



rails-to-trails
conservancy



Three Rivers Heritage Trail 2014 User Survey and Economic Impact Analysis

Contents

Executive Summary.....	2
Historical Perspective.....	5
Location Analysis.....	7
Three Rivers Heritage Trail Map.....	8
Pittsburgh Area Demographics.....	11
Survey Results.....	12
Methodology and Analysis.....	19
Comparative Analysis.....	20
Trail User Estimate.....	24
Economic Impact.....	26
Trail Maintenance, Security and Cleanliness.....	29
Qualitative Values of the Trail.....	31
Appendix – Trail Counter Data.....	33

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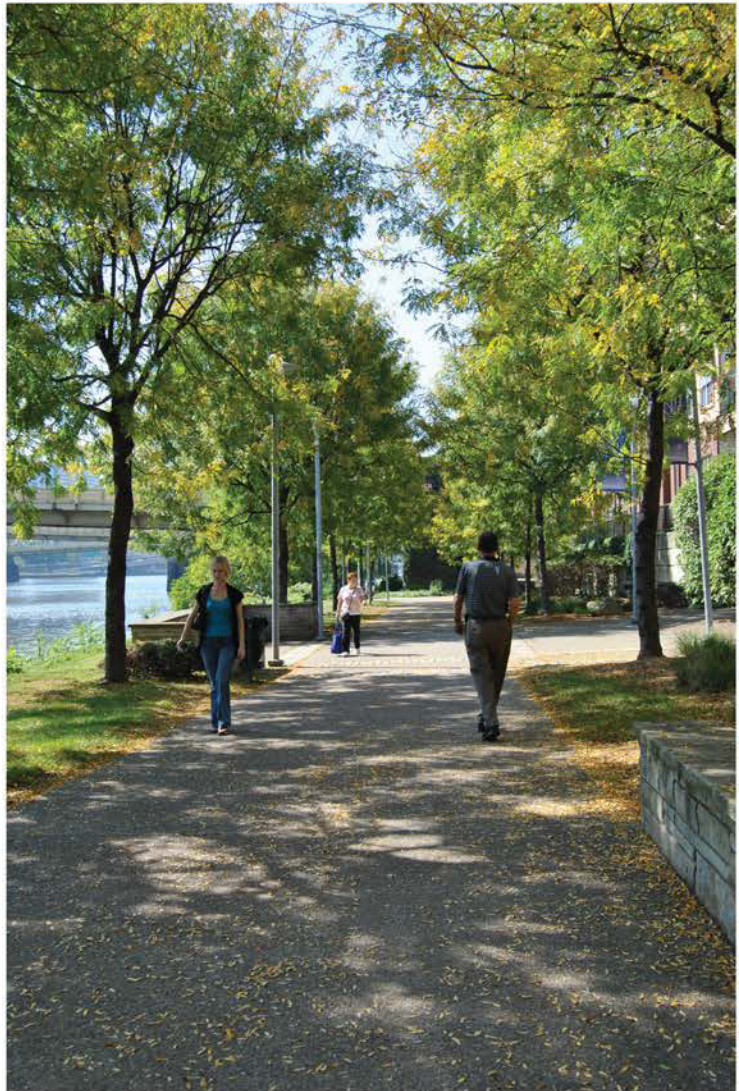


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Three Rivers Heritage Trail 2014 User Survey and Economic Impact Analysis

Carl Knoch, Manager of Trail Development
Northeast Regional Office
Rails-to-Trails Conservancy

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Rails-to-Trails Conservancy
Northeast Regional Office
2133 Market St., Suite 222
Camp Hill, PA 17011
Tel 717.238.1717 / fax 717.238.7566

National Headquarters
2121 Ward Court, NW, 5th Floor
Washington, DC 20037
Tel 202.331.9696 / fax 202.223.9257

railstotrails.org
TrailLink.com

Executive Summary

The 24-mile Three Rivers Heritage Trail extends along the banks of the Allegheny, Monongahela and Ohio rivers in one of America's most storied cities, Pittsburgh, Pennsylvania. The trail has been developed by Friends of the Riverfront, which has worked for more than 24 years to turn a riparian brownfield into a world class trail network.

During 2014, Rails-to-Trails Conservancy (RTC) conducted a study of the users of the Three Rivers Heritage Trail, with support from a grant from the Pennsylvania Department of Conservation and Natural Resources. This study utilized a survey methodology previously tested on Pennsylvania trails and documented in RTC's

An analysis of the data accumulated from infrared counters located along the trail and the completed surveys received from users indicates an estimated 622,873 annual user visits, resulting in a total economic impact in 2014 of \$8,286,026.



Trail User Survey Workbook (railstotrails.org/resourcehandler.ashx?id=3543). This survey was designed to monitor trail user characteristics and economic impact.

Two different survey data collection methods were employed for the Three Rivers Heritage Trail project. Paper survey forms were available from mid-April to mid-November along the following segments of the trail: Millvale, North Shore, Chateau, Eliza Furnace, Panther Hollow, Station Square, Southside and Baldwin Borough. Completed responses were mailed back to RTC and tallied by an independent consultant. Paper surveys included in this analysis total 287. In addition, an online version of the survey, hosted by Survey Monkey, was utilized to collect responses. Survey boxes containing a QR code link to the online version of the survey, and a take-one card containing the QR code and the URL for the survey, were deployed along the same segments of the trail as the paper surveys. A total of 238 online surveys are included in this analysis. The total responses to the Three Rivers Heritage Trail User Survey are 525.

ZIP codes indicate that a large majority (75.5 percent) of trail users on the Three Rivers Heritage Trail reside in the city of Pittsburgh. Another 15.5 percent reside in Allegheny County, which surrounds the city of Pittsburgh.

The majority of respondents (59.0 percent) reported using the trail at least twice a week or more. First-time users made up 3 percent of our sample.

The age profile of users of the Three Rivers Heritage Trail is similar to what we've seen in



other trail surveys, with the majority of users (55.8 percent) over the age of 46. The percentage of trail-user survey participants between the ages of 26 and 35 (22.4 percent) is the highest RTC has ever recorded in the eight years we have been conducting trail user surveys. We believe this is a reflection of the trail's urban environment and the attraction of a city life style that is enjoyed by many Millennials.

The male/female ratio is also typical of what we have surveyed on other rail-trails, with 58.7 percent male and 40.3 percent female.

Riding a bike on the trail is the activity cited most frequently by respondents to the survey, at 44.1 percent. Walking is the second most popular activity cited by respondents, at 32.7 percent. Running and jogging (20.8 percent) represents the highest participation rate for this type of activity that we have seen in any previous study.

Other activities carried on by trail users center around observing wildlife (32.0 percent) or bird watching (21.2 percent). There is a bald eagle nest along one segment of the trail that attracted a lot of attention. It was recorded that 10.5 percent of survey respondents used the trail to go shopping, and an additional 8.2 percent used the trail to attend an event. From observation, many people use the trail to attend Pittsburgh Pirate baseball games.

Even with the very urban nature of the Three Rivers Heritage Trail, 60.2 percent of survey respondents used an automobile to get to a trail access point.



When asked how they found out about the trail, the most popular response from respondents was that they lived nearby (37.7 percent), followed by word of mouth (24.6 percent). This is the first survey we have conducted where word of mouth wasn't the top response to this question.

The survey included eight questions about expenditures, in order to develop a profile of trail-user spending habits. More than 80 percent (82.6) of respondents indicated they had purchased some form of durable good, also

known as a “hard good,” for use while on the trail (bike, shoes, bike supplies, etc.), with users spending an average of \$444.77 per person on these types of items during the previous year.

Consumable goods, or “soft goods,” such as snacks and drinks, were purchased by 57.5 percent of respondents, for an average of \$16.53 per person, per trip.

Lodging was the third factor examined for economic analysis. In the case of the Three Rivers Heritage Trail, the impact of overnight stays was insignificant. Only 2.7 percent of survey respondents indicated they stayed overnight in conjunction with their visit to the trail.

Survey respondents perceived the trail to be very well maintained. More than 80 percent rated the cleanliness and maintenance of the trail as good to excellent, and 82.5 percent indicated that safety on the trail was good to excellent.

The segments of the Three Rivers Heritage Trail that our respondents used most frequently were Southside (22.6 percent) and North Shore (21.1 percent). The most-often cited trail access points were Millvale Riverfront (23.8 percent) and Southside Riverfront Park (20.6 percent).

The majority of our survey respondents (65 percent) use the Three Rivers Heritage Trail year-round and would prefer to have snow removed from the trail surface (69.6 percent).



Historical Perspective*

*Excerpted from “Forging Connections: Friends of the Riverfront – Twenty Years of Building the Three Rivers Heritage Trail 1991-2011.” Copies are available from Friends of the Riverfront (friendsoftheriverfront.org) for a requested \$10 donation.

