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Schuylkill River Trail 2009 User Survey and Economic Impact Analysis

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Schuylkill River Trail 2009 User Survey and Economic Impact Analysis

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Executive Summary



The Schuylkill River Trail is a multi-use pathway that generally follows the course of the Schuylkill River from Pottsville to Philadelphia, Pa. The trail consists of sections of rail-trail and canal towpath, as well as small connectors that utilize shared road. The trail is a focal point of the Schuylkill River Heritage Area and has been constructed, as funding permits, by many municipalities and organizations that lie within the watershed. There are currently three separate segments totaling 56 miles of pathway that provide a substantive trail experience and are heavily used.

Beginning in May 2007, the Schuylkill River Heritage Area placed infrared counters at nine trailhead locations to measure movement and activity on the trail. Data from these counters was collected over the course of an entire year.

This study utilized a survey methodology previously tested on four other Pennsylvania trails and documented in Rails-to-Trails Conservancy's (RTC) "Trail User Survey Workbook" (www.railstotrails.org/resources/documents/resource_docs/UserSurveyMethodology.pdf).

It was designed to gather data on user characteristics, needs, trail maintenance strengths and weaknesses, and to determine the economic impact of the Schuylkill River Trail.

Self-selecting survey forms were available at 21 trailheads along the Schuylkill River Trail over a period of eight months. In all, 1,223 completed survey forms are included in this study.

The majority of the survey respondents reside in Berks County (33.6 percent), with Montgomery County (24.0 percent) and Philadelphia County (21.1 percent) representing the next highest group

of respondents most likely to use the Schuylkill River Trail. Eleven percent of the respondents reside in Chester County, and another 4.2 percent are from Delaware County. Fewer than two percent of the respondents were from Schuylkill County (1.6 percent). All other Pennsylvania counties represent another 2.5 percent (primarily counties in the southeast region of the state), and the out-of-state users are represented by another 1.8 percent of the total survey respondents (primarily from New Jersey).

The majority (55.8 percent) of survey respondents drove to the trail in an automobile. The next most common method of transportation was bicycling (23.6 percent), followed by walking (14.7 percent). A little more than one percent indicated they used mass transit to get to the trail.

Nearly half of the survey respondents (45.9 percent) indicated they use the Schuylkill River Trail on at least a weekly basis. Nearly a quarter (23.3 percent) indicated they used the trail three to five times per week. Another 16.2 percent indicated they use the trail several times each month.

The age profile of the Schuylkill River Trail study respondents is typical of that found from other trail studies across Pennsylvania and nationally. The majority (64.6 percent) of the survey respondents indicated they were 46 years of age or older. Children under the age of 15 accompanied trail user respondents just 12.9 percent of the time, and of those, the majority were children between the ages of 10 and 15 (53.4 percent). The ratio of men (62.1 percent) to women (37.8 percent) is slightly higher than we have seen in other trail user surveys in Pennsylvania.

Bicycling (44.3 percent) is the predominant activity on the Schuylkill River Trail. Walkers account for



the next highest user group, and jogging accounts for another 12.3 percent. Dog walking accounts for close to 10 percent of the trail activity. The type of activity also relates to the amount of time that survey respondents indicated they spent on the Schuylkill River Trail. The largest percentage of respondents (49.7) indicated they spent between one and two hours on the trail, which would indicate they are using one segment of the trail rather than the entire length. Slightly more than 20 percent indicated they spent more than two hours on the trail; 26.8 percent spent between 30 minutes to one hour engaged in a trail activity.

Respondents did not indicate a clear preference for morning or afternoons on the trail. Both times averaged a 31-percent response, with 26.7 percent stating anytime was the right time to be on the trail. For their frequency of use, most respondents indicated they were on the trail on both weekdays and weekends (58.8 percent).

Health and exercise were the primary reasons (57.8 percent) given for using the trail, while 27 percent indicated recreation; 7.4 percent chose fitness training, and 4.9 percent listed commuting.

The respondents' knowledge of the trail came primarily from "word of mouth" (37.3 percent). Roadside signage and "driving by" were cited by nearly a quarter of the respondents (24.4 percent). Another 9.4 percent cited newspaper media, followed by other websites at 6.6 percent. Ten percent of the respondents stated they knew about the trail because they live or work in the vicinity.

In terms of economic impact, 77 percent of the 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, bike supplies and footwear that resulted in an average expenditure of \$406.31.

Fifty percent of the survey respondents indicated they had purchased "soft goods" (water, soda, candy, ice cream, lunches, etc.) in conjunction with their most recent trail visit. Of those who made a purchase, the average amount per person per trip was \$9.07.

Overnight accommodations do not play a significant role in the economic impact of the Schuylkill River Trail. Not quite three percent of the survey respondents indicated that an overnight stay was part of their trail experience, and the majority of stays (61 percent) were at a friend's house.

Nine out of 10 respondents stated that maintenance of the trail was good to excellent; 80 percent felt that safety and security along the trail was good to excellent; and 89 percent 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 Schuylkill River Trail, more than 66 percent responded that they would.

Of the 23 trailhead locations listed in the survey, the seven places that were checked as being used the most by the survey respondents were, in descending order, Betzwood, Pottstown Riverfront Park, Brentwood, Gibraltar, Perkiomen Trail, Manayunk, Schuylkill Banks and Pawlings Road.

The survey respondents were asked if they had been opposed to the trail when it was first proposed, and if their opinion had changed. Of the total, 37 percent indicated their opinion had changed. Of those survey respondents, 92 percent indicated they feel more favorable toward the trail than they had previously.

Historical Perspective



Fairmont Park and the trails along the historical riverfront at Kelly Drive were designed and created for horse-drawn traffic in the early 19th century. The park itself was officially founded in 1855. The oldest developed part of the trail was built on remnants of the canal towpath used during the 19th century to haul barges filled with coal and limestone cut from nearby quarries. Railroads later filled in portions of the canals, laying rails over top of the towpaths and canal beds. In combination, these three elements—carriage pathways, canal towpaths and railroad corridors—enabled development of the Schuylkill River Trail.

More than 100 years later, during the planning phases in the late 1970s and into the mid-1980s, the trail was called the Philadelphia to Valley Forge Bikeway, or sometimes just the Valley Forge Bikeway. The first phase of this trail, running along the Schuylkill River from Whitemarsh to downtown Philadelphia, had been built in 1979. In 1980

Montgomery County (adjacent to Philadelphia) added a 4.3-mile section of trail. And in 1985, the Montgomery County Planning Commission, in partnership with the Sierra Club of Eastern Pennsylvania, applied for and received funds to build a “bikeway demonstration project” that would connect downtown Philadelphia to Valley Forge National Historic Park.

By 1986, easements were obtained from Pennsylvania Electric Company (PECO) for use of the former Conrail railroad right-of-way along the river from Conshohocken west to Valley Forge.

There are now seven separate sections of trail open along the planned 125-mile route. Of these, three sections are complete, well-developed and heavily used. Another four smaller segments are built and open but not yet connected. Plans are in place to connect all the sections into one seamless route.



Management



The Schuylkill River Trail runs through Philadelphia, Montgomery, Chester, Berks and Schuylkill counties, tracing the course of the Schuylkill River for most of its length. Current open and planned sections of trail cross through 35 different municipalities. When completed, the total mileage is anticipated to be just more than 125 miles of multi-use trail. As of October 2009, 56 miles were open, 22.91 miles are in design or under construction, and another 46 miles are planned for future development.

