ghost Town Trail, the Blacklick Creek Watershed Association was formed and today functions as a public-private

partnership to mitigate the effects of AMD.

Several "boney" piles—large mounds of coal tailings—are also visible in areas along the trail, primarily in the vicinity of Wehrum and Vintondale.

From Dilltown east to Ebensburg, the trail passes through a higher density of small towns and residential areas where remnants of the area's coal mining history are more visible. Interpretive signage along the route provides some details of the social and environmental history. Along the trail at Vintondale, a previous AMD mitigation project includes several dynamic art pieces installed to honor the mining history (www.amdandart.org/).

The steepest elevation changes in the trail occur between Vintondale and Twin Rocks, where there is a 300-foot climb over six miles, and between Nanty

Glo and Ebensburg, where the trail climbs 280 feet.

Restaurants where trail users can purchase meals and refreshments are located across the street from the trailhead in Nanty Glo. Dilltown has one trailside bed-and-breakfast that caters to trail users and offers some refreshments. As the largest retail center along the trail, Ebensburg has a variety of

restaurants and stores throughout town, though none are situated directly adjacent to the trail itself.





## **Ghost Town Trail Map**



The Ghost Town Trail is part of a regional trail network in west-central Pennsylvania that is in a position to make connections to one of the largest trail networks in the country, the Great Allegheny Passage. The Ghost Town Trail currently maintains a shared-road connection with the Hoodlebug Trail, which will in turn connect to the West Penn Trail. The West Penn Trail is working to connect with the trail network being developed in Westmoreland

County—including the Westmoreland Heritage Trail, Five Star Trail and Coal & Coke Trail—that will eventually link to the Great Allegheny Passage in Connellsville, Pa.

Connecting to the West Penn Trail will also permit a link to the planned Erie to Pittsburgh Trail, a network of trails that are working toward one continuous route between the two Pennsylvania cities.

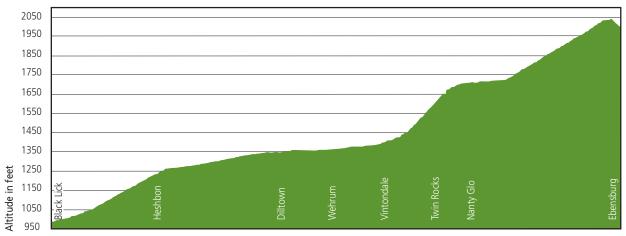


#### **Ghost Town Mileage Chart**

	Black Lick	Heshbon	Buena Vista	Dilltown	Wehrum	Vintondale	Twin Rocks	Nany Glo	Ebensburg
Black Lick		6	9	13	16	19	22	24	32
Heshbon	6		3	6	10	12	16	18	25
Buena Vista Furnace	9	3		3	7	9	13	15	22
Dilltown	13	6	3		4	6	10	12	19
Wehrum	16	10	7	4		3	6	8	15
Vintondale/Eliza Furnace	19	12	9	6	3		4	6	13
Twin Rocks	22	16	13	10	6	4		2	9
Nanty Glo	24	18	15	12	8	6	2		7
Ebensburg	32	25	22	19	15	13	9	7	

Courtesy of Indiana Parks

#### Elevation Profile of the Ghost Town Trail



Towns

# Ghost Town Trail Area Demographics

The Ghost Town Trail is located in Indiana County and Cambria County in Pennsylvania.

Ghost Town Trail Region Demog	graphic Profile* (by cou	ınty)
	Indiana County	Cambria County
Population (2008 est.)	87,479	144,319
Median Household Income (2007 est.)	\$34,463	\$37,260
Households (2000 Census)	34,123	60,531
Persons per household (2000 Census)	2.47	2.384
Persons per square mile (2000 Census)	108.0	221.8
Ghost Town Trail Region Popula	tion Growth** (projec	ted by county)
	Indiana County	Cambria County
2000	89,605	152,598
2010	81,130	141,775
2020	73,078	133,174
2030	66,322	124,483

<sup>\*</sup>SOURCE: U.S. CENSUS QUICK FACTS

<sup>\*\*</sup> SOURCE: U.S. CENSUS AND PA BULLETIN 38 PA.B. 1415

## Qualitative Values of the Ghost Town Trail

The best way to evaluate the qualitative values of the Ghost Town Trail is to let the trail users describe how they feel about the pathway. The following are verbatim comments taken from the 2009 Ghost Town Trail User Survey forms.

Love the trail—met up with some of the workers, they were all polite & friendly.

We really enjoy using the trail. Our kids enjoy it.

Quads are a danger & ruin the trail surface—Dogs should be kept on leash

I wish we had bike trails as nice as these in the State of Indiana. Keep it up!!

A great asset for our area I tell many people about it. Many people are unaware of it, or how far you can travel on it.

Trail markers (mile) are needed

A lot of quad riders in the Ebensburg area, trail is destroyed in places from where they ride.

I would be willing to volunteer time occasionally to clean up the trail. You should consider advertising volunteer clean up days once a month or so.

Would like to see trail open soon to Indiana. Also restroom near Ebensburg. Love the Trail!

I have visited many trails throughout PA & the Ghost Town Trail is by far one of the nicest!

Love this trail—Scenic, lovely, enjoyed the slight hills instead of completely flat like most rail trails.

Will do entire trail in coming weeks. We frequently do Allegheny Trail—Just became aware of Ghost Town Trail.

Lots of wildlife—I saw a copperhead snake up close and two bears at a distance.

I have traveled entire trail—love it. We explore the entire area when biking. Restaurants, shopping, etc. looking for hidden gems.

Seems like they leave a lot of quad riding on the trail.

As a visitor from Michigan—I found this trail very scenic and clean. A real treasure.

We really enjoy the travel and plan on using often from different points, so we can check all out. Thank you for a good job. P.A. It would be nice to have a few out door bath rooms along the way.

I train for marathons by running from Ebensburg to Dilltown. It's great on the knees & the miles are marked which really helps w/pace. I love this trail!!!