Until heavy industry took over in the last part of the 19th century, rivers were part of Pittsburgh’s recreational life, with swim clubs and public boathouses lining the banks. But this intimate recreational and social connection with the rivers disappeared for more than a century, when industrial development began in the 1870s, resulting in the degradation of the environment. The rivers became off limits to the public because of fencing, pollution, railroads, steel mills and safety rules essential to the region’s phenomenal growth as an industrial machine.

The modern revival of Pittsburgh’s blighted riverfronts turned a corner in 1970 with the construction of Three Rivers Stadium, a venue for the Pirates and Steelers and a first effort to return the Ohio riverfront to the public. Then, in 1976, Station Square opened on the Monongahela River, reclaiming 52 acres from the Pittsburgh and Lake Erie rail yard and its magnificent headquarters building. A riverfront walkway was part of the plan.

As the steel industry declined in the 1970s, Pittsburgh experienced a series of environmental and economic transformations that resulted in cleaner-flowing waters and abundance of “brownfields” vacated by industry. Friends of the Riverfront was formed in 1991 to take advantage of this opportunity and to reclaim the region’s riverfronts for public use.

Riverfront changes were increasingly on the minds of a succession of the city’s mayors. Mayor Richard Caliguiri (1977-88) made it possible to build Carnegie Science Center on brownfields on the right bank of the Ohio River, and after his death in office, Sophie Masloff (1988-94) became mayor. Mayor Masloff was the first to authorize a strip of land on the Southside as a public trail in 1991, responding to the advocacy work of the Riverfront Planning Committee (which later became Friends of the Riverfront).





Chronological Development of the Three Rivers Heritage Trail

North Shore – 1994, 1997, 1998
Lawrenceville – 1996
Eliza Furnace – 1998
Southside – 1991, 1998, 1999, 2005
Chateau – 1998, 2000
Panther Hollow – 1999
Duck Hollow – 2001
Washington’s Landing – 1999
Station Square – 2002
Strip District – 2002
Baldwin Borough – 2002
Millvale – 2002
Hot Metal Bridge – 2007
Casino – 2009
Mon Warf – 2010
Route 28 – 2010
Convention Center – 2012
Hazelwood – 2012
Keystone/GAP – 2012

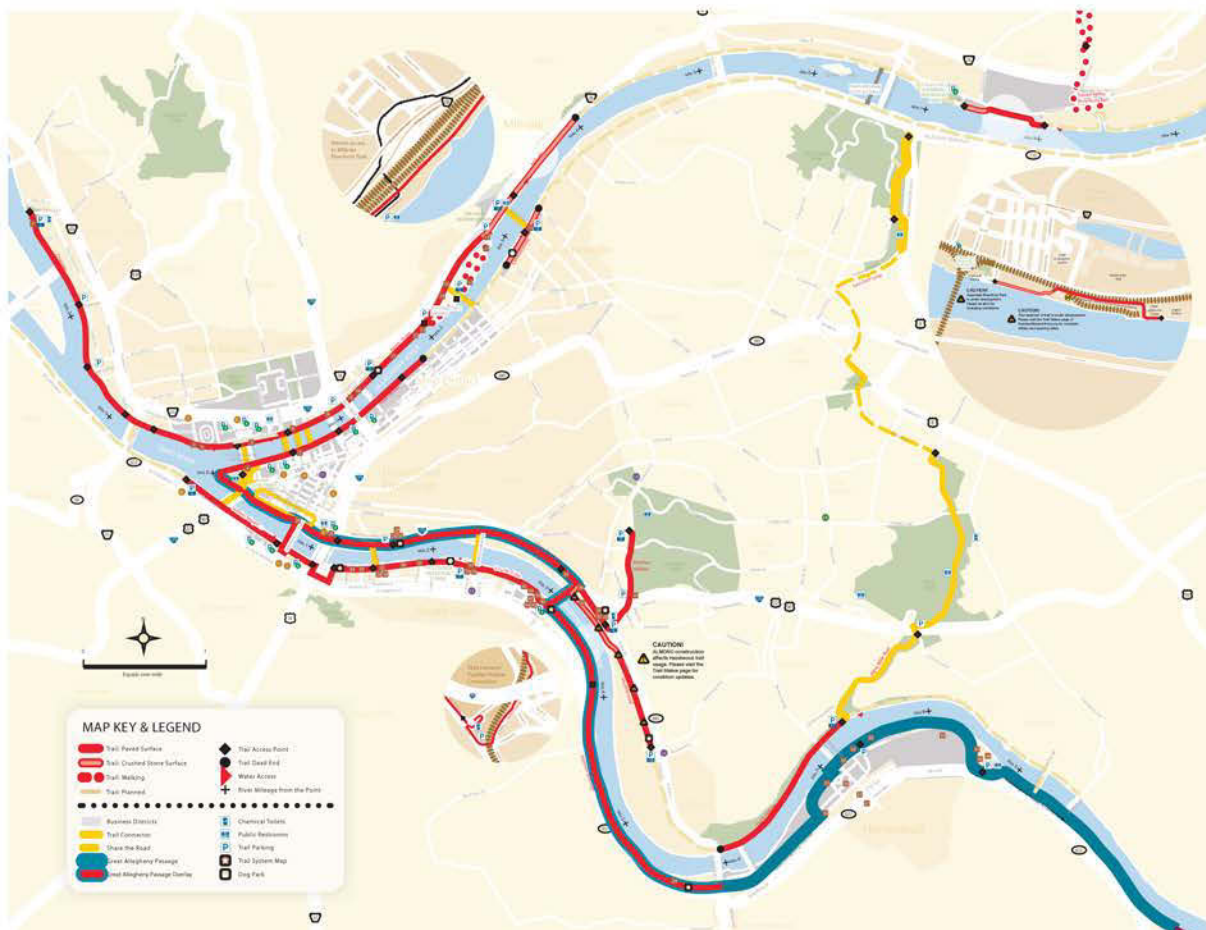
Tom Murphy (1994-2006), known nationally as “the trail mayor,” led Pittsburgh into national prominence (during his three terms) as one of the most developed rail-trail cities in the nation.

Location Analysis



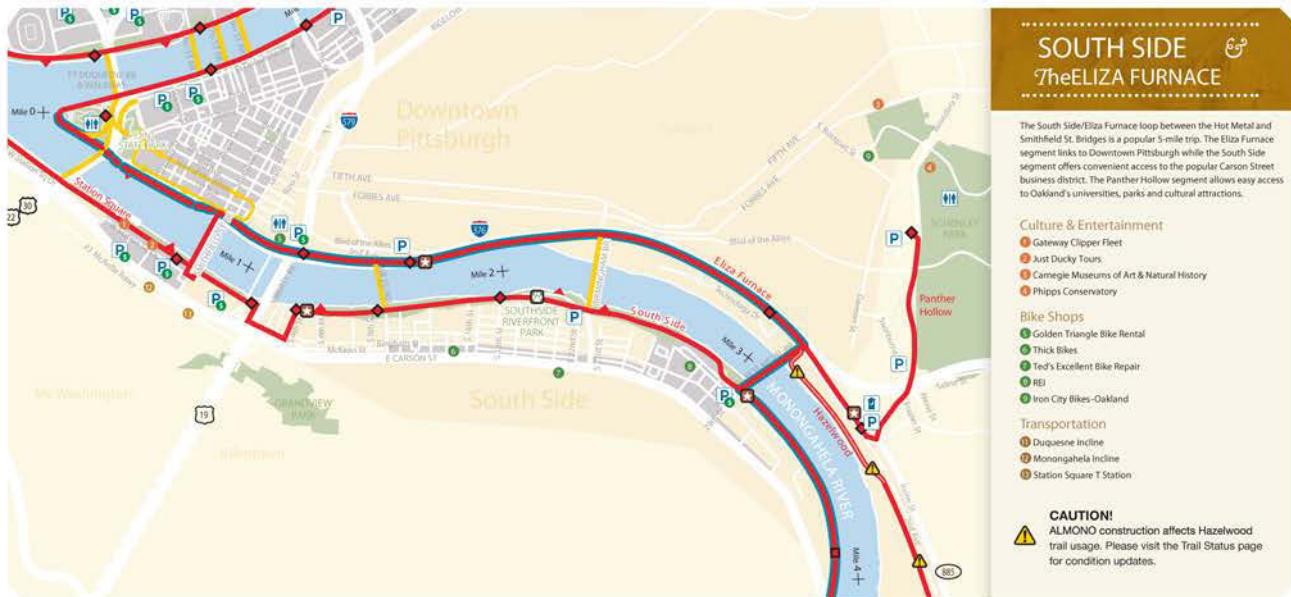
The Three Rivers Heritage Trail is a 24-mile multi-use riverfront trail system in the Pittsburgh, Pennsylvania region. The trail runs along the banks of the three rivers that give Pittsburgh its unique geographic characteristic. The Allegheny and Monongahela rivers meet at “The Point” in downtown Pittsburgh to form the Ohio River. In some cases, there is trail on both banks of the rivers. The Three Rivers Heritage Trail provides access to the city’s central business district, neighborhoods, municipalities, shopping venues and local attractions.