The nonprofit Schuylkill River Greenway Association manages the Schuylkill River National Heritage Area. They formed the Schuylkill River Trail Council (the Council) for the purpose of facilitating the exchange of information regarding development of the various trail segments and to determine how to improve the presentation of the Schuylkill River Trail as a unified regional trail system. The Council was also tasked with defining and using consistent management standards along the currently segmented trail. The Council consists of the following organizations:

Schuylkill River Development Corporation, Fairmount Park, East Falls Development Corporation, Manayunk Development Corporation, Montgomery County, Valley Forge National Historical Park, Chester County, Schuylkill River National and State Heritage Area, Berks County Planning Department, Borough of Hamburg, Schuylkill County and the Pennsylvania Department of Conservation and Natural Resources.

The Council members represent the following Schuylkill River Trail pieces:

City of Philadelphia — A little more than nine miles of Schuylkill River Trail pass within the city of Philadelphia. All of this section is currently managed by the Fairmount Park Commission, which

takes care of all of the management and maintenance responsibilities.

Montgomery County — Montgomery County park staff set standards and handle all maintenance for its sections of trail. Paid park rangers manage security, and trail “rules and regulations” are posted at all trailhead kiosks.

Two miles of the Schuylkill River Trail pass through the Valley Forge National Historical Park. The National Park Service manages the mowing and tree pruning, and Montgomery County maintains the trail surface.

Chester County — The Chester County segments of the Schuylkill River Trail are still under development. Maintenance is divided between four regional park offices, including some use of volunteers for light maintenance. Trails are patrolled by park rangers and part-time park technicians.

Berks County — There are 14 miles of Schuylkill River Trail from Reading to Pottstown. The bulk of the trail miles are owned by the Schuylkill River Greenway Association, managers of the National Heritage Area. Other owners include Reading Area Community College and the city of Reading. Individual property owners do not own or participate in trail operations. Most of the maintenance is carried out by Trail Keeper volunteers.

Schuylkill County — Parts of the Bartram Trail section that are within Schuylkill County are owned by the county but leased to the Schuylkill River Greenway Association for trail operation and management. Trail Keeper volunteers manage this and two additional trail segments to the north in concert with mowing provided by three surrounding municipalities.



Courtesy Schuylkill River Heritage Area

Location Analysis



The Schuylkill River Trail is the spine of the Schuylkill River National Heritage and State Heritage Area, which highlight the rich industrial and cultural heritage of the region surrounding the Schuylkill River watershed. For much of its length, the trail runs adjacent to the Schuylkill River, traversing a combination of East Coast cityscapes, high-volume “spaghetti” highways, suburban malls and residential areas, as well as a distinct rural environment. In total, the trail passes through five counties and 35 municipalities.

The largest continuous open section of trail follows the banks of the Schuylkill River from downtown Philadelphia past the fields of Valley Forge National Historical Park to the trailhead at Port Providence (25.5 miles). The next-largest segment is called the Thun Trail section and runs from Pottstown Riverfront Park to Reading, Pa. (20.1 miles). A third section of developed trail is the John B. Bartram section, running 7.3 miles from Hamburg, Pa., to the Silver Creek Trailhead in North Manheim Township. Other short sections, most less than one mile in length, have been built and developed between these three main sections as funds became available. Plans and a current timetable are in place for constructing trail that will connect all of the segments into one seamless route.

Paved trail connects the important social and historical sections of Philadelphia: Schuylkill Banks

at South Street, the Museum of Art and Boathouse Row along Kelly Drive, Main Street in Manayunk, and a hub of restaurant and boutique retail with the open space of Valley Forge National Historical Park.

An on-road bicycle trail will be installed from Reading, Pa., north to Hamburg, Pa., using Berks County’s Union Canal Trail and roads adjacent to the Schuylkill River. In northern Berks County, the off-road section of the Schuylkill River Trail begins and travels 1.3 miles from Hamburg to Port Clinton, where the trail enters Schuylkill County.

Another important local trail, the 19-mile Perkiomen Trail, connects to the Schuylkill River Trail at Oaks, Pa., just north of the Betzwood entrance to Valley Forge National Historic Park, providing more than 44 miles of seamless-multi-use trail between Philadelphia and the end of the Perkiomen Trail in Green Lane, Pa.

Signage at 20 major trailheads provides a large trail map. Information “blades” along the length of the trail provide a help number and a list of nearby amenities, and they mark the distance between trailheads and towns. A trail map brochure is also available at the trailhead kiosks. As with most multi-use trails, the grade of the trail varies little along its length; however, connecting pathways have been designed with sloping twists and turns in order to navigate through developed areas.

Schuylkill River Trail/Road Mileage

	Philadelphia Art Museum	Manayunk	Conshohocken	Norristown	Valley Forge	Phoenixville	Spring City	Pottstown	Douglassville	Birdsboro	Gibraltar	Reading	Leesport	Hamburg	Port Clinton	Auburn	Landingville	Schuylkill Haven
Manayunk	6																	
Conshohocken	13	6																
Norristown	16.5	9.5	3.5															
Valley Forge	20.5	13.5	7.5	4.0														
Phoenixville	26.5	19.5	13.5	10	6													
Spring City	30.5	23.5	17.5	14	10	4												
Pottstown	40	33	27	23	19.5	13.5	9.5											
Douglassville	44	37	31	27.5	23.5	17.5	13.5	4										
Birdsboro	49	42	36	32.5	28.5	22.5	18.5	9	5									
Gibraltar	52.5	45.5	39.5	36	32	26	22	12.5	8.5	3.5								
Reading	58.5	51.5	45.5	42	38	32	28	18.5	14.5	9.5	6							
Leesport	70.5	63.5	57.5	54	50	44	40	30.5	26.5	21.5	18	12						
Hamburg	79.5	72.5	66.5	63	59	53	49	39.5	35.5	30.5	27	21	9					
Port Clinton	82.5	75.5	69.5	66	62	56	52	42.5	38.5	33.5	30	24	12	3				
Auburn	87.5	80.5	74.5	71	67	61	57	47.5	43	38.5	35	29	91.5	8	5			
Landingville	90.5	83.5	77.7	74	70	64	60	50.5	46.5	41.5	38	32	20	11	8	3		
Schuylkill Haven	93.5	86.5	80.5	77	73	67	63	53.5	49.5	44.5	41	35	23	14	11	6	3	
Pottsville	98.5	91.5	85.5	82	78	72	68	58.5	54.5	49.5	46	40	28	19	16	11	8	5

Courtesy of Schuylkill River Heritage Area



Schuylkill River Trail Area Demographics

The Schuylkill River Trail is located in a five-county area west and north of the Philadelphia metropolitan region. The most populous municipalities along the trail are Philadelphia, Conshohocken, Norristown, Phoenixville, Pottstown and Reading.