Some of the trails have mile markers which is nice. Also, some have benches that is nice. It would be really good if they all have them.

The trail is at real asset to our area. I especially enjoy seeing families using the trail.

Need more picnic pavilions, points of interest, trail map.

## 2009 Survey Results



#### **Question 1**

#### What is your ZIP Code?

38.5%	Cambria County, Pa.
26.8%	Indiana County, Pa.
13.6%	Westmoreland County, Pa.
12.6%	Regional counties in southwest Pennsylvania
4.9%	Non-regional counties in Pennsylvania
2.2%	Other states

#### **Question 2**

#### How often on average do you use the trail?

7.1%	Daily
18.5%	Once a week
11.0.%	Twice a week
9.4%	More than twice a week
6.9%	Once a month
15.3%	A couple of times a month
22.9%	Few times a year
8.9%	First time

#### **Question 3**

### How often in the past 12 months have you used the trail?

10,944 total trail user visits reported by the survey respondents

#### **Question 4**

#### Please identify your age group.

1.4%	15 and under
3.4%	16 – 25
9.0%	26 – 35
12.2%	36 – 45
26.9%	46 – 55
30.1%	56 – 65
17.0%	66 and older

#### **Question 5**

## Were any children 15 years of age or younger with you on your trail experience today?

19.5%	Yes
80 5%	No

#### **Question 6**

#### What is your gender?

53.9%	Male
46 1%	Female

#### **Questions 7**

#### What is your primary activity on the trail?

26.4%	Walking/hiking
60.1%	Biking
7.4%	Jogging/running
1.4%	Horseback riding
4.6%	Cross-country skiing/snowshoeing
0.1%	Pet walking

#### **Question 8**

## If the Ghost Town Trail did not exist, would you still participate in these activities?

74.9%	Yes
25.1%	No

#### **Question 9**

#### Generally, when do you use the trail?

15.4%	Weekdays
25.8%	Weekends
58.8%	Roth

#### **Question 10**

## How much time do you generally spend on the trail on each visit?

.2%	Less than 30 minutes
16.8%	30 minutes to 1 hour
39.1%	1 to 2 hours
43 9%	More than 2 hours

#### **Question 11**

## Would you consider your main use of the trail to be for...

33.1%	Recreation
63.6%	Health and exercise
1.9%	Training
1.4%	Other

#### Question 12

#### During your visit to the trail, did you...

1.2%	Fish
0.4%	Kayak
17.3%	Watch birds
36.1%	Watch other wildlife
16.8%	Study wildflowers
20.1%	Visit a historical site
2.4%	Attend a festival
5.7%	Other

#### **Question 13**

How did you find out about the trail?

32.1%	Word of mouth
10.3%	Roadside signage
7.0%	Driving past
9.1%	Newspaper
5.5%	Parks department
4.5%	Bike shop
3.6%	Tourist Bureau
13.5%	Information from Rails-to-Trails Conservancy
7.4%	Internet/website
7.0%	Other

#### **Question 14**

Has your use of the trail influenced your purchase of...?

25.4%	Bike
26.8%	Bike supplies
6.6%	Auto accessories (bike rack, etc.)
13.5%	Footwear
16.1%	Clothing
11.6%	Nothing

#### **Question 15**

Approximately how much did you spend on the items above in the past year?

The average for those who indicated they had made a purchase and provided a dollar amount was \$357.63 (n=322)

#### **Question 16**

In conjunction with your most recent trip to the trail, did you purchase any of the following?

25.5%	Beverages
13.7%	Candy/snack foods
7.7%	Sandwiches
9.2%	Ice cream
14.1%	Meals at a restaurant along the trail
0.2%	Bike rental
1.8%	Other
27.8%	None of these

#### **Question 17**

Approximately how much did you spend per person on the items above?

The average for those who indicated they had made a purchase and provided a dollar amount was \$13.62 (n=240).

Note that this is an average amount spent per person, per trip.

#### **Question 18**

Did your visit to the trail involve an overnight stay in one of the following types of accommodations (n=54)?

37.0%	Motel/hotel
13.0%	Bed-and-breakfast
37.0%	Friend or relative's home
9.3%	Campground
3.7%	Other

#### **Question 19**

How many nights did you stay in conjunction with your visit to the trail?

Average number of nights per stay was 2.2.

#### **Question 20**

Approximately how much did you spend on overnight accommodations per night?

Average expenditure per night for those who provided an amount was \$78.04 (n=29).

#### **Question 21**

In your opinion, the maintenance of the trail is...

45.6%	Exceller
43.5%	Good
8.4%	Fair
2.5%	Poor

#### **Question 22**

In your opinion, the safety and security along the trail is...

38.4%	Excellen
48.1%	Good
10.5%	Fair
3.0%	Poor

#### **Question 23**

In your opinion, the cleanliness of the trail is...

54.9%	Excellen <sup>-</sup>
35.9%	Good
7.1%	Fair
2 1%	Poor

#### **Question 24**

Would you be willing to pay a voluntary fee to help maintain the trail?

63.8%	Yes
36.2%	Nο

#### **Question 25**

If yes, how much would you be willing to pay...?

55.2%	\$10.00
17.0%	\$15.00
18.2%	\$25.00
9.6%	Other amounts

#### **Question 26**

Would you use the C&I Trail extension (north of 422) if the original rock ballast surface remains unimproved (trail would be mowed only)?

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36.2% Yes
63.8% No
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#### **Question 27**

Which portion of the trail do you use most often?

11.6%	Black Lick (Saylor Park) to Heshbon
7.8%	Heshbon to Dilltown
24.8%	Dilltown to Vintondale
13.4%	Vintondale to Twin Rocks
13.8%	Twin Rocks to Nanty Glo
20.0%	Nanty Glo to Ebensburg
8.6%	Rexis to Route 422

#### **Question 28**

Which access point do you generally use when you visit the trail?