The Three Rivers Heritage Trail is made up of segments, each named for the section or neighborhood of the city they pass through. The Eliza Furnace Trail, on the north bank of the Monongahela River, passes where once stood Jones and Laughlin Steel Company’s Eliza furnaces. The North Shore Trail occupies the north bank of the Allegheny River in Pittsburgh’s North Shore neighborhood. The Strip District Trail, on the south bank of the Allegheny River, traverses an area famous for wholesale and retail shopping, eateries and nightlife.



Three Rivers Heritage Trail Map





The rich history and ecology of the Pittsburgh region is highlighted by 42 interpretive signs along the length of the Three Rivers Heritage Trail. These signs highlight the area's earliest days as a frontier trading post and the major events that made Pittsburgh an industrial powerhouse and turned it into the "Steel City." Additionally, the signs explain the role of the Three Rivers Heritage Trail as a riparian buffer for the rivers and discuss the aquatic life within the rivers and the plant life along their banks. The Three Rivers Heritage Trail also serves as the final segment of the Great Allegheny Passage, a 150-mile trail stretching from Cumberland, Maryland, to The Point in downtown Pittsburgh. The GAP, as the trail is known, also connects to the Chesapeake & Ohio Canal Towpath, which can take adventurers from Cumberland, Maryland, to the Georgetown neighborhood in Washington, D.C.

In 2010, Friends of the Riverfront secured National Recreation Trail status for the Three Rivers Heritage Trail from the U.S. Department of the Interior. This designation is granted to trails that are considered to be locally or regionally significant, have been open to the public for at least 10 years, and practice proper management and maintenance.



Demographics





Three Rivers Heritage Trail Demographic Profile*

	City of Pittsburgh	Allegheny County
Population (2013 estimated)	305,841	1,231,527
Median Household Income (2008-2012)	\$38,029	\$50,664
Households (2008-2012)	133,192	524,392
Persons Per Household (2008-2012)	2.12	2.27
Population Density (2010)	5,521.4 per sq. mile	1,675.6 per sq. mile
Mean Travel Time to Work (minutes); Worker age 16+ (2008-2012)	23.2	25.8

*Source: U. S. Census QuickFacts

Three Rivers Heritage Trail Population Growth

	2000	2010	2020	2030
City of Pittsburgh**	334,563	305,704	305,356	318,548
Allegheny County***	1,281,666	1,223,348	1,264,803	1,351,659

**Source: Southwestern Pennsylvania Commission 2012

***Source: Pittsburgh REMI Model. University Center for Social and Urban Research,
University of Pittsburgh

2014 Survey Results



Question 1

What is your zip code?

75.5%	City of Pittsburgh
15.5%	Allegheny County
1.9%	Butler County
1.3%	Beaver County
1.0%	Westmoreland County
1.0%	Washington County
3.9%	Other

Question 2

What municipality do you live in?
(If the City of Pittsburgh, go to Question 3.)

Top five mentions:
Shaler Township
Ross Township
Millvale
Bellevue Borough
Forest Hills

Question 3

If you live in the City of Pittsburgh, what neighborhood do you live in?

Top five mentions:
South Side
Squirrel Hill
Lawrenceville
Greenfield
Highland Park

Question 4

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

14.9%	Daily
29.8%	More than twice a week
14.3%	Twice a week
13.6%	Once a week
16.6%	A couple times a month
2.6%	Once a month
5.2%	A few times a year
3.0%	First time

Question 5

Please identify your age group.

0.4%	15 and under
4.9%	16-25
22.4%	26-35
16.6%	36-45
20.2%	46-55
24.4%	56-65
11.2%	66 or older

Question 6

Were any children 15 years old or younger with you on your trail experience today?

9.8%	Yes
90.2%	No

Question 7

What is your gender?

59.7%	Male
40.3%	Female

Question 8

Do you usually use the trail...

49.9%	Alone (by gender, 70.5% male, 29.5% female)
31.8%	With one other adult
7.1%	In a small group (3 or 4 others)
6.0%	As a family
5.3%	Large group

Question 9

What is your primary activity (mode of travel) on the trail?

32.7%	Walking
44.1%	Biking
20.8%	Jogging/running
2.4%	Rollerblading

Question 10

Do you usually bring a pet with you when you use the trail?

13.0%	Yes
87.0%	No

Question 11

During your trail visit, did you...

3.0%	Fish
2.0%	Go boating
21.2%	Bird watch
32.0%	Watch wildlife
11.8%	Study wildflowers
2.7%	Geocache
8.6%	Visit a historical site
10.5%	Shop
8.2%	Attend an event

Question 12

Has the trail had an influence on the type or frequency of the activity you participate in?

83.9%	Yes
16.1%	No

Question 13

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

4.7%	Less than 30 minutes
33.0%	30 minutes to 1 hour
40.9%	1 to 2 hours
21.4%	More than 2 hours

Question 14

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

35.3%	Recreation
37.3%	Health and exercise
5.6%	Commuting to work
14.7%	Fitness training
0.7%	Walk or bike to school
6.4%	Personal business (visit friends, shopping)

Question 15

If you use the trail to travel to school, what is the total round-trip mileage on the trail?

Average miles 3.5 (n=5)

Question 16

If you use the trail to commute to work, what is the total round-trip mileage on the trail?

Average miles 8.3 (n=64)

Question 17

Did you get to the trail today as part of an experience on the Great Allegheny Passage?

11.7%	Yes
88.3%	No

Question 18

How do you generally get to the trail?

23.5%	Walk
13.9%	Bicycle
60.2%	Automobile
2.1%	Mass transit

Question 19

If you drove to the trail, where did you park?

18.7%	Millvale
5.4%	Eliza Furnace
4.9%	Southside Riverfront Park
2.4%	Duck Hollow
68.6%	Others

Question 20

Did you have difficulty finding a place to park?

8.8%	Yes
91.2%	No

Question 21

Did you have to pay to park?

5.0%	Yes
95.0%	No

Question 22

Did your trail experience today begin and end at the same location?

89.1%	Yes
10.9%	No

Question 23

How did you find out about the trail?

24.6%	Word of mouth
5.1%	Roadside signage
7.3%	Driving past
37.7%	Live nearby
3.6%	Newspaper
1.8%	Parks department
3.8%	Bike shop
0.8%	Tourist bureau
7.0%	Friends of the Riverfront map and guide
4.2%	friendsoftheriverfront.org
2.0%	explorepatrails.com
2.2%	TrailLink.com

Question 24

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

21.9%	Bike
23.4%	Bike supplies
5.3%	Auto accessories
1.4%	Stroller
0.6%	Inline skates
14.3%	Footwear
15.7%	Clothing
17.4%	Nothing

Question 25

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

The average expenditure for those who indicated they had made a purchase and provided a dollar amount was \$444.77 (n=333).

Question 26

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

20.5%	Beverages
6.0%	Candy/snack foods
2.9%	Sandwiches
2.4%	Ice cream
10.3%	Meals at a restaurant along the trail
14.5%	Meals at a restaurant a few blocks from the trail
0.5%	Bike rental
0.3%	Other
42.5%	None of these

Question 27

Approximately how much did you spend, per person, on the items above on your most recent visit?

The average expenditure for those who indicated they had made a purchase and provided a dollar amount was \$16.53 (n=229).

Question 28

Approximately how far did you have to travel off of the trail to make these purchases?

26.7%	Stayed on the trail
39.0%	One or two blocks
34.3%	More than two blocks

Question 29

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

50.0%	Motel/hotel
12.5%	Bed and breakfast
31.2%	Friend's or relative's home
6.3%	Campground

Question 30

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

Average number of nights per stay: 2.5

Question 31

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

Average expenditure per night for those who provided an amount was \$114.38 (n=8).

Question 32

In your opinion, the maintenance of the trail you used today is...

29.7%	Excellent
53.8%	Good
14.3%	Fair
2.2%	Poor

Question 33

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

27.1%	Excellent
55.4%	Good
15.3%	Fair
2.2%	Poor

Question 34

In your opinion, the cleanliness of the trail you used today is...

31.6%	Excellent
53.6%	Good
11.8%	Fair
2.9%	Poor

Question 35

Would additional trailside trees and landscaping have an impact on your frequency of trail use?

30.1%	Increase trail use
1.6%	Decrease trail use
68.3%	No change in trail use

Question 36

What type of trailside landscaping would you prefer?

12.8%	Mowed lawn, park like
59.1%	Trees for overhead canopy
28.1%	Wildflower meadow

Question 37

Would you be willing to be a paying member of an organization that supports the trail?

62.4%	Yes
37.6%	No

Question 38

What portion of the trail do you use most often?