Schuylkill River Trail Region Demographic Profile* (by county)					
	Philadelphia	Montgomery	Chester	Berks	Schuylkill
Population (2008 est.)	1,447,395	778,048	491,489	403,595	147,254
Median Household Income (2007 est.)	\$35,431	\$73,985	\$82,979	\$52,620	\$40,655
Households (2000 Census)	590,071	286,098	157,905	141,570	60,530
Persons per household (2000 Census)	2.48	2.54	2.65	2.55	2.36
Persons per square mile (2000 Census)	9,999.9	1,553.0	573.4	435.0	193.2
Schuylkill River Trail Region Population Growth** (projected by county)					
	Philadelphia	Montgomery	Chester	Berks	Schuylkill
2000	1,517,550	750,097	433,501	373,638	150,336
2010	1,450,356	815,168	520,721	412,708	147,227
2020	1,424,801	857,209	605,799	451,816	146,872
2030	1,411,405	890,682	693,665	493,080	146,567

* SOURCE: U.S. CENSUS QUICK FACTS ** SOURCE: U.S. CENSUS AND PA BULLETIN 38 PA.B. 1415

Qualitative Values of the Schuylkill River Trail

The best way to evaluate the qualitative values of the Schuylkill River Trail is to let trail users describe how they feel about it. The following are just a small sampling of comments taken verbatim from the 2009 Schuylkill River Trail User Survey forms:

“I moved here in August ‘08. I’m about a 1/4 mile from Port Providence access. The trail was a big influence on choosing this home!”

“The trail is excellent and my wife and I will use it more often. We may eventually buy bikes to ride it.”

“Add sidetrack for runners; widen paths (too many close calls with cyclists).”

“The opportunity to ride your bike relatively danger free is impossible these days so our family is thankful to have at least one trail we love to bike on.”

“Trail is great—Horses are a problem, owners not cleaning up them. Severe hoof marks make trail unbearably bumpy making it unpleasant to ride, jog, walk. Need alternative for horses.”

“Benches along trail route would be nice, more signs about cleaning up after dogs, sides of trail had much dog poop, bags for disposal of dog poop might encourage clean-up, otherwise we had an enjoyable time.”

“I appreciate the healthy alternative this trail provides. Thank you.”

“Waste baskets are needed & a few benches for elderly people.”

“Some parts of trail could use more lighting & maintenance, signs are lacking at end of Manayunk where meets up with paved trail to Spring Mill.”

“Some sections need to be repaved/ smoothed out.”

“Would like to see “single file signs” —too many bikers ride in rows of 2–3.”

“Can’t wait for Pottstown-Phila connection to be opened up.”

“Lots of horse poop on trail, but it’s not a big deal, love the trails and can’t wait until it goes all the way to Pottsville!!”

“Thank you very much for building & maintaining it. It is a wonderful addition to our county.”

“More water fountains would be great and parking esp. for weekdays.”

2009 Survey Results



Question 1

What is your ZIP Code?

33.6%	Berks County, Pa.
24.0%	Montgomery County, Pa.
21.1%	Philadelphia County, Pa.
11.0%	Chester County, Pa.
4.2%	Delaware County, Pa.
1.6%	Schuylkill County, Pa.
2.5%	All other Pennsylvania Counties
1.8%	All other states

Question 2

How did you get to the trail?

55.8%	Drive
23.6%	Bike
14.7%	Walk
4.7%	Run/jog
1.1%	Mass transit
.1%	Horseback

Question 3

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

6.2%	Daily
23.3%	Between 3 and 5 times a week
22.6%	1 or 2 times a week
11.3%	Once a week
16.2%	A couple of times a month
4.4%	Once a month
9.5%	Few times a year
6.3%	First time

Question 4

Please identify your age group.

1.5%	15 and under
4.4%	16 – 25
12.0%	26 – 35
17.5%	36 – 45
26.2%	46 – 55
23.6%	56 – 65
14.8%	66 and older

Question 5

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

12.9%	Yes
87.0%	No

Questions 5a

If yes, please indicate the number of children in each age of the following age groups.

22.3%	Under 5
24.4%	5 – 9
53.4%	10 – 15

Question 6

What is your gender?

62.2%	Male
37.8%	Female

Questions 7

What is your primary activity on the trail?

28.8%	Walking/hiking
44.3%	Biking
12.3%	Jogging/running
0.4%	Horseback riding
9.9%	Walking a pet
4.2%	Other

Question 8

Generally, when do you use the trail?

17.4%	Weekdays
23.7%	Weekends
58.8%	Both

Question 9

What time of the day do you generally use the trail?

31.6%	Morning
30.8%	Afternoon
10.9%	Evening
26.7%	Anytime

Question 10

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

2.9%	Less than 30 minutes
26.8%	30 minutes to 1 hour
49.7%	1 to 2 hours
20.7%	More than 2 hours

Question 11

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

- 27.0% Recreation
- 57.8% Health and exercise
- 4.9% Commuting
- 7.4% Fitness training
- 1.3% Tourism
- 1.5% Other

Question 12

If you commute using any part of the trail, how far is your trip one way?

- 53.0% 1-5 Miles
- 26.4% 6-10 Miles
- 16.5% 11-20 Miles
- 4.1% More than 20 Miles

Note: question #12 responses were not consistent with responses to #11 above. Analysis has determined that the question was badly posed and misinterpreted by the respondents; therefore the data from this question, though included here, is not included in the final data analysis.

Question 13

How did you find out about the trail?

- 37.3% Word of mouth
- 7.9% Roadside signage
- 16.5% Driving past
- 3.8% Trail brochure at kiosk
- 9.4% Newspaper
- 2.8% Bike shop
- 1.0% Convention and Visitors Bureau
- 4.6% Information from Rails-to-Trails Conservancy
- 4.3% Schuylkill River Heritage Area website
- 2.2% Other website
- 10.1% Other (live or work nearby was predominant response)

Question 14

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

- 18.8% Bike
- 24.2% Bike supplies
- 3.4% Auto accessories (bike rack, etc.)
- 14.2% Footwear
- 16.4% Clothing
- 23.0% 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 \$406.31 (n=714).

Question 16

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

- 21.3% Beverages
- 10.0% Candy/snack foods
- 3.4% Sandwiches
- 3.7% Ice cream
- 10.8% Meals at a restaurant along the trail
- 0.9% Other
- 50.0% 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 \$9.07 (n=439).

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=33)?

- 18.2% Motel/hotel
- 3.0% Bed-and-breakfast
- 60.6% Friend or relative's home
- 18.2% Campground
- 0% 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 \$75.92 (n=12).

Question 21

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

40.8%	Excellent
49.0%	Good
9.5%	Fair
0.6%	Poor

Question 22

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

24.5%	Excellent
55.7%	Good
16.1%	Fair
3.7%	Poor

Question 23

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

43.8%	Excellent
44.8%	Good
9.7%	Fair
1.7%	Poor

Question 24

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

65.9%	Yes
34.1%	No

Question 25

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

4.6%	Kernsville Dam
3.9%	Reading Area Community College
7.1%	Brentwood
2.3%	Angstadt Lane
6.6%	Gibraltar
5.3%	Birdsboro
2.1%	Morlatton
2.5%	Grosstown Road
0.4%	Keystone Boulevard
7.2%	Pottstown Riverfront Park
1.7%	Mont Clare
1.6%	Port Providence
6.4%	Perkiomen Trail Junction
5.5%	Pawlings Road
8.0%	Betzwood
2.8%	Norristown
4.2%	Conshohocken
3.0%	Spring Mill
6.0%	Manayunk
2.8%	East Falls
1.0%	East Park Canoe House
3.6%	Lloyd Hall
5.9%	Schuylkill Banks
5.1%	Other (specify)

Question 26

If you live on or near the trail and were opposed to its construction, has your opinion changed now that the trail has been open for a few years? (n=127)

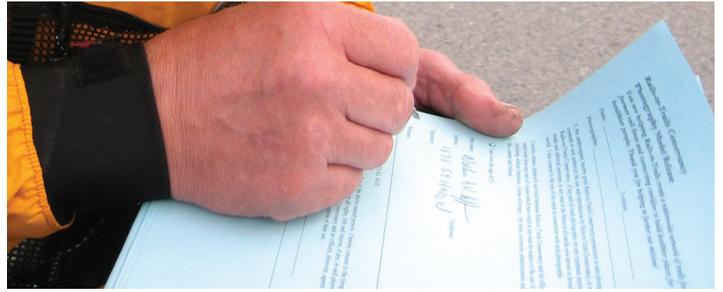
36.7%	Yes
63.3%	No

Question 26a

If yes, how has your opinion changed?