16.9%	Black Lick (Saylor Park)
6.7%	Heshbon
31.0%	Dilltown
2.7%	Wehrum
13.1%	Rexis/Vintondale/Eliza Furnace
3.4%	Twin Rocks
12.6%	Nanty Glo
13.6%	Ebensburg

# Methodology and Analysis



Utilizing RTC's Trail User Survey Workbook survey form template as a starting point, the Ghost Town Trail survey was refined with input from Indiana County Parks and the Cambria County Conservation Authority. The sample was self-selecting, meaning trail users could pick up survey forms that were available at each of the trail's primary trailheads and trailside businesses and mail them to RTC via the provided business reply postage. Survey collection was conducted from the beginning of April 2009 through the end of October 2009.

For the purpose of this analysis, 441 survey forms were completed.

Because several questions called for multiple responses, and some survey respondents did not answer all of the questions, the percentages presented in this analysis are based on the total number of responses to each individual question.

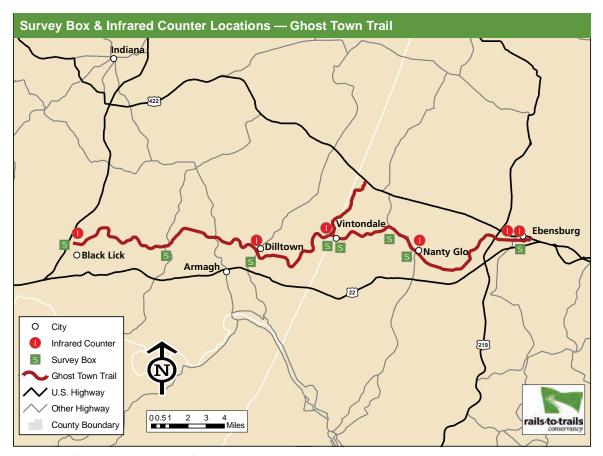
(Disclaimer: As a self-selecting survey, these findings are not absolute, and no one can predict with any certainty how trail users will act in the future. That said, the findings track very closely with similar surveys and other published reports, as well as anecdotal evidence).

For the purpose of this analysis, the data from the Ghost Town Trail User Survey will be compared with data collected in a 2008 survey of users on the Perkiomen Trail in Montgomery County, Pa., and a 2007 survey of users on the Heritage Rail Trail County Park in York County, Pa. The data collection methodology and survey questions from the Perkiomen Trail and Heritage Rail Trail surveys are in most cases identical to those in the Ghost Town Trail survey.

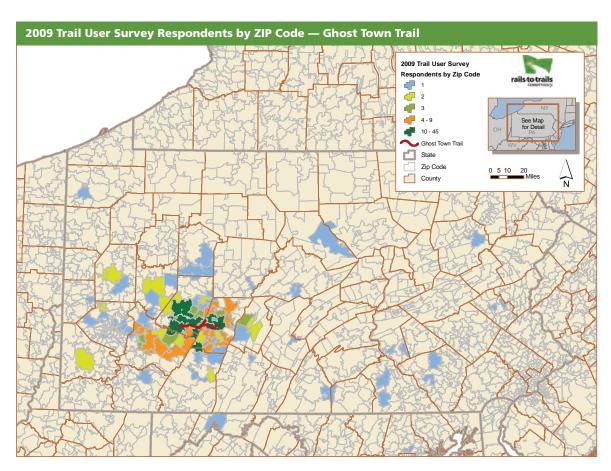
The Heritage Rail Trail is part of the York County Park system and runs for 21 miles from the Maryland state line to the city of York. The trail passes through small boroughs in rural and agricultural areas before reaching the more populous areas around York (pop. 40, 862).

The Perkiomen Trail is a 19-mile, multi-use trail in southeast Pennsylvania, not far from Philadelphia. The Perkiomen Trail is managed by the Montgomery County Parks Department and passes through several small towns and rural areas, and all within 30 miles of Philadelphia.

Like the Ghost Town Trail, both the Perkiomen and the Heritage trails run adjacent to a waterway for a major portion of their length.



Location of Survey Boxes and Infrared Counters posted along the trail.



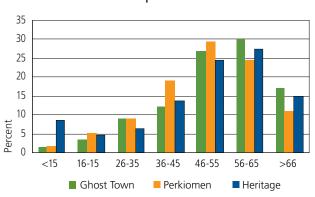
## **Comparative Analysis**

In all three of these studies, the vast majority of trail users are over the age of 45. Survey respondents to the Ghost Town Trail study who are 56 to 65 years of age represent a slightly higher percentage than respondents to the Perkiomen Trail and Heritage Rail Trail. This age profile is slightly older with what has been gathered from other studies across the country.

#### What is your age group?

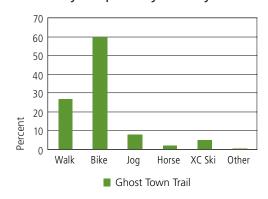


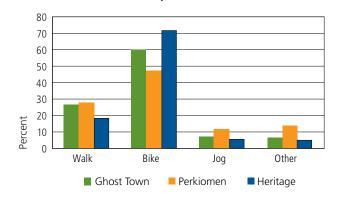
#### Comparison with other trails



The predominant activities on the Ghost Town Trail are bicycling and walking. Cross-country skiing was listed separately as an option for users on the Ghost Town Trail because it is a known activity on the pathway. However, cross-country skiing has been included in the 'Other' category in the comparison chart.

#### What is your primary activity?



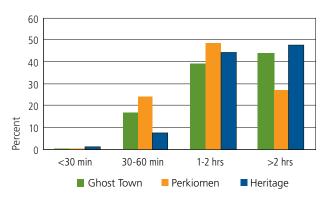




At 36 miles, the Ghost Town Trail is the longest of the three trails used in the comparison. The Heritage Rail Trail is 21 miles long, and the Perkiomen Trail 19 miles. Both the Heritage Rail Trail and Ghost Town Trail pass through natural 'wilderness' areas, which may contribute to the length of time users spend on the trail as there are more places to explore the natural surroundings, wildflowers, streamside, etc. Visual observations on the Ghost Town Trail likewise indicate the majority of users are taking time to explore the trail. At the same time, a higher percentage of users on both the Ghost Town and Perkiomen trails spend less than two hours on the trail than is the case for users of the Heritage Rail Trail. Both the Ghost Town and the Perkiomen trails pass through more residential areas than the Heritage Rail Trail, so the incidence of quicker visits may be indicative of the people who live near the trail and use it for short walks on a daily basis.