10.7%	Baldwin Borough (along East Carson Street)
11.0%	Chateau (past the stadiums)
12.6%	Eliza Furnace (along I-396)
3.8%	Hazelwood (passing LTV)
3.8%	Lawrenceville (passing the dog park)
21.1%	North Shore (passing Herr's Island and 31st Street Bridge)
7.4%	Panther Hollow (passing Schenley Park)
22.6%	Southside (through Southside Riverfront Park)
7.1%	Strip District (passing Veterans Memorial Bridge)

Question 39

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

20.6%	Southside Riverfront Park at 18th Street
9.1%	Carson Street under the Birmingham Bridge
5.1%	South 4th Street
11.7%	Eliza Furnace Trailhead at 88 Swinburne Street
6.6%	River Avenue at Veterans Bridge
15.0%	River Avenue at Heinz Street
23.8%	Millvale Riverfront
8.0%	Herr's Island/Washington Landing

Question 40

What is your trail surface preference?

42.0%	Asphalt
5.6%	Concrete
28.2%	Crushed stone
14.6%	Recycled asphalt
9.6%	Asphalt - separate crushed stone tread

Question 41

Do the interpretive signs along the trail have an impact on your trail experience?

53.8%	Increase my enjoyment of the trail.
30.6%	Have no impact on my trail experience.
15.6%	What interpretive signs, where are they?

Question 42

Do you use the trail-year round or only during the warmer months?

65.0%	Year-round
35.0%	Only warmer months

Question 43

Do you prefer to have the trails cleared of snow?

69.6%	Yes
14.3%	No
16.1%	Doesn't matter



Methodology and Analysis

Starting with a survey questionnaire template used on previous trail user surveys, the survey instrument for the Three Rivers Heritage Trail project was developed with input from Friends of the Riverfront, Allegheny County and the Southwest Pennsylvania Commission. The sample was self selecting, meaning that trail users could pick up survey forms that were available along the trail, capture the QR code on survey boxes or take an information card containing the QR code and the URL for the survey on Survey Monkey. This is the first survey Rails-to-Trails Conservancy has conducted of trail users utilizing the online Survey Monkey technology. Paper survey forms were also available that were folded into a postage-paid self-mailer addressed to RTC. Survey collection was conducted along the Three Rivers Heritage Trail from April to the end of October in 2014.

For the purpose of this analysis, 525 survey forms and electronic surveys were tabulated and analyzed. Because several questions called for multiple responses, and some survey respondents did not answer all the questions, the percentages presented in this analysis are based upon the total number of responses to each individual question.

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

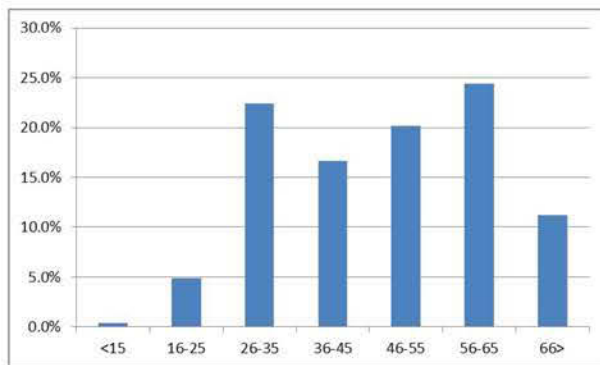


Comparative Analysis

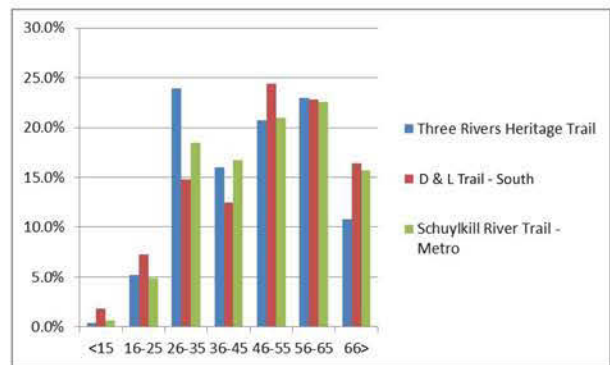
Rails-to-Trails Conservancy has conducted more than a dozen trail user surveys since 2006. The Three Rivers Heritage Trail is unique compared with other trails we have surveyed previously due to its predominately urban landscape. Fortunately, two of the previous survey reports broke out the data in order to distinguish between the more rural sections of the trail and the more suburban/urban segments. In this comparative analysis, we will look at the results from the Three Rivers Heritage Trail survey responses and compare them to the southern segment from the D & L Trail Survey (2012), which covered the trail in Bucks County, Pennsylvania, between the cities of Easton and Bristol. We will also include the metropolitan segment of the Schuylkill River Trail (2009), which starts at the Betzwood Trailhead near Valley Forge National Historic Park in Montgomery County, Pennsylvania, and runs to the end of the trail in Center City, Philadelphia.

Users of the Three Rivers Heritage Trail are considerably younger than the users of the D & L Trail-South or the Schuylkill River Trail-Metro. However, it is interesting to note that all three trails have an almost identical percentage of users in the 56-65 age range.

What is your age group?



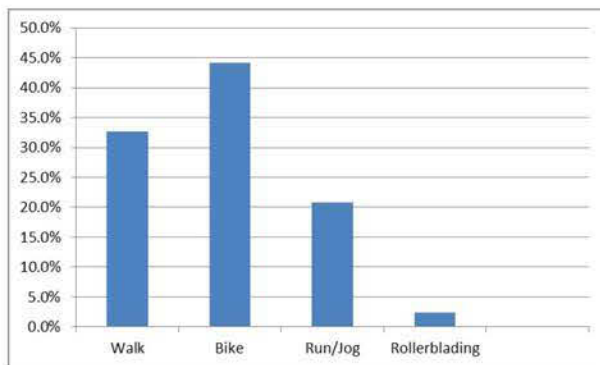
Comparison to other trails



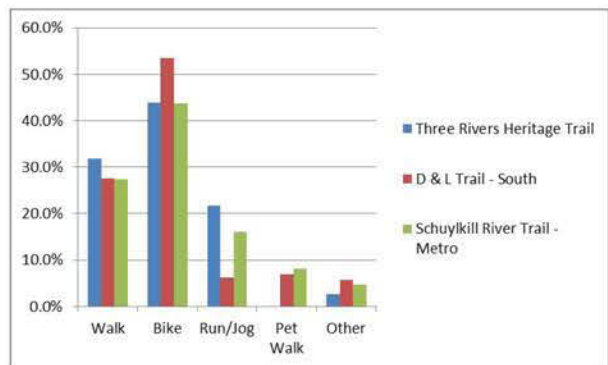


The percentage of trail users that walk is slightly higher for the Three Rivers Heritage Trail than for our other two comparative trails. The real difference is in the percentage of trail users that run or jog. This is probably a result of the Three Rivers Heritage Trail's younger age profile. Pet walking was not addressed in the Three Rivers Heritage Trail Survey.

What is your primary activity?

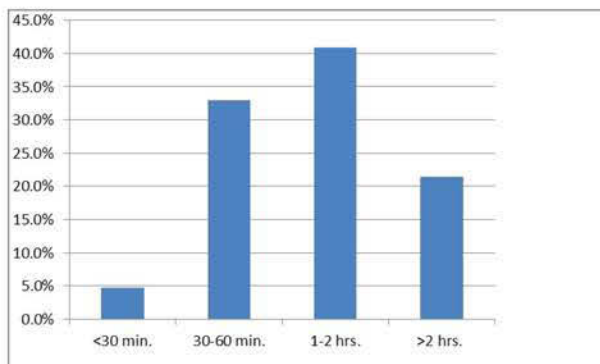


Comparison to other trails

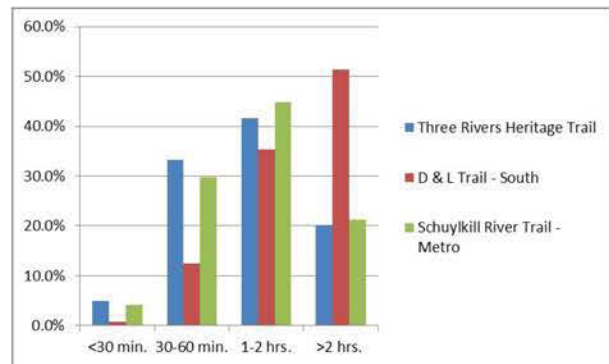


The Three Rivers Heritage Trail has a higher percentage of walkers, which, to some extent, can account for the shorter duration of trail experiences. The higher percentage of trail users that run and jog may account for the shorter trail usage duration. Also, as a primarily urban trail, many trail users can get to the trail from work or home for a short walk or run. The D & L Trail-South has the highest percentage of cyclists, which spend more time on the trail.