92.0%	Feel more favorable toward the trail
6.4%	Feel somewhat more favorable toward the trail
1.6%	Feel somewhat less favorable toward the trail
0.0%	Feel much less favorable toward the trail

Methodology and Analysis



Utilizing Rails-to-Trails Conservancy's (RTC) "Trail User Survey Workbook" survey form template as a starting point, the survey form was refined with input from the Schuylkill River Heritage Area staff and trail manager. The sample was self-selecting; that is, trail users could pick up survey forms at trailhead locations. The surveys were printed on a single 8.5" x 14" sheet that folded into a postage-paid form addressed to RTC. Surveys were collected from November 2008 through October 2009.

For the purpose of this report, 1,223 completed survey forms were included and analyzed.

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, not the 1,223 usable surveys.

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

The Schuylkill River Trail can be viewed as having two distinct environmental surroundings. The southeastern end of the trail between Valley Forge and the city of Philadelphia is a typical metropolitan environment. Here the trail is close to office and retail businesses, cultural attractions, mass transit

and residential areas. The trail north/northwest of Valley Forge traverses a suburban and rural environment as it travels miles beyond the metropolitan area.

In order to get a clear picture of the trail users' priorities, RTC determined that separating the respondents into users in the metro versus suburban/rural areas would be helpful for the management of the trail.

For the purpose of this analysis, the data from the Schuylkill River Trail User Survey was divided into two groups ("Northern" and "Southern") using trailhead use as the determining factor. Respondents who selected Betzwood and south were placed in the Southern (metro) users group, and respondents who chose trailheads from Pawlings Road and north were placed in the Northern (suburban) group.

The Perkiomen Trail connects seamlessly to the Schuylkill River Trail just outside of Valley Forge National Historical Park near Oaks, Pa. A user survey of the Perkiomen Trail was conducted in 2008. Responses to that survey were with few exceptions very similar to the responses gathered from users on the Schuylkill River Trail.

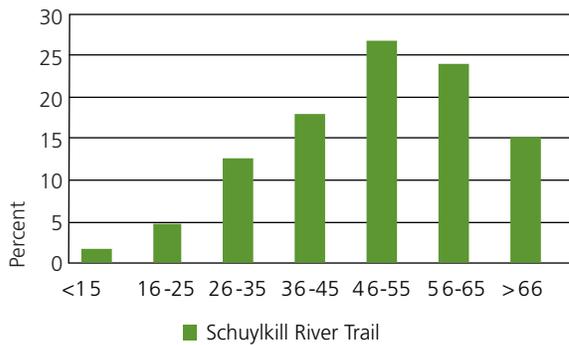
In the analysis, the first graph represents the overall results for all 1,223 survey respondents. The second graph for each analysis topic compares the Northern/Suburban trailhead users with the Southern/Metropolitan trailhead users as described above.

Comparative Analysis

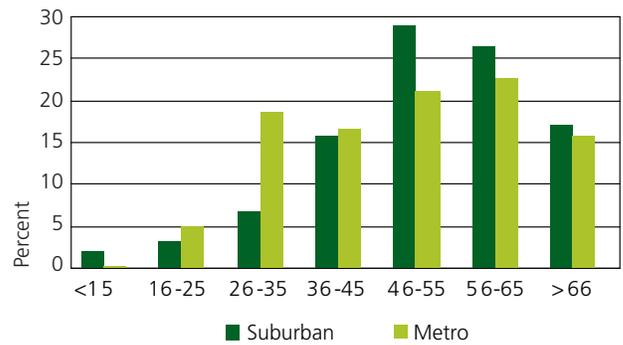
The vast majority of the trail users are over the age of 45. This breakdown is the same majority age of survey respondents found throughout the country.

When we divide the sections of the trail between the Northern/Suburban and Southern/Metropolitan areas of the trail, we see that metro users are considerably younger than users in the area north of Betzwood. The majority of metro trail users are younger than 46, while the majority of suburban users are older than 46. Note the increased numbers from 26 to 35 years of age in the metro group.

What is your age group?



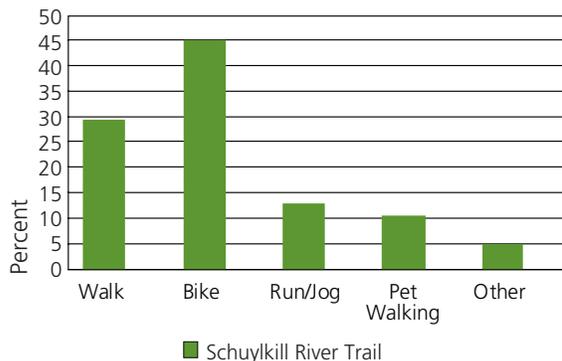
Comparison of trail sections



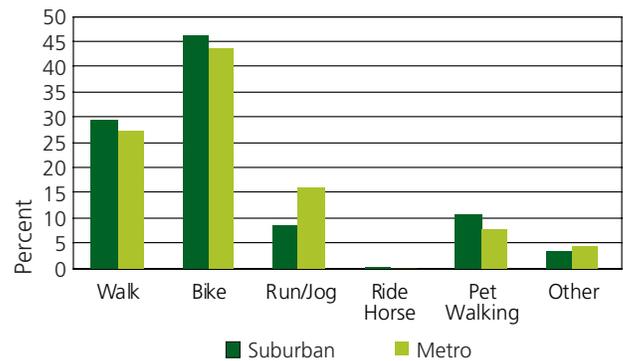
The distribution of primary trail activities indicates the Schuylkill River Trail is used primarily for biking and walking.

The comparison chart indicates the usage pattern of urban versus suburban users of the Schuylkill River Trail is very similar; the major differences are more runners/joggers among the urban users, and more pet walkers among the older suburban users.

What is your primary activity?