#### How much time did you spend on each trail visit?





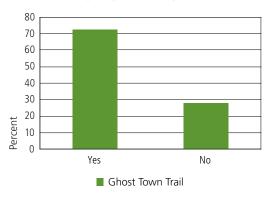


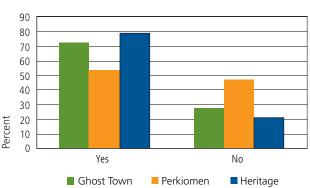


In conjunction with their trail visit, a high percentage of users of the Ghost Town Trail purchased "soft goods," which for the purpose of this survey included items such as snacks, water, ice cream and meals. The percentage of purchases may relate to the length of the trail and the environment the trail passes through. The Ghost Town Trail is isolated from any services in many places, while the Perkiomen is always within easy distance of food and water. The Heritage Rail Trail has a large number of trailside businesses that cater to trail users and has continually reported a high volume of "soft good" expenditures. For the more isolated Ghost Town Trail, on the other hand, users may feel a greater need to be prepared by carrying some nourishment.

#### Number of people who purchased "soft goods"?

### Comparison with other trails

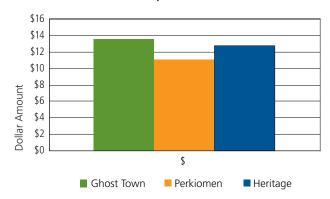




Spending on "soft goods" is somewhat consistent across the three trails. Users on the Ghost Town Trail report spending an average of \$13.62, while Heritage Rail Trail users report spending \$12.86. Again, the distance traveled on the trail and the environment the trail passes through seem to influence the amount of money spent on non-durable goods. Nearly half of the Perkiomen users do not purchase any "soft goods" during their trail outing.

Average \$ spent per person on "soft goods"

#### \$16 \$14 \$12 \$10 \$8 Dollar Amount \$6 \$4 \$2 \$0 \$ ■ Ghost Town Trail

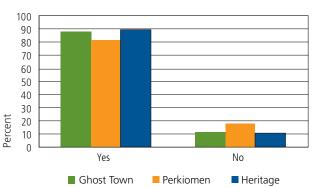


In the case of all three studies, use of the trails has influenced a "hard goods" purchase by more than 80 percent of respondents. For the purpose of these studies, "hard goods" included bikes, bike supplies, auto accessories (bike racks, etc...), footwear and clothing.

#### Number of people who purchased "hard goods"

#### 100 90 80 70 60 50 40 30 20 10 0 Yes No ■ Ghost Town Trail

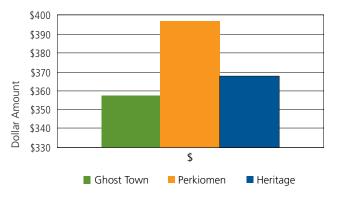
#### Comparison with other trails



The amount respondents reported spending on "hard goods" across all three studies is remarkably similar, with a variation of less than \$40.00. Data collected indicates a higher number of users purchased expensive highend bicycles in the Philadelphia metropolitan area—where the Perkiomen Trail is located—than users of the Ghost Town or Heritage trails. While the dollar amount spent per person is reportedly higher for the Perkiomen Trail, fewer respondents reported purchasing goods.

#### Average \$ spent on "hard goods" per person?







An Economic Impact Study\* of the Ghost Town Trail was completed for Indiana County Parks in 1996. While a slightly different methodology was used, certain data gathered in the 1996 study and this survey can be fairly compared. The user counts vary by approximately 10,000 visits. The number of users residing in Indiana and Cambria counties was estimated at 77 percent in 1996 and a little more than 67 percent in 2009. In 1996, 10 percent of respondents indicated they stayed overnight, while in 2009, 12 percent planned an overnight stay (lodging accounts for the largest dollar amount

of economic impact in 2009). The expenditures in 1996 were analyzed based on the resident status of the user: \$4.33/visitor day was estimated as the average expenditure made by local residents, with \$9.28 spent/visitor day by non-local residents. With an inflation rate calculated at 37.9 percent since 1996 (www.usinflation.com), the dollar amounts equate to \$5.97 and \$12.80, respectively, at a 2009 value. The 2009 study determined that \$13.62 was the average amount spent daily on consumables by all survey respondents who reported purchasing items.



<sup>\*</sup>Strauss, C.H., and B.E. Lord. (1996). Economic Impact of Ghost Town Trail in the Indiana and Cambria Counties Region. State College: Pennsylvania State University.

## **Ghost Town Trail User Estimate**

During the summer of 2009, passive infrared counters were placed at various locations along the Ghost Town Trail. These counters collect data on the number of trail users passing the counter by detecting each user's "heat signature."

The counters were placed near trailheads at Black Lick, Dilltown, Rexis, Nanty Glo and Ebensburg. The counters at Black Lick, Dilltown and Ebensburg were placed along the trail in April 2009. The counters at Black Lick and Dilltown collected data through October 2009. The Ebensburg counter was vandalized in July and replaced in August. The Rexis counter, which was on a spur trail, was moved to Nanty Glo in August. A counter was installed at Amerford in October after the installation of bridges closed a gap in the trail between Dilltown and Black Lick.

For the purpose of this analysis, the data from four counters was analyzed for the Ghost Town Trail. A separate analysis provides an estimate of the usage of the Rexis Spur Trail. In order to develop an annual user estimate for the Ghost Town Trail, the data collected from April through October was extrapolated to a 12-month estimate using a User Visit Model developed by RTC. This method examines data from electronic counters at 58 different locations on rail-trails across the United States.