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



Comparison to other trails

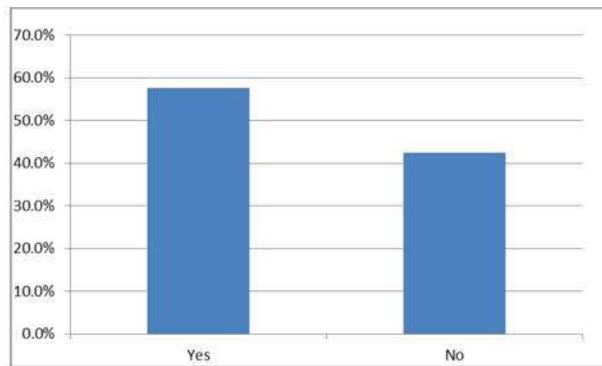




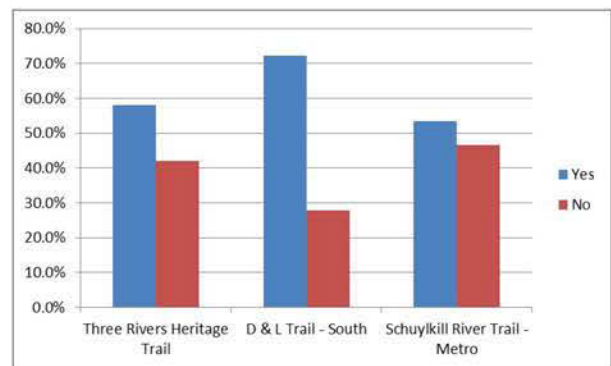
The percentage of trail users purchasing soft goods is nearly identical for users of the Three Rivers Heritage Trail and the Schuylkill River Trail-Metro segment. The higher percentage for D & L Trail-South users can be attributed to the fact that they spend more time on the trail.

The ability to purchase soft goods, also called “consumable goods,” is influenced by the number of establishments that make these types of purchases available to trail users. For example, the Eliza Furnace segment of the Three Rivers Heritage Trail was visited by 12.6 percent of survey participants, but there are no retail establishments selling “soft goods” along this 2.7-mile trail segment.

Percentage of people who purchased “soft goods”

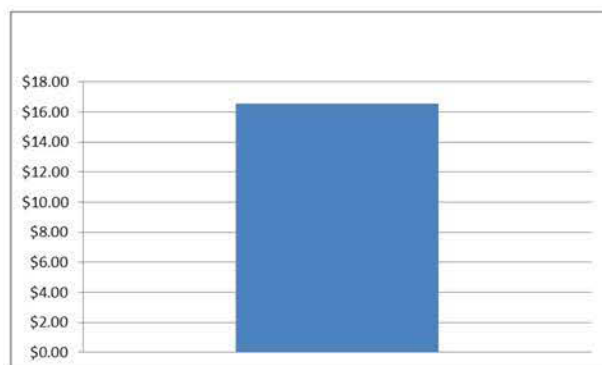


Comparison with other trails

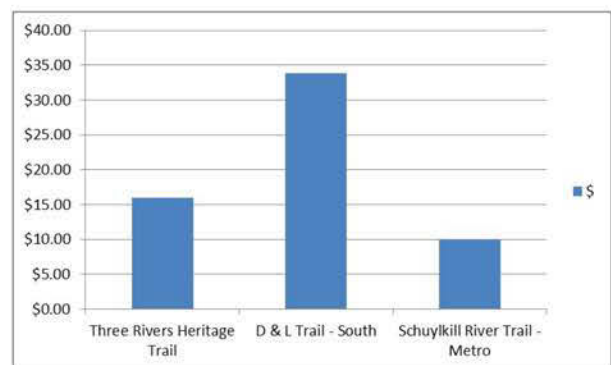


It would follow that if you spend more time on the D & L Trail-South, and you purchase more soft goods, that your average spending per trail outing would be higher. Looking at the survey data, 18.2 percent of D & L Trail-South users had a “meal at restaurant along the trail,” while only 10.8 percent of Schuylkill River Trail-Metro users and only 9.4 percent of Three Rivers Heritage Trail users had a meal at a restaurant along those trails. An additional 14.9 percent of Three Rivers Heritage Trail users had a meal away from the trail; this was a question we did not ask in either of the comparative studies.

Average \$ spending per person on “soft goods”



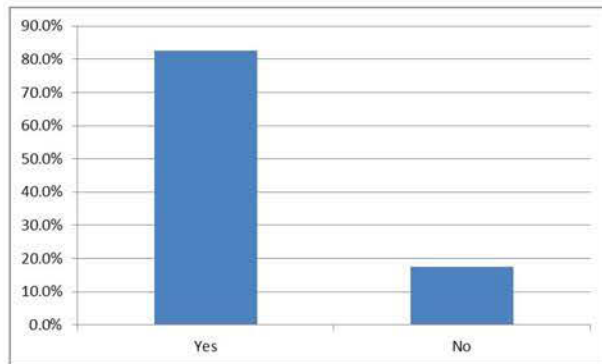
Comparison with other trails



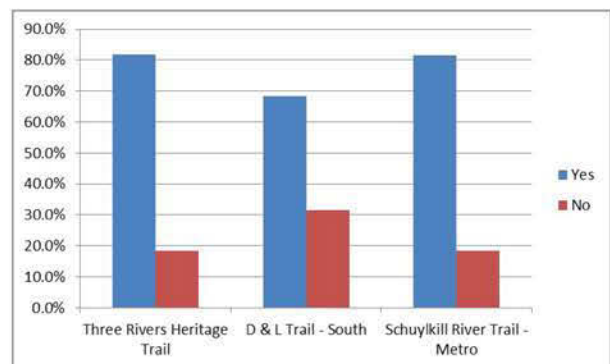


The percentage of trail users purchasing hard goods, also referred to as durable goods, is nearly identical for the Three Rivers Heritage Trail and the Schuylkill River Trail-Metro segment. It is about 10 percent less for users of the D & L Trail-South. Looking back through some of our previous studies, in all cases, the percentage purchasing some sort of durable goods in connection with trail use is consistently above 80 percent.

Percentage of people who purchased "hard goods"



Comparison with other trails

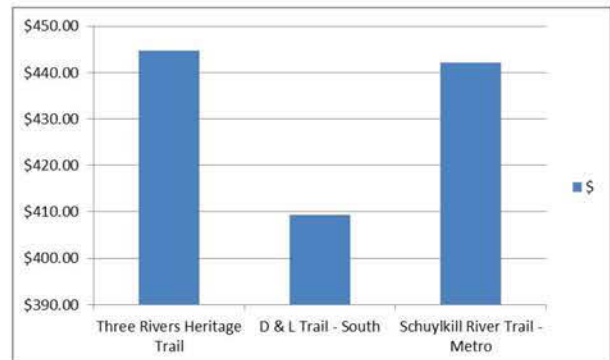


The average spending on hard goods on all three trails is fairly consistent. The difference between the high and low points is less than \$50. This is further evidence that building a trail is good for business!

Average \$ spending per person on "hard goods"



Comparison with other trails



Trail Users Estimate

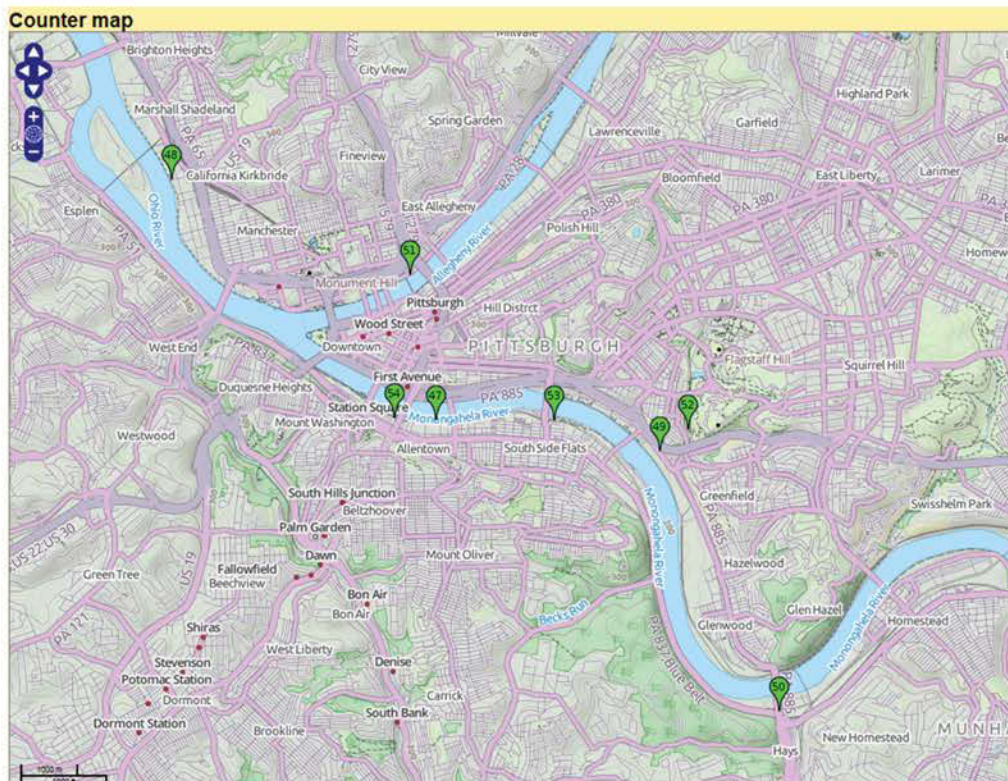
During the course of this study, passive infrared counters were placed along the Three Rivers Heritage Trail at the seven locations identified below. The counters collect data on the number of trail users passing the counter by detecting each user’s “heat signature.”