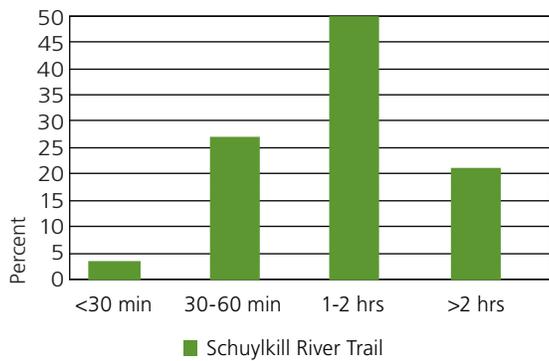
Comparison of trail sections



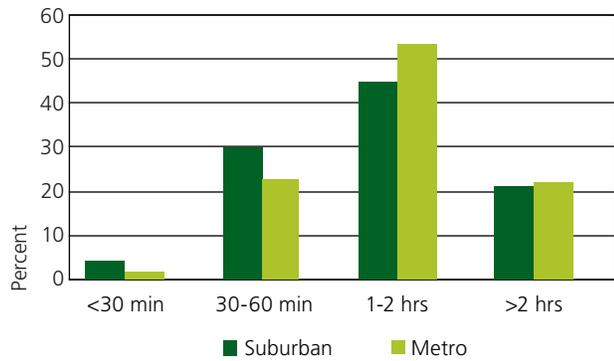


The length of time spent on the trail is somewhat reflective of the types of activity that trail users engage in. The shorter trail experience of the suburban user may represent more walking/pet walking, while the slightly longer use by the metro users may represent more time spent on a run.

How much time did you spend on each trail visit?

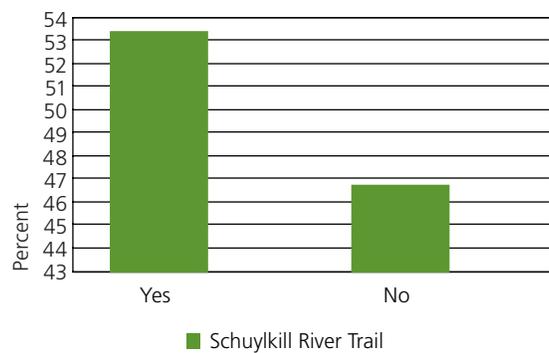


Comparison of trail sections

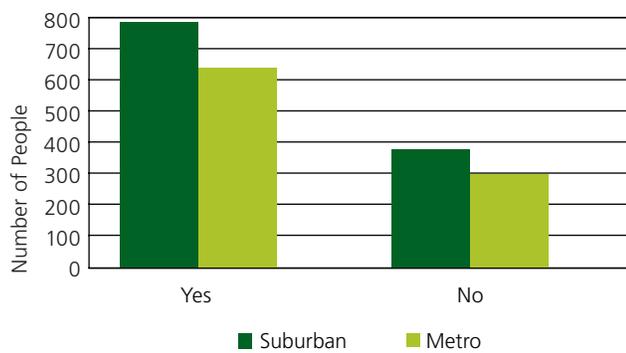


The purchase of soft goods such as water, snacks or a restaurant meal normally is proportional to access to merchants providing those services. Along the suburban sections of the trail, there are small towns that provide these types of trail-user services. There are actually more opportunities as the trail enters the metropolitan area passing Manayunk, Fairmount Park and the Boat House along the banks of the Schuylkill River, yet the metropolitan users are less likely to purchase these types of goods.

Number of people who purchased "soft goods?"



Comparison of trail sections

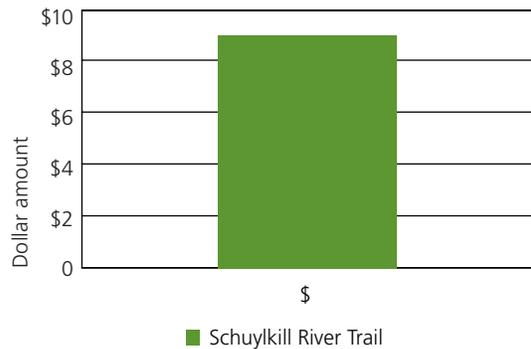




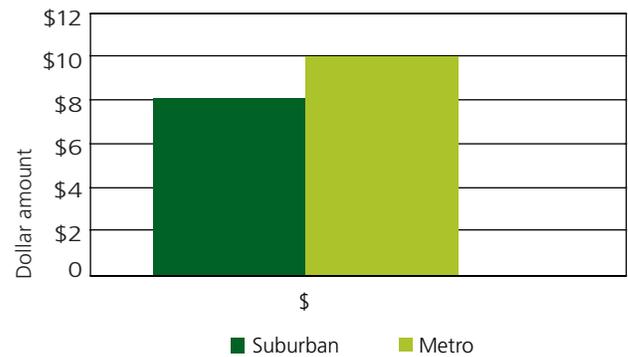
All respondents who indicated they bought something during their trail visit spent an average of \$9.07 per visit to any section of the Schuylkill River Trail.

In the comparison chart, we see that respondents using the suburban trailheads spent an average of \$8.07, while the users at metropolitan trailheads reported an average of \$10.04. So, while we see fewer expenditures per visit in the metropolitan areas of the trail, those purchases have a higher dollar value.

Average \$ spent per person on “soft goods”

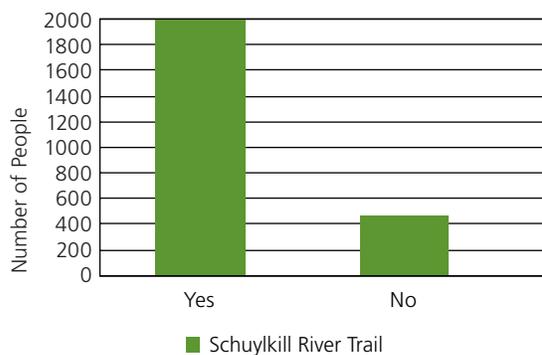


Comparison of trail sections

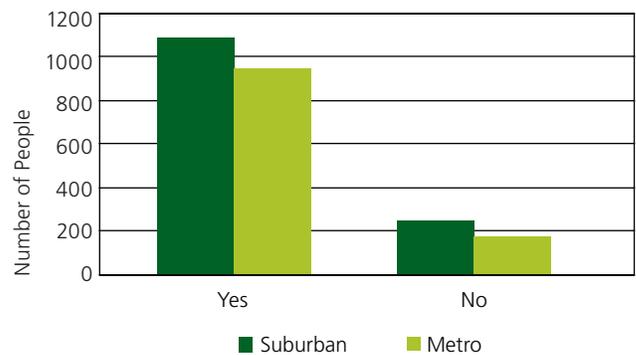


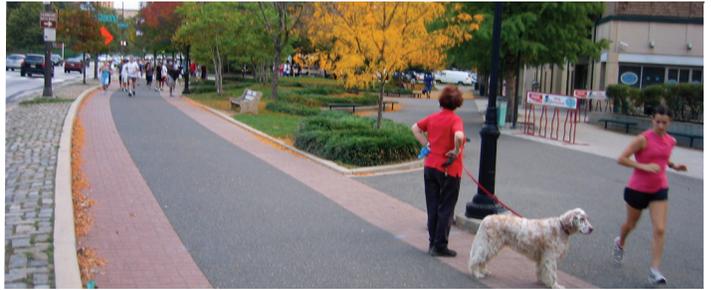
Seventy-seven percent of respondents to question #14 indicated they had purchased some durable goods during the past year because of their use of the trail, with the average expenditure amounting to more than \$400 per user. Although we have no way of accurately tracking exactly where these expenditures were made (through local or national retail), we can say the trail precipitates an infusion of dollars into the economy.