A calibration for the counters was determined by comparing a one-hour visual count to the data collected by the infrared counter at two locations. The variation was determined to be 1.21 percent and was applied to all counter data (missing counts column).

The following are the set of assumptions that were made in order to account for users who may not have passed one of the counters or may have passed multiple counters. The assumptions also take into

account the idiosyncrasies of infrared trail counting technology and the habits of trail users. These assumptions result in an estimate of all trail user visits on an annual basis based on count data collected during 2009.

#### Assumptions:

Trail users starting in Black Lick only passed one counter.

Prior to the installation of the bridges in October, trail users starting at Dilltown only passed one counter.

Trail users starting in Dilltown and heading east only passed one counter from April through July.

Trail users starting in Ebensburg heading west between April and July only passed one counter.

Starting in August, 25 percent of cyclists (60.2 percent of all users) starting in Dilltown heading east or Ebensburg heading west passed two counters.

Starting in August, 25 percent of cyclists heading west from Nanty Glo passed two counters.



Trail Counter Location	Actual Count	Estimated 12-Month Count**	Adjusted for Passing Multiple Counters	Adjusted for Missing Counts	Adjusted for Out-and- Back Trips
Black Lick (4.2.09–11.15.09)	8,606*	11,243		13,480	6,740
Dilltown (4.2.09-11.15.09)	20,844	22,394	21,066	25,279	13,304
Ebensburg (4.2.09–11.15.09)	17,122*	34,062	32,042	38,450	20,236
Nanty Glo (8.19.09–11.15.09)	7,596	24,223	22,786	27,343	14,391
Amerford (10.8.09–11.16.09)	2,362	35,156	33,071	39,685	20,886
Total Annual Trail User Visits					75,557

<sup>\*</sup> Includes only 6-month data.

The Rexis extension is a short spur trail off the main body of the Ghost Town Trail. A counter was placed along this section from April through July in order to discern the number of users on this four-mile extension. Total counts are divided by two because there is only one trailhead at the south end of the extension that lies between Wehrum and Vintondale. Any user accessing the spur from this point would have to pass it again to exit the trail.

The Rexis counts are not included in the economic impact analysis.

Trail Counter Location (Annual Use)	Actual Count	Estimated 12-Month Count**	Adjusted for Passing Multiple Counters	Adjusted for Missing Counts	Adjusted for Out-and- Back Trips
(Allitual Ose)					
Rexis	1,313	7,783	7,783	9,340	4,670

<sup>\*\*</sup> Annual estimate developed from actual counter data extrapolated using the RTC User Visit Model.

## **Economic Impact**

The economic impact of the Ghost Town Trail is comprised of a number of elements.

First, the survey determined the percentage of respondents who have purchased "hard goods" (bikes, bike equipment, running/walking shoes, etc...). Many of these respondents also revealed how much they spent on these types of purchases over the past 12 months.

Second, the survey determined how much trail users spent on "soft goods" (water, soda, snacks, ice cream, lunches, etc...) while using the trail. Again, the percentage of respondents who made these types of purchases is an important aspect for determining the economic impact.

Third, more than 12 percent of respondents to the Ghost Town Trail User Survey indicated that an overnight stay was part of their trail experience. Of the 441 completed survey forms, 54 indicated an overnight stay.

An estimate of the overall economic impact of the Ghost Town Trail is presented in the form of a table below.

#### Hard Goods

Has your use of the trail influenced your purchase of...? (check all that apply)

Bike	25.4%
Bike supplies	26.8%
Auto accessories	6.6%
Running/walking/hiking shoes	13.5%
Clothing	16.1%
Nothing	11.6%

Approximately how much did you spend on the items above in the past year? (enter dollar amount)

This average is influenced by the purchase of some expensive bicycles costing as much as \$3,000 or more.

#### **Soft Goods**

In conjunction with your most recent trip to the trail, did you purchase any of the following? (check all that apply)

Beverages	25.5%
Candy/snack foods	13.7%
Sandwiches	7.7%
Ice cream	9.2%
Meals at a restaurant along the trail	14.1%
Bike rental	0.2%
Other	1.8%
None of these	27.8%

Approximately how much did you spend per person on the items above? (enter dollar amount)

Average "soft goods"	purchase	\$13.62
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Note that this is an average amount spent per person, per trip.



Did your visit to the trail involve an overnight stay in one of the following types of accommodations? (circle one response)

Motel/hotel	37.0%
Bed-and-breakfast	13.0%
Friend or relative's home	37.0%
Campground	9.3%
Other	3.7%

Note that 12.24 percent of respondents indicated they spent an overnight in conjunction with their visit to the Ghost Town Trail. However, some overnight stays were with friends or relatives, and it is assumed there was no cost involved. In addition, the "Other" category is assumed to also have no associated cost. Therefore, to calculate the economic impact, which would be dollar expenditures, the "non-paying" visitors are not included in the calculation.

How many nights did you stay in conjunction with you visit to this trail? Average: 2.2

Approximately how much did you spend on overnight accommodations per night? Average: \$78.04

The following chart takes the data provided above and extrapolates the purchases on an annual basis. While "hard good" purchases may not be made on an annual basis, they represent a significant expenditure figure. The purchase of "soft goods" does represent an annual expenditure because these purchases are made on a per-trip basis by users. Likewise, the spending on overnight accommodations can be anticipated to occur year after year.