In order to develop an annual user estimate for the Three Rivers Heritage Trail, the data collected between June and October 2014 was extrapolated to a 12-month estimate using a “User Visitation Model” developed by Rails-to-Trails Conservancy. This model examines data collected using electronic counters from 62 different locations on rail-trails across the United States where trail usage is impacted by seasonal changes, US Climate Zones 4, 5 and 6. The 62 counter locations recorded over 5 million counts for inclusion in the model.

The counters were placed along the trails at the following locations:

Counter Locations	Map Key
Keystone 40° 23' 40" N 79° 56' 06" W	50
Southside 40° 25' 52" N 79° 58' 20" W	53
Riverfront Park 40° 25' 52" N 79° 59' 30" W	47
Chateau 40° 27' 41" N 80° 02' 08" W	48

Counter Locations	Map Key
North Shore 40° 26' 58" N 79° 59' 46" W	51
Panther Hollow 40° 25' 48" N 79° 57' 00" W	52
Eliza Furnace 40° 25' 38" N 79° 57' 17" W	49
Station Square 40° 25' 53" N 79° 59' 55" W	54





Adjusted for Passing Multiple Counters: This adjustment is the percentage of trail users who would pass multiple counters. This adjustment is determined from the survey data, based upon the distance the counters are apart from each other, the amount of time users are on the trail and their mode of travel.

Adjusted for Missing Counts: Based upon recent research conducted by Toole Design Group and observations made by RTC at counter locations, the passive infrared counters miss about 13.7 percent of trail users. This usually takes place when two or more individuals are walking or riding side by side, and the counter only “sees” one heat signature.

Adjusted for Out and Back Trips: One of the questions on the Three Rivers Heritage Trail survey asked respondents if their start and end locations were the same. More than 87 percent of respondents indicated that this was the case, so the user count needs to be adjusted to reflect two counts for each trip.

Trail Counter Location	Actual Count	Estimated 12-Month Count*	Adjusted for Passing Multiple Counters	Adjusted for Missing Counts	Adjusted for Out and Back Trips
Keystone	13,545	122,600	122,600	139,396	78,480
Southside Riverfront Park	17,751	160,700	125,547	142,747	80,366
South 4th Street	18,054	167,400	130,843	148,768	83,757
Chateau	10,349	94,000	69,130	78,601	44,252
North Shore	41,510	376,000	277,280	315,267	177,496
Panther Hollow	6,473	59,000	43,239	49,162	27,678
Eliza Furnace	17,007	154,000	113,604	129,168	72,721
Station Square	12,838	116,200	90,798	103,238	58,123
Total Estimated Annual User Visits					622,873**

*Annual estimate developed from actual counter data extrapolated using the RTC User Visitation Model

**The trail counter at Millvale Riverfront Park was stolen during the course of the summer, and no data was available for this location. From the survey, this access point was the most frequently cited, representing 23 percent of our sample. Counters at Southside Riverfront Park (south of 18th Street) and Duck Hollow also went missing over the summer. A conservative estimate would be an additional 200,000 user visits.

Economic Impact



The economic impact of the Three Rivers Heritage Trail comprises several elements. From the survey, the percentage of respondents who purchased durable goods, or “hard goods” (bikes, bike equipment, running shoes, strollers, walking shoes, etc.), was determined. Many respondents also indicated how much they spent on these items during the course of the past 12 months.

Has your use of the trail influenced your purchase of: (Select all that apply.) (n=389)

Bike	21.9%
Bike supplies	23.4%
Auto accessories	5.3%
Stroller	1.4%
Inline skates	0.6%
Footwear	14.3%
Clothing	15.7%
Nothing	17.4%

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

Average hard goods purchased	\$444.77
------------------------------	----------

The survey also determined how much trail users spent on consumable goods, or “soft goods” (water, soda, snacks, ice cream, lunch, etc.), while using the trail. The percentage of respondents who made these types of purchases is an important number for determining the local economic impact.

In conjunction with your most recent trip on the trail, did you purchase any of the following? (Select all that apply.) (n=313)

Beverages	20.5%
Candy/snacks	6.0%
Sandwiches	2.9%
Ice cream	2.4%
Meals at a restaurant along the trail	10.3%
Meals at a restaurant a few blocks from the trail	14.5%
Bike rental	0.5%
Other	0.3%
None of these	42.5%

Approximately how much did you spend, per person, on the items above on your most recent visit?

Average soft goods purchased	\$16.53
------------------------------	---------

The third factor included in the estimate of economic impact is overnight lodging.

The number of overnight stays and the average amount paid per room are determined directly from the survey responses.

Did your visit to the trail involve an overnight stay in one of the following types of accommodations? (Select one response.) (n=14)

Motel/hotel	50.0%
Bed and breakfast	12.5%
Friend's or relative's home	31.2%
Campground	6.3%
Other	0.0%

How many nights did you stay?

Average 2.5

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

Average \$114.38





Economic Impact Analysis

The following chart takes the data collected from the three categories of durable goods, consumable goods and lodging and extrapolates the purchases on an annual basis. While durable goods purchases may not be made on an annual basis, they represent a significant expenditure figure. The purchase of consumable goods does represent an annual expenditure, because these purchases are made on a pre-trip basis by trail users. Likewise, spending on overnight accommodations can be expected to occur year after year.

Annual User Estimate						622,873
	% Usage	Avg. \$	Avg. Life	Avg. # of Trips	Avg. # of Nights	Est. \$
Durable Goods*	82.6%	\$444.77	6 years	17.1		\$1,842,288
Consumable Goods	57.5%	\$16.53				\$5,866,660
Accommodations	0.3%	\$114.38			2.7	\$ 577,078
Total estimated annual economic impact						\$8,286,026

Durable Goods = (% Usage x (Avg. \$/Avg. Life) x (# Users/Avg. # of Trips))**

Consumable Goods = (% Usage x Avg. \$ x # Users)

Overnight Accommodations = (% Usage x Avg. \$ x Avg. # of Nights x # Users)

*Major durable goods purchases, such as a bike, may be implemented every five or 10 years. Running shoes may be replaced every couple of months. For the purposes of this analysis, we have assumed the average life of a durable good to be six years. To get to a figure that is usable on an annual user visit basis, the durable goods need to be broken down to a per-trip amount.

**This calculation takes the average spending on a durable good and breaks it down to a per-trip depreciation amount.

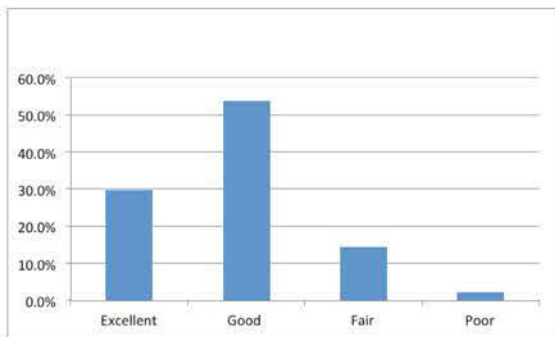
Trail Maintenance, Security and Cleanliness

One of the most important aspects of the trail user survey is that it allows a trail's management organizations to receive feedback, both positive and negative, from users. The 2014 Three Rivers Heritage Trail User Survey can serve as a benchmark against which future maintenance, security and cleanliness issues can be compared.

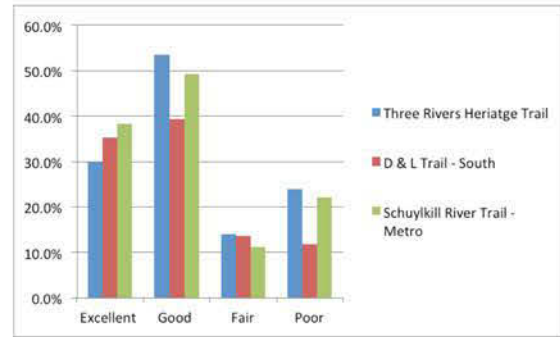
This series of questions was also posed in the 2009 study on the Schuylkill River Trail and the study of the D & L Trail in 2012. As with previous comparisons in this report, we used the "metro" breakout from the Schuylkill River Trail study and the "southern" data breakout from the D & L Trail study for comparison with the urban Three Rivers Heritage Trail.