Number of people who purchased “hard goods”



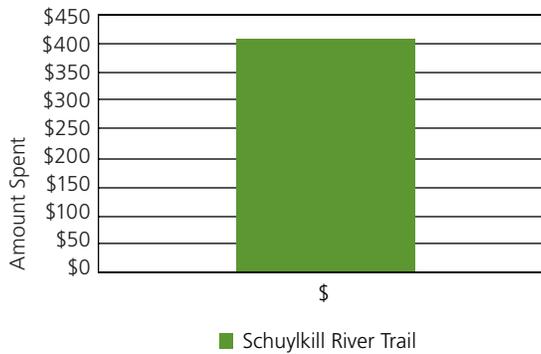
Comparison of trail sections



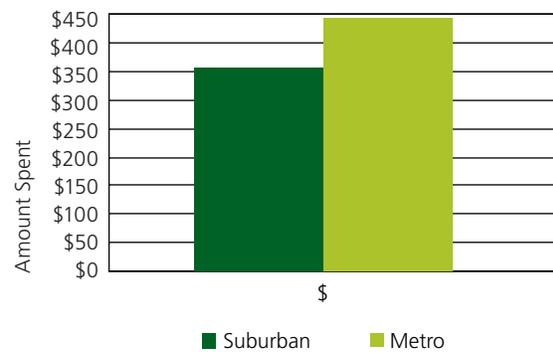


Respondents indicate they spent an average of \$406 on durable goods. Nearly 25 percent indicated they spent money on bike supplies, and 18.8 percent said they had purchased a bicycle because of their trail use. Expenditures by users on the suburban area of the trail average \$353, while metro area respondents indicated they had spent an average of \$442.

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



Comparison of trail sections



Schuylkill River Trail User Estimate

Beginning in May 2007, the Schuylkill River Heritage Area placed passive infrared counters at various locations along the Schuylkill River Trail. These counters collect data on the number of trail users passing the counter by detecting each user's "heat signature."

The original counter was placed along the trail in Pottstown near the headquarters of the Schuylkill River Heritage Area. Subsequently, additional counters were added to other trail locations. These counters collect trail-user data on a continual basis, 24 hours a day, 12 months a year.

For the purpose of this analysis, the data from nine counters was analyzed. For six of the counters, 12 months worth of data was available, covering the period during which the trail survey was being conducted. For the other three counters, only partial-year data was available. In these cases, data for the missing monthly counts was extrapolated to a 12-month estimate using a model developed by RTC that examined data collected using electronic counters at 58 different locations on rail-trails across the United States.

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 who 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 2008 and 2009.

Assumptions:

Users who passed the Kernsville counter did not pass any other counter due to undeveloped trail between Hamburg and Reading.

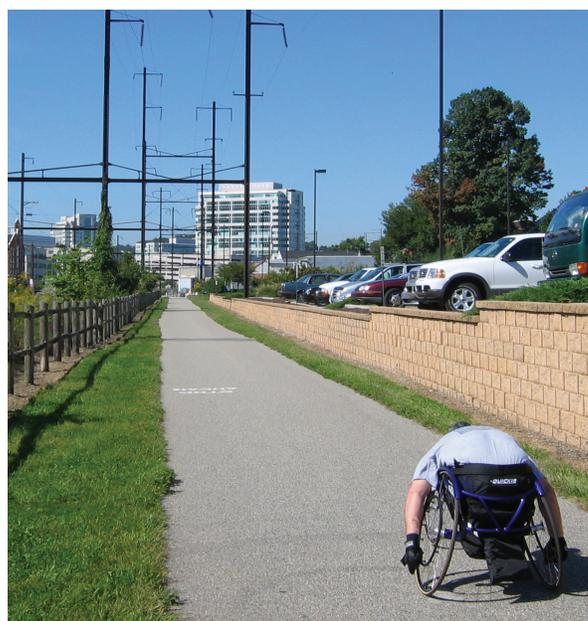
Between Lancaster Avenue in Reading and Pottstown, 20 percent of cyclists passed more than one trail counter.

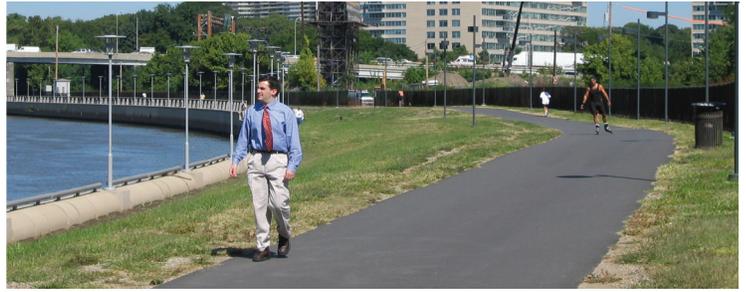
Users who passed the Oaks counter did not pass another counter.

Between Manayunk and Schuylkill Banks, all user types passed multiple counters.

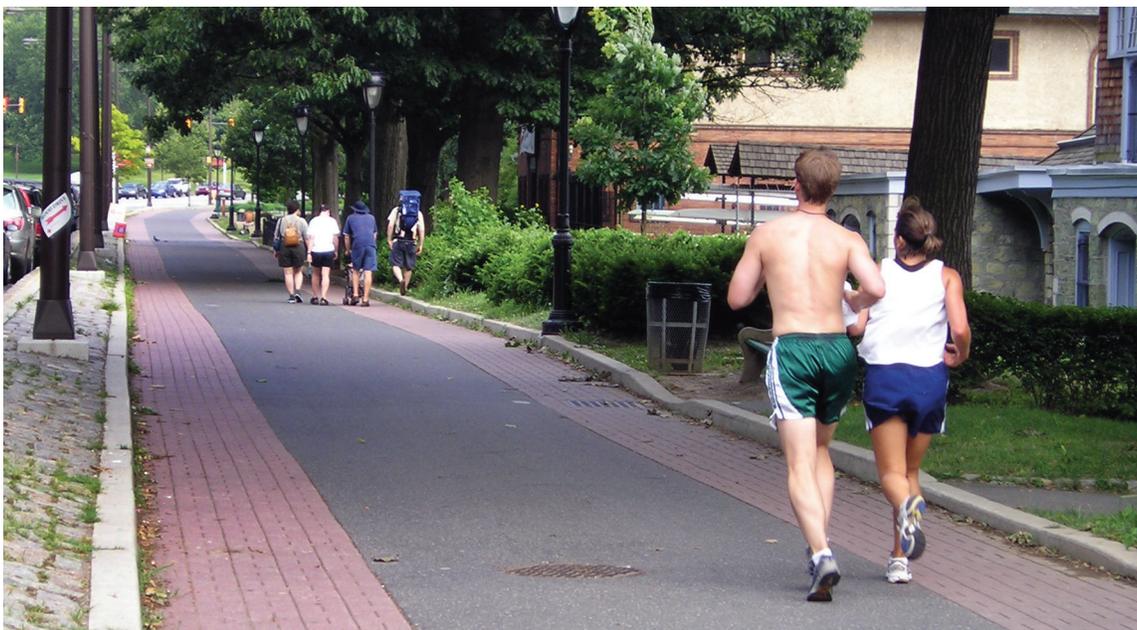
The technology returns an approximate 20 percent undercount due to users walking side by side or cyclists moving too quickly for heat signature to be registered.

95 percent of all trail trips start and end at the same location, so users pass a single counter twice.