Ghost	t Town	Trail Eco	onomic	Impact An	alysis	
					·	Annual User et. (Rounded)
						75,600
Category	% Usage	Avg. \$	Avg. Life	Avg. # of trips	Avg. # of night	S
Hard Goods*	88.4%	\$357.63	6 years	5.9		\$675,157
Soft Goods	72.2%	\$13.62				\$743,423
Overnight Accommodations	7.3%	\$78.04			2.2	\$947,512

Hard Goods = (% Usage X (Avg. \$÷Avg. Life) X # Users ÷ Avg. Number of Trips)\* In the above example the calculation would look like this:  $((.884 \text{ X } (\$357.63 \div 6)) \text{ X } (75,600 \div 5.9) = \$675,157)$ 

Soft Goods = (% Usage X Users Avg. \$ X # Users) In the above example the calculation would look like this: (.722 X \$13.62 X 75,600) = \$743,423

Overnight Accommodations = (% Usage X User Avg. \$ X Avg. # of Nights X # Users) (.073 X \$78.04 X 2.2 X 75,600) = \$947,512

\*Major "hard good" purchases such as a bike may be replaced every five to 10 years. Running shoes may be replaced every couple of months. For the purpose of this analysis, an average life of six years is assumed. To get a figure that is usable on an annual user basis, the "hard goods" need to be broken down to a per-trip figure. What this amounts to is working the average spending on a "hard good" down to a per-use depreciation amount.

## **Ghost Town Trail Construction** and Maintenance Costs

Construction of the Ghost Town Trail began in 1991 when the Kovalchick Salvage Company donated 16 miles of the former Ebensburg & Black Lick Railroad to Indiana County. In 1993, four miles from Rexis to White Mill Station were donated to Cambria County by the Cambria and Indiana Railroad. In 2005, Cambria County purchased another eight miles from the R.J. Corman Railroad Group. Indiana County added an additional 12 miles of trail the same year. In 2009, what had been two disconnected segments of trail became one seamless route, totaling 36 miles with the installation of two bridges just west of Dilltown.

Overall, the estimated costs of both acquisition and construction of the trail total \$4,519,766.

By agreement and a Memorandum of Understanding between the county agencies, Indiana County Parks maintains 28.5 miles of the trail, and the Cambria County Conservation and Recreation Authority maintains eight miles.

Total annual maintenance costs for the entire 36 miles of trail are estimated to be \$60,000 a year.



## Trail Maintenance, Security and Cleanliness

One of the most important aspects of the trail user survey is that it allows the trail's management organizations to receive feedback, both positive and negative, from users. The 2009 Ghost Town Trail User Survey can serve as a benchmark against which future maintenance, security and cleanliness issues can be compared.

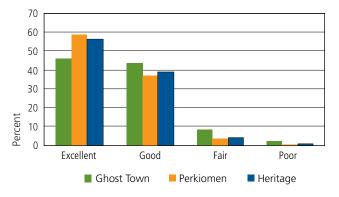
This series of questions was also posed in the 2007 study on the Heritage Rail Trail and the 2008 study of the Perkiomen Trail. To provide a basis of comparison for the management of the Ghost Town Trail, the responses from those studies have been included in this section of the analysis.

According to the survey, the Ghost Town Trail is well maintained, with the majority of respondents rating the maintenance as good to excellent. Some respondents reported that trespassing by ATV users on the trail section west of Ebensburg has had a negative impact on the condition of the trail.

The Heritage Rail Trail in York County is maintained by the York County Department of Parks, and the Perkiomen Trail is maintained by the Montgomery County Department of Parks.

#### Opinion of trail maintenance





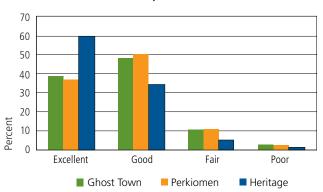


The feeling of security that trail users have is influenced by the presence of other trail users, visual observation of rangers, familiarity with the trail, and the users' general perception of how safe their overall environment is. From the chart, it appears that respondents to the Ghost Town Trail User Survey feel comparable to the users on the Perkiomen Trail. The Heritage Rail Trail has a volunteer Trail Ambassador Program, which may account for their users' increased sense of security.

#### Opinion of trail safety and security



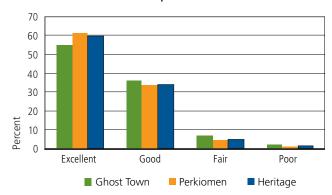
#### Comparison with other trails



Survey respondents rate the cleanliness of the Ghost Town Trail good to excellent. This rating is as much a credit to the users of the trail as to any other factor. Generally, trail users respect the trail and the open space through which they travel. Users often can be seen picking up after someone who was not as respectful of the environment. The decision to make the trail a "pack out what you pack in" facility normally results in a much cleaner environment than those areas using trash cans, which can be misused and are costly to maintain.

#### Opinion of trail cleanliness





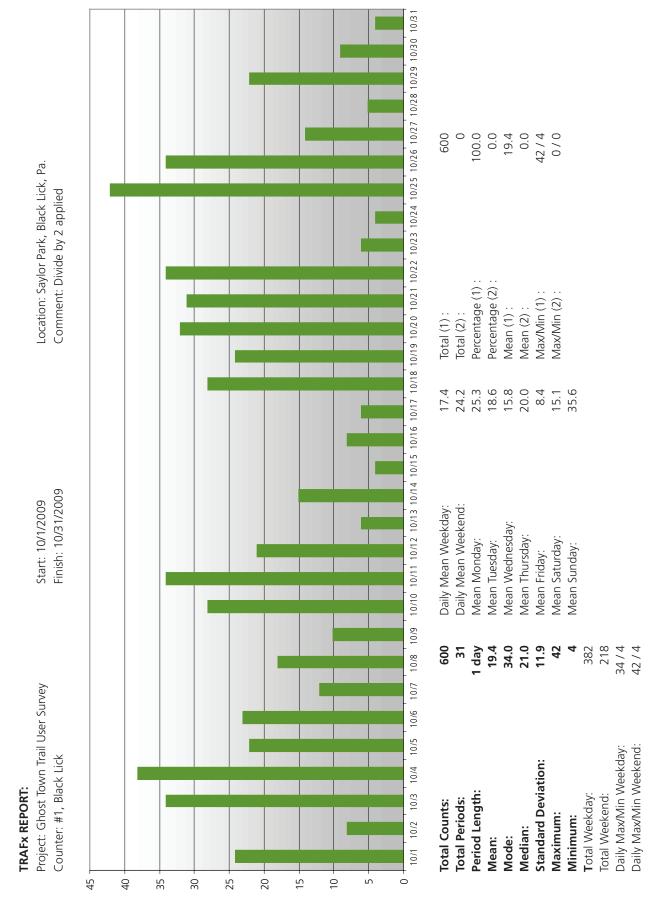
## Additional Comments Summary

At the end of the survey form, respondents were encouraged to add any additional comments regarding their experience on the Ghost Town Trail, and 325 comments were recorded. A review of these comments revealed they could be generally grouped into five different categories. The following is a summary of the categorized comments.