According to the survey results, the Three Rivers Heritage Trail is well maintained, with 83.6 percent of respondents rating the maintenance as excellent or good. To determine why 24 percent of survey respondents rated the maintenance as poor, we looked at the comments section of the survey. The comment that appeared most frequently was: "Trail has become very overgrown; needs a lot of trimming to be done to prevent narrowing of trail."

Opinion of trail maintenance



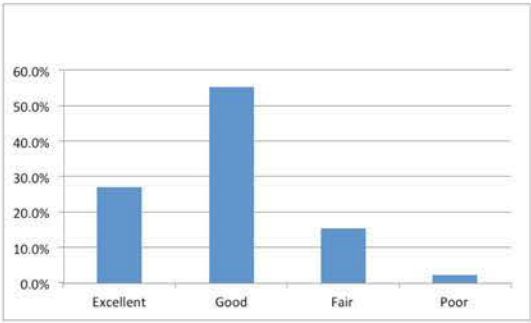
Comparison with other trails



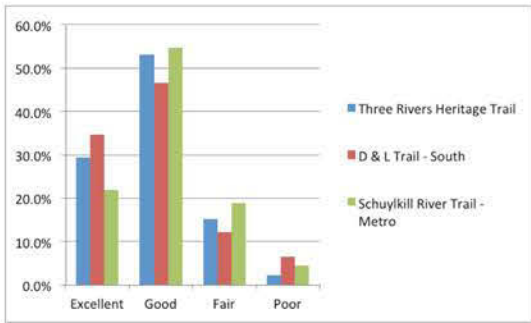


The opinion of trail users regarding their safety and security is influenced by a number of factors, including the presence of other trail users, lines of sight, familiarity with the trail, availability of “escape routes” and the presence of law enforcement (either rangers or police). Compared with the D & L Trail-South and the Schuylkill River Trail-Metro, users of the Three Rivers Heritage Trail feel somewhat more safe and secure, with only 2.2 percent of respondents indicating that this aspect of the trail was poor.

Opinion of trail safety and security

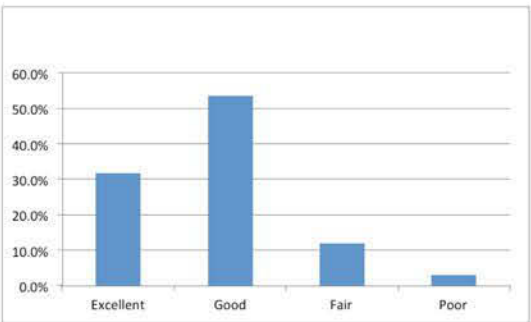


Comparison with other trails

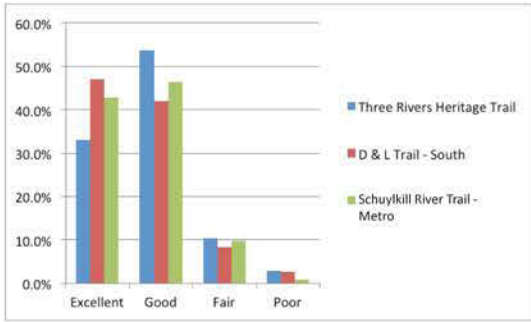


Keeping a trail clean of litter and debris in an urban environment is an ongoing maintenance issue. Much of the litter is not the result of trail users, but the result of the areas surrounding the trail. This is especially true along specific sections of the Three Rivers Heritage Trail that run close to riverbanks and/or hillsides with highways, industrial sites and residential neighborhoods.

Opinion of trail cleanliness



Comparison with other trails



Qualitative Values of the Three Rivers Heritage Trail

The trails are a large reason I bought my house (in biking distance to trails) and why I didn't move away from Pittsburgh.

Recently biked the GAP, from Ohiopyle to Pittsburgh. I was proud to be a Pittsburgher.

Love it. Just love it. It has gotten me downtown more and increased my appreciation of Pittsburgh.

I would like to see some additional port-o-johns, if possible. This is a great trail system, and I appreciate the hard work that goes into it.

I love the trails. I've lived in the South Side a long time, and I remember no one by me being on the trail. I knew it would change, and I has. It is used by a great variety of people, as it should be for everyone. It definitely adds to my quality of life. The new trees planted in the South Side Riverfront Park have exceeded anything I could have imagined. 100+ trees. Awesome.

These trails are great; nice that they are clean but not fussed up with too much landscaping and somewhat natural. Not nuts about asphalt on the trail, but understand maintenance needs. Pittsburgh is a better community with these trails!! Thanks.

I love the asphalt paved trails, easy for bikes and running and inline skating.

I used to be an avid Montour Trail rider, but lately drive the 45 minutes into town to ride these trail. More scenic, easier riding.

I frequently use the trail for jogging. I occasionally bike by myself or with others. I'd suggest adding additional signs for bikers to respect walkers, runners. There have been incidents where bikers have ridden very fast past runners almost hitting them. A good sign would be: Bikers please share the trail with others. This is NOT a bike only trail... it is a multi-use trail.

Love using the trails and would be willing to pay a small amount. Clearing snow during the winter months would be awesome!

I am concerned about safety on the trail—I think there needs to be better lighting and possibly an increase of public safety presence in the evening hours (8 to 10 pm). I prefer less trees, and definitely DO NOT want a canopy of trees, as the view of the river is part of the attractiveness.

More trees would be great. I head to the trails to look for a shady route to run in the summer.

Love the trail. I just wish there were more bathrooms than random construction portapotties. Also water fountains.



Lovely trail, great for out town visitors! Enjoyed our visit from Vancouver BC Canada.

As a result of having the trails I have lost 50 lbs. Thank you.

More drinking fountains and Port-A-Potties would be a welcome addition along the trail.

We biked Pittsburgh to DC last year! Fantastic!!

Need way more water fountains, particularly on the North Shore Trail. I frequently run the entire length of it, & only having a fountain in Millvale is unacceptable. I almost passed out, after having drank all of the water from my handheld on the wayback up before the casino. More potties too please!!

Love the trails. A huge amenity for city dwellers.

Why is the trail along the Strip District closed? When will it be available again?

As an emergency responder, I notice a lack of access to emergency services. Many runners and riders I have seen exercise without communication devices, if they have or witness a medical or other emergency on the trail there is no easy way to contact 9-1-1.

Our section of the Lawrenceville Trail does not connect to the rest of the trail system. If it did usage could be much greater.

The trail is always well kept and users are respectful. I have passed trail volunteers and they always seem upbeat and happy to assist others in any way.

Planting native fruit producing trees would increase bird activity.

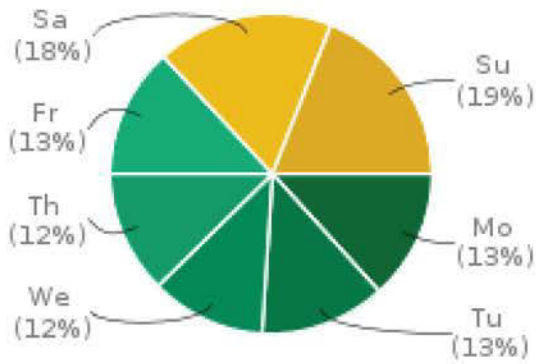
We love Pittsburgh's trails and want more of them.