Trail Counter Location	Actual 12-Month Count	Estimated 12-Month Count*	Adjusted for Passing Multiple Counters	Adjusted for Missing Counts	Adjusted for Out-and-Back Trips
Kernsville	40,715		40,715	48,858	25,715
Lancaster Avenue		30,453	27,660	33,193	17,470
Birdsboro		23,180	21,054	25,265	13,297
Pottstown	53,180		48,303	57,964	30,507
Oaks		51,071	51,071	61,285	32,255
Manayunk	133,601		67,201	80,642	42,443
East Falls	326,871		164,416	197,299	103,842
Boathouse Row	1,007,833		506,940	608,328	320,173
Schuylkill Banks	681,611		342,850	411,420	216,537
Total Annual Trail User Visits					802,239



Economic Impact



The economic impact of the Schuylkill River Trail is comprised of a number of elements.

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

Also from the survey, it was 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 another important aspect for determining the economic impact.

Very few respondents to the Schuylkill River Trail User Survey indicated that an overnight stay was part of their trail experience. Of the 1,223 completed survey forms, only 33 indicated an overnight stay. At a little less than three percent of the respondents, that data is insufficient to include this category of spending in the economic impact analysis.

Estimates of the overall economic impact of the Schuylkill River Trail are presented in the form of a table.

Hard Goods

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

Bike	18.8%
Bike supplies	24.2%
Auto accessories	3.4%
Running/walking/hiking shoes	14.2%
Clothing	16.2%
Nothing	23.0%

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

Average “hard goods” purchase \$406.31

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	21.3%
Candy/snack foods	10.0%
Sandwiches	3.4%
Ice cream	3.7%
Meals at a restaurant along the trail	10.8%
Other	.9%
None of these	50.0%

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

Average “soft goods” purchase \$9.07

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

Economic Impact Analysis

The following chart takes the data provided and extrapolates the purchases based on an annual user estimate. 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.

Schuylkill River Trail Economic Impact Analysis					
					Annual User Est. (Rounded)
					800,000
Category	% Usage	Avg. \$	Avg. Life	Ave. # of trips	
Hard Goods*	77.0%	\$406.31	6 years	11.32	\$3,685,026
Soft Goods	50.0%	\$9.07			\$3,628,000

Hard Goods = (% Usage X (Avg. \$÷Avg. Life) X # Users ÷ Avg. Number of Trips)*

In the above example, the calculation would look like this:
 $((.77 \times (\$406.31 \div 6)) \times (800,000 \div 11.32)) = \$3,685,026$

Soft Goods = (% Usage X Users Avg. \$ X # Users)

In the above example, the calculation would look like this:
 $(.50 \times \$9.07 \times 800,000) = \$3,628,000$

* Major “hard good” purchases such as a bike may be replaced every five to 10 years. Running shoes may be replaced every couple months. For the purpose of this analysis, the assumption is an average life of six years for “hard goods.” 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.

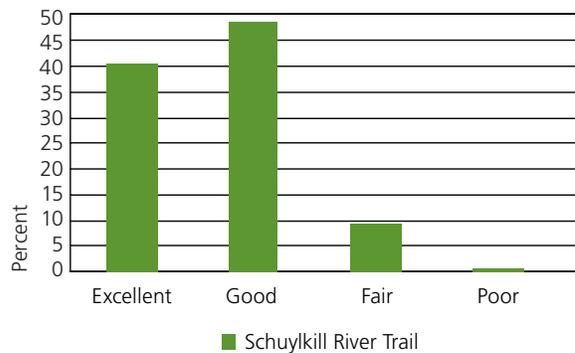


Trail Maintenance, Security and Cleanliness

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

Respondents using all sections of the trail felt the trail is well maintained.

Opinion of trail maintenance



Comparison of trail sections



The feeling of security that trail users have is influenced by the presence of other trail users, familiarity with the trail, and the users' general perception of the safety of their overall environment. There appears only a slight variation in the perception of security between the Suburban and Metro respondents (<3%).

Opinion of trail safety and security



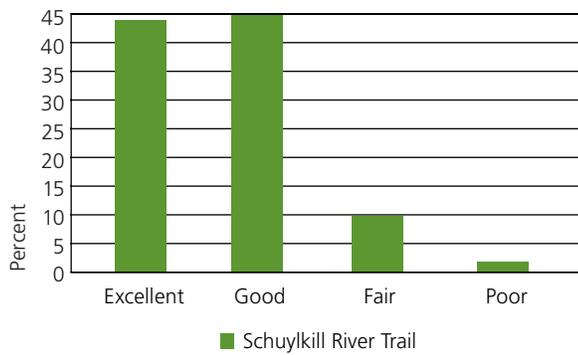
Comparison of trail sections



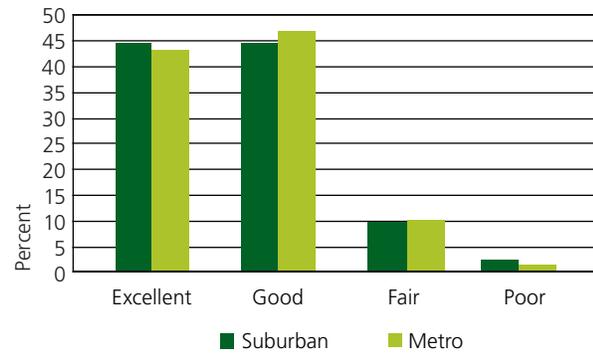


Respondents rate the cleanliness of the Schuylkill River Trail very highly. This rating is as much a credit to the users of the trail as to any other factor. Generally trail users respect the trail and the open space through which they travel. Often users can be seen picking up after someone who was not as respectful of the environment.

Opinion of trail cleanliness



Comparison of trail sections



Additional Comments

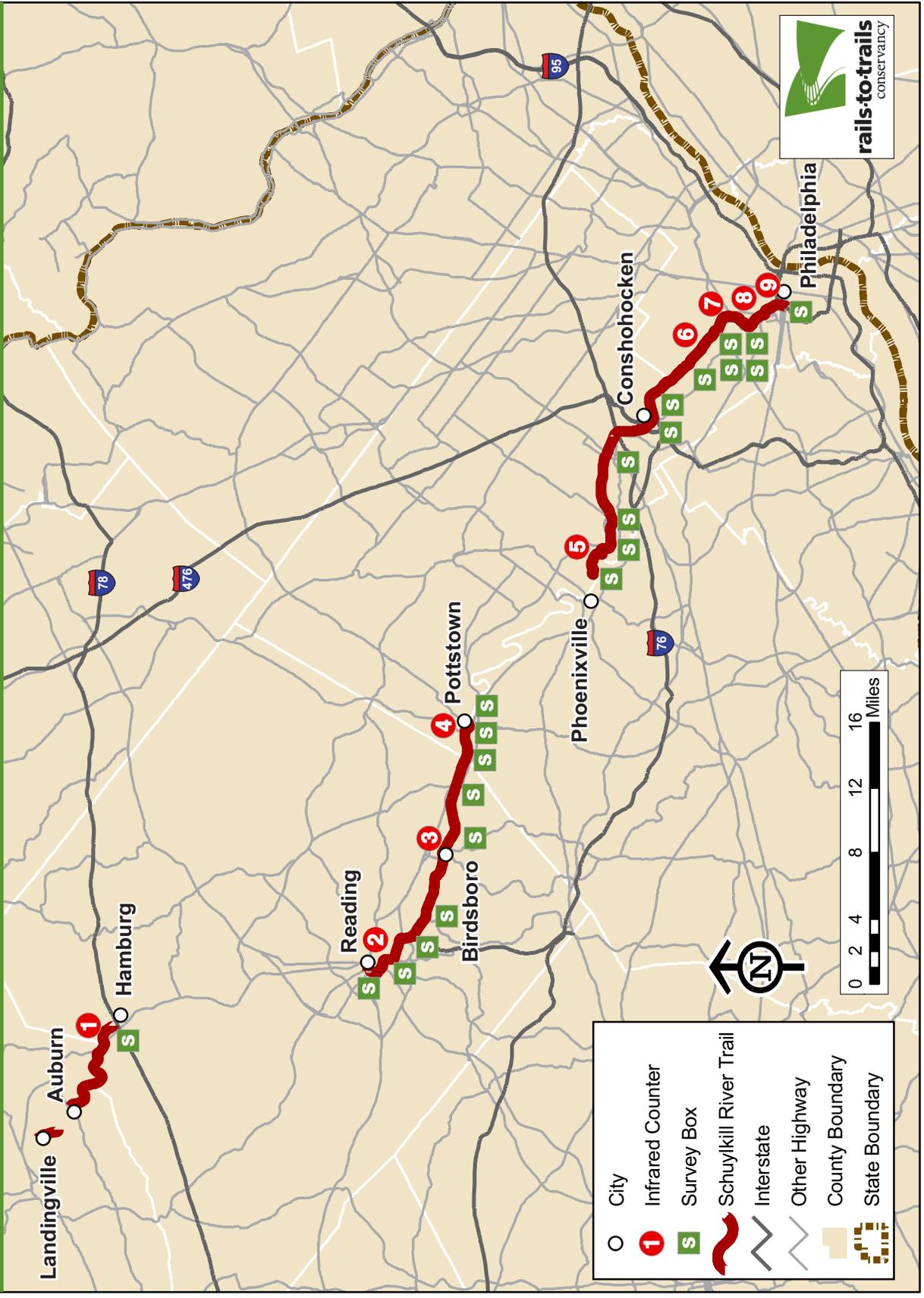
Respondents were encouraged to add any additional comments regarding their experience on the Schuylkill River Trail. More than 481 comments were recorded. A review of the comments revealed they could be generally grouped into seven different categories. The comments tended to contain a good deal of suggestions about things that might improve the trail, not necessarily critical or complimentary.

The following table presents a loose summary of the categorized comments:

Compliments	34.9%	Love the trail, good use of tax dollars
Complaints	2.9%	Horse manure on trail, fast-moving bikes
Amenities	14.5%	Install water fountains, mileage markers, benches
Maintenance/ Improvements	15.1%	Widen the trail and/or pave sections that aren't paved
Extensions/ Connections	14.3%	Build more trail and/or complete the connections
Security	2.2%	Very few comments regarding security issues
Enforcement	10.8%	Majority of these comments regarded clean-up after horses



Survey Box & Infrared Counter Locations — Schuylkill River Trail

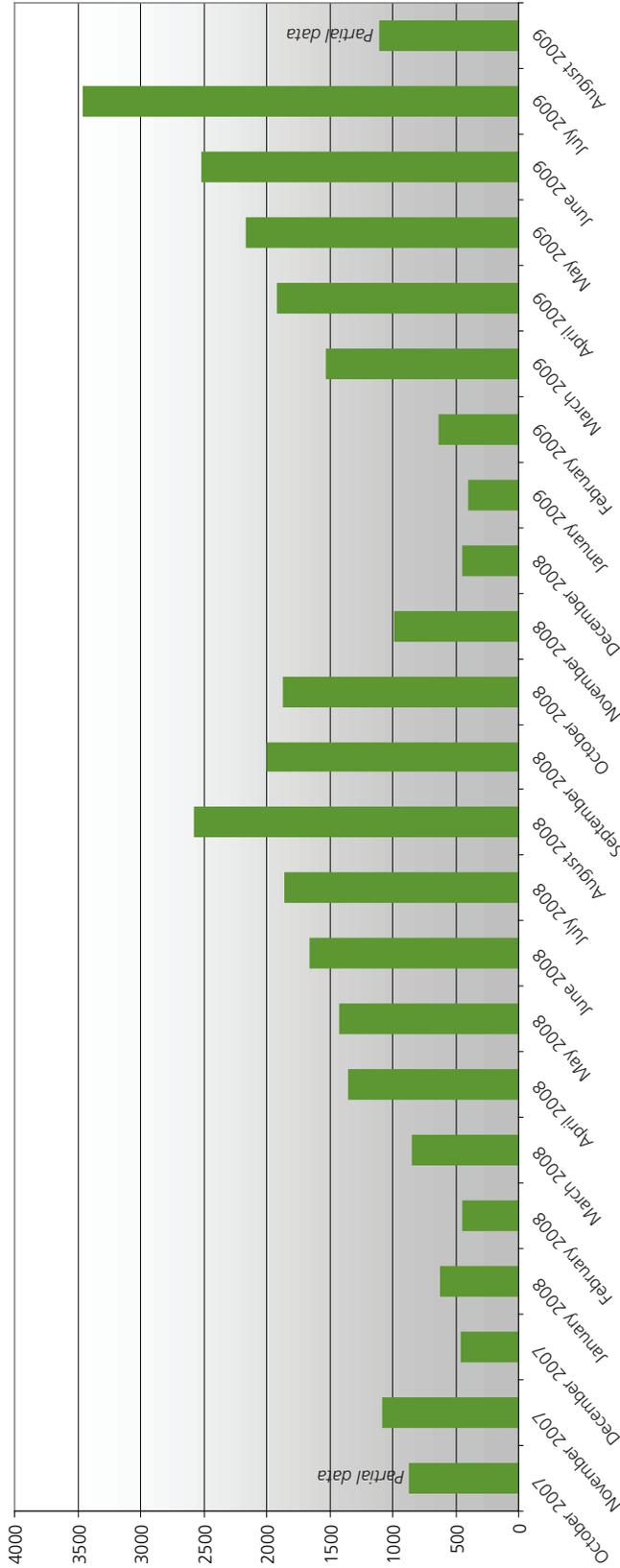


TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Kernsville

Start: October 2007
 Finish: August 2009

Location: #1, Hamburg, Pa.
 Comment: Divide by 2 applied



Total Counts	31,960	Total (1):	31,960
Total Periods:	23	Total (2):	0
Period Length:	1 month	Percentage (1):	100.0
Mean:	1,389.6	Percentage (2):	0.0
Mode:	#N/A	Mean (1):	1,389.6
Median:	1,336.0	Mean (2):	0.0
Standard Deviation:	809.8	Max/Min (1):	3,452 / 392
Maximum:	3,452	Max/Min (2):	0 / 0
Minimum:	392		
Total Weekday:	16,986		
Total Weekend:	14,974		
Daily Max/Min Weekday:	221 / 0		
Daily Max/Min Weekend:	280 / 2		
Daily Mean Weekday:			
Daily Mean Weekend:			
Mean Monday:			
Mean Tuesday:			
Mean Wednesday:			
Mean Thursday:			
Mean Friday:			
Mean Saturday:			
Mean Sunday:			