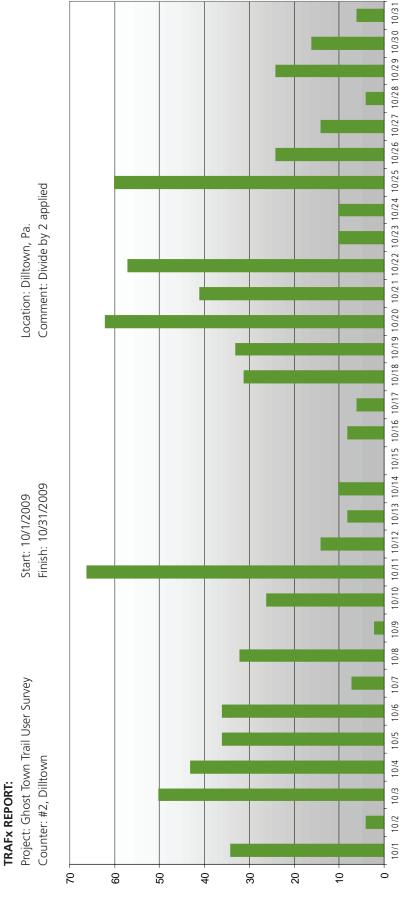
Compliments	38%	Love the trail, keep up the good work, beautiful trail
Complaints	17%	ATV/Quad use, horse and dog clean-up
Amenities	20%	Install mileage markers, toilet facilities
Surface	8%	Repair divots and quad damage
Extensions/Connections	13%	Complete bridges, connections to Hoodlebug



## Appendix — Trail Counter Data

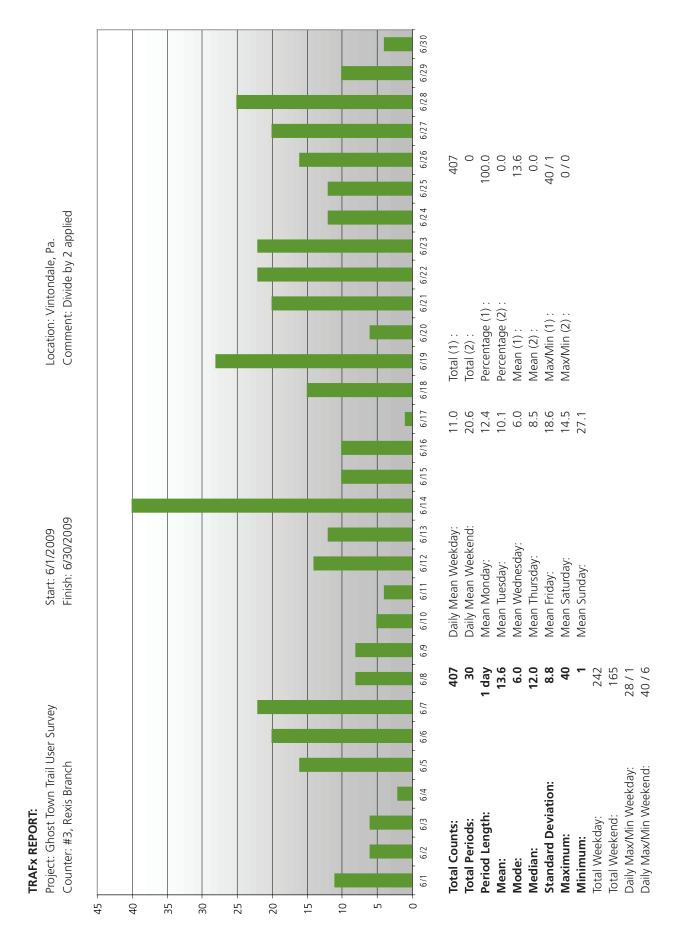


FIVE PEAK PERIODS: 10/25/2009 (42), 10/4/2009 (38), 10/3/2009 (34), 10/11/2009 (34), 10/22/2009 (34)



Total Counts:	774	Daily Mean Weekday:	21.6	Total (1) :	774
Total Periods:	31	Daily Mean Weekend:	33.1	Total (2) :	0
Period Length:	1 day	Mean Monday:	26.8	Percentage (1):	100.0
Mean:	25.0	Mean Tuesday:	30.3	Percentage (2):	0.0
Mode:	10.0	Mean Wednesday:	15.4	Mean (1) :	25.0
Median:	24.0	Mean Thursday:	29.4	Mean (2) :	0.0
Standard Deviation:	19.7	Mean Friday:	7.9	Max/Min (1):	0/99
Maximum:	99	Mean Saturday:	19.3	Max/Min (2) :	0/0
Minimum:	0	Mean Sunday:	50.1		
Total Weekday:	476				
Total Weekend:	298				
Daily Max/Min Weekday:	62 / 0				
Daily Max/Min Weekend:	9 / 99				

FIVE PEAK PERIODS: 10/11/2009 (66), 10/20/2009 (62), 10/25/2009 (60), 10/22/2009 (57), 10/3/2009 (50)