Appendix A — Trail Counter Data

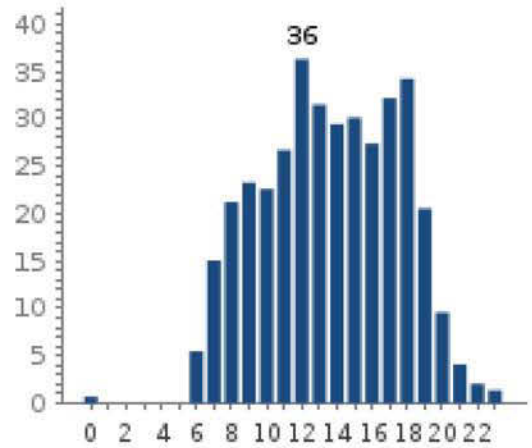




4th Street

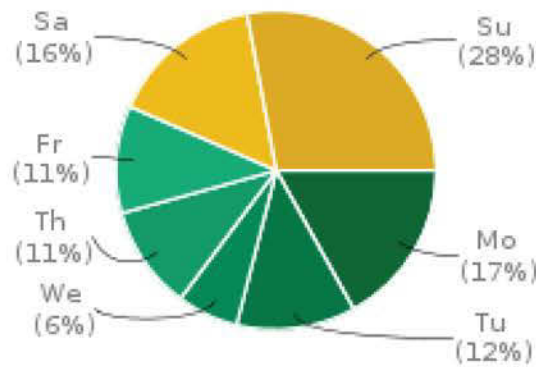


Daily

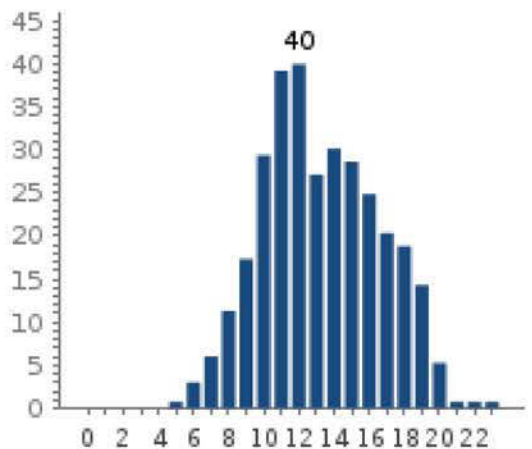


Hourly

Chateau



Daily



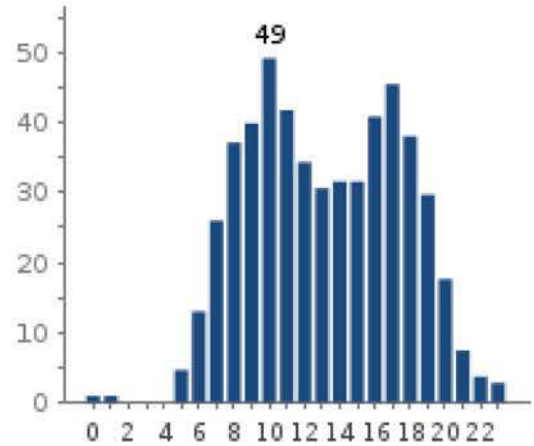
Hourly



Eliza Furnace

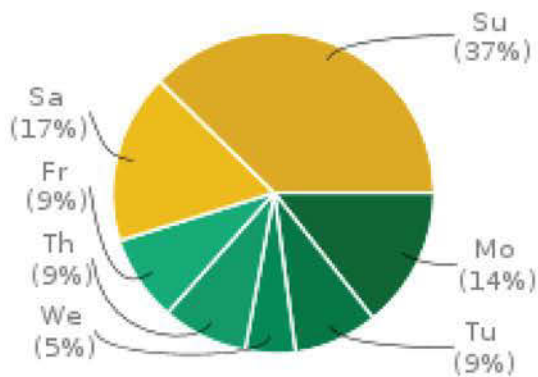


Daily

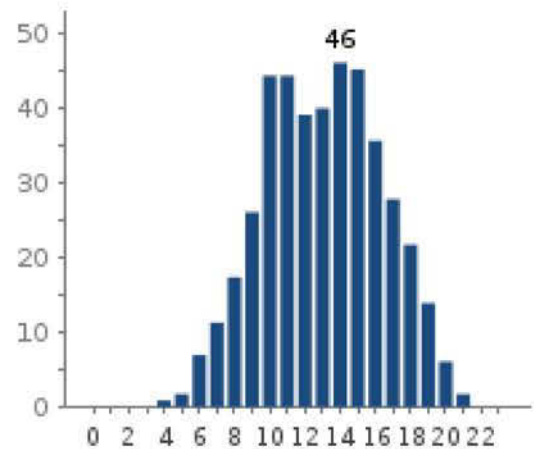


Hourly

Keystone



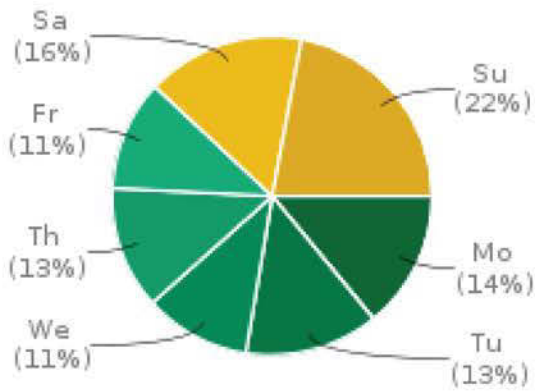
Daily



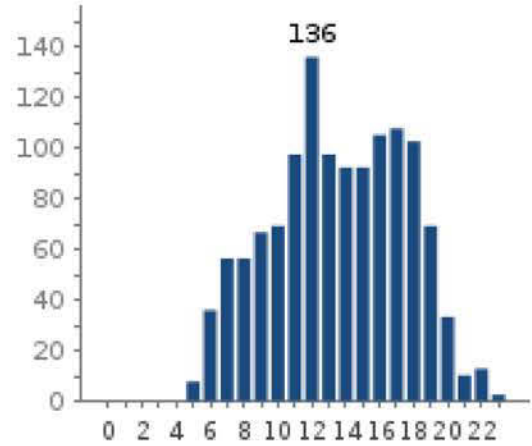
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North Shore

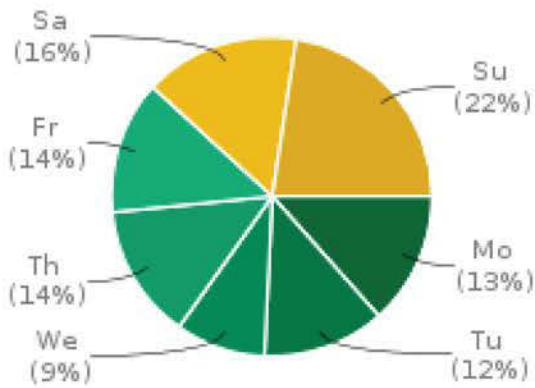


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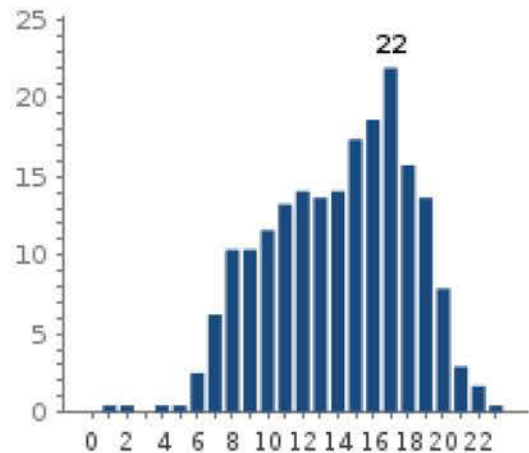


Hourly

Panther Hollow



Daily



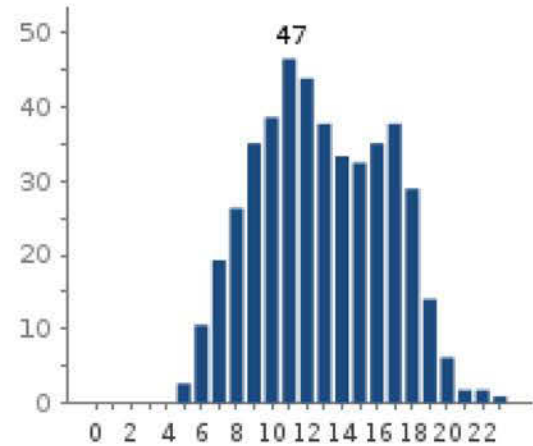
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Southside Riverfront Park

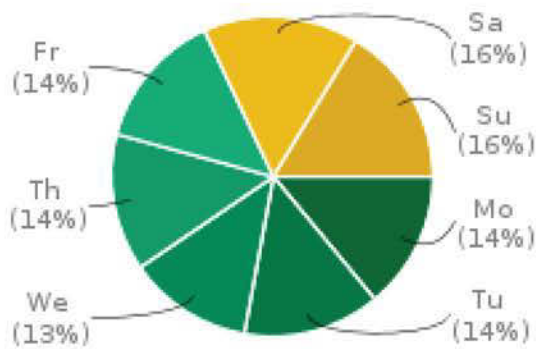


Daily

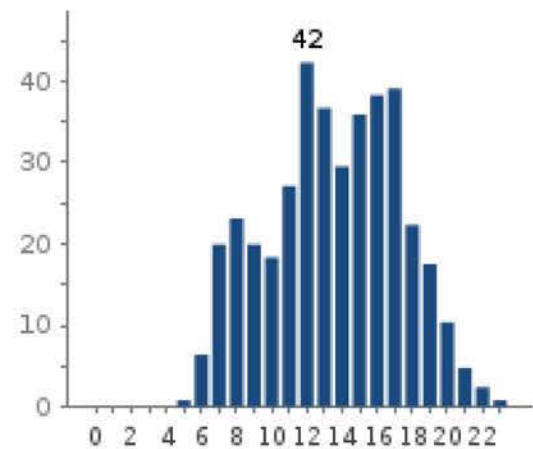


Hourly

Station Square



Daily



Hourly



rails·to·trails
conservancy

Northeast Regional Office
2133 Market St., Suite 222
Camp Hill, PA 17011
tel 717.238.1717
fax 717.238.7566

National Headquarters
2121 Ward Court, NW, 5th Floor
Washington, DC 20037
tel 202.331.9696
fax 202.223.9257

railstotrails.org
TrailLink.com