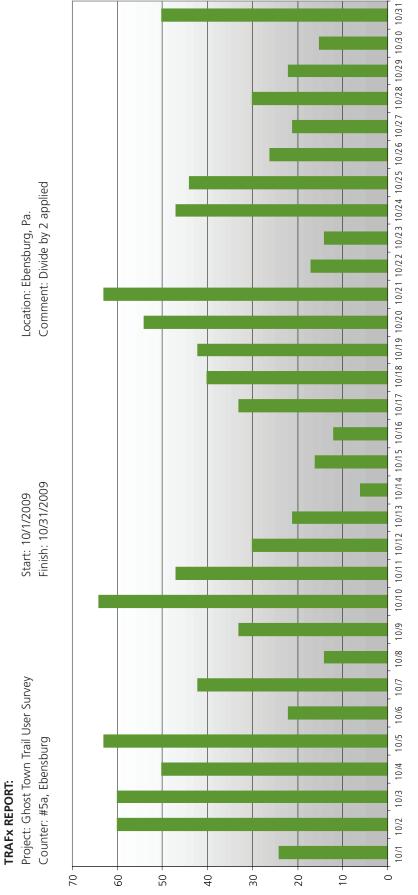


FIVE PEAK PERIODS: 6/14/2009 (40), 6/19/2009 (28), 6/28/2009 (25), 6/7/2009 (22), 6/22/2009 (22) Data was collected along the Rexis Branch of the trail during the month of June.

10/1 10/2 10/3 10/4 10/5 10/6 10/7 10/8 10/9 10/10 10/11 10/12 10/13 10/14 10/15 10/16 10/17 10/18 10/14 10/15 10/20 10/20 10/20 10/21 10/22 10/23 10/24 10/25 10/26 10/27 10/29 10/29 10/30 10/30 10/31 10/31 Comment: Divide by 2 applied Location: Nanty Glo, Pa. Finish: 10/31/2009 Start: 10/1/2009 Project: Ghost Town Trail User Survey Counter: #4, Nanty Glo TRAFx REPORT: 8 20 09 20 40 30 20 9 0

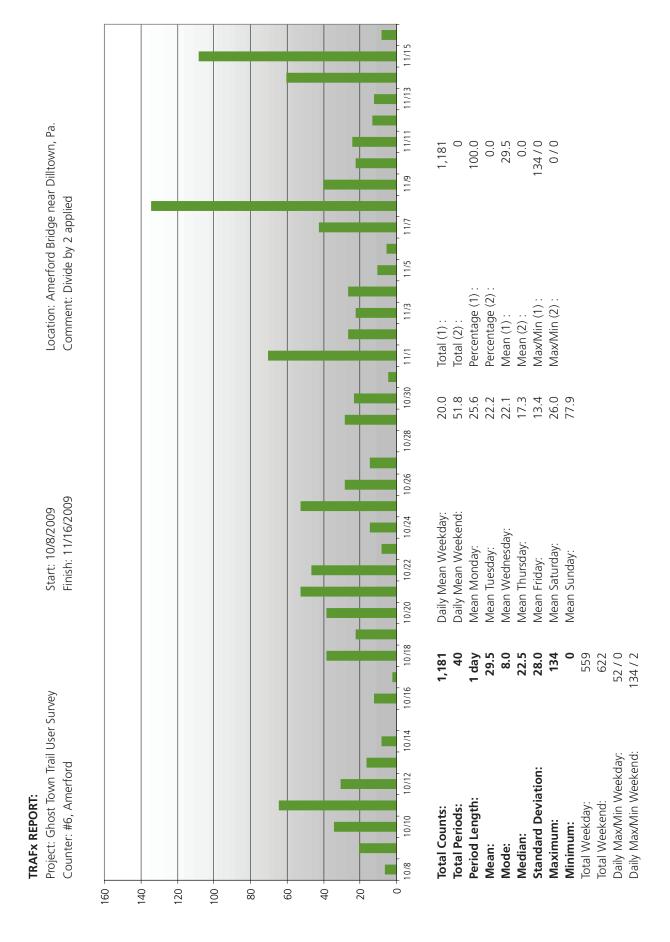
Total Counts:	1,022	Daily Mean Weekday:	31.2	Total (1):	1,022
Total Periods:	31	Daily Mean Weekend:	37.2	Total (2) :	0
Period Length:	1 day	Mean Monday:	41.9	Percentage (1):	100.0
Mean:	33.0	Mean Tuesday:	37.8	Percentage (2) :	0.0
Mode:	22.0	Mean Wednesday:	24.9	Mean (1) :	33.0
Median:	30.0	Mean Thursday:	36.5	Mean (2) :	0.0
Standard Deviation:	17.7	Mean Friday:	17.2	Max/Min (1):	70/3
Maximum:	70	Mean Saturday:	27.3	Max/Min (2):	0/0
Minimum:	m	Mean Sunday:	49.5		
Total Weekday:	687				
Total Weekend:	335				
Daily Max/Min Weekday:	63/3				
Daily Max/Min Weekend:	70 / 12				

FIVE PEAK PERIODS: 10/4/2009 (70), 10/5/2009 (63), 10/3/2009 (59), 10/8/2009 (58), 10/11/2009 (53)



Total Counts:	1,082	Daily Mean Weekday:	29.4	Total (1):	1,082
Total Periods:	31	Daily Mean Weekend:	48.3	Total (2) :	0
Period Length:	1 day	Mean Monday:	40.4	Percentage (1):	100.0
Mean:	34.9	Mean Tuesday:	29.4	Percentage (2) :	0.0
Mode:	0.09	Mean Wednesday:	35.1	Mean (1) :	34.9
Median:	33.0	Mean Thursday:	18.7	Mean (2) :	0.0
Standard Deviation:	17.6	Mean Friday:	27.0	Max/Min (1):	64 / 6
Maximum:	64	Mean Saturday:	50.9	Max/Min (2):	0/0
Minimum:	9	Mean Sunday:	45.1		
Total Weekday:	647				
Total Weekend:	435				
Daily Max/Min Weekday:	9 / 89				
Daily Max/Min Weekend:	64/33				

FIVE PEAK PERIODS: 10/10/2009 (64), 10/5/2009 (63), 10/21/2009 (63), 10/2/2009 (60), 10/3/2009 (60)



FIVE PEAK PERIODS: 11/8/2009 (134), 11/15/2009 (108), 11/1/2009 (70), 10/11/2009 (64), 11/14/2009 (60) Amerford Counter was in place part of October, after bridge installation was complete.



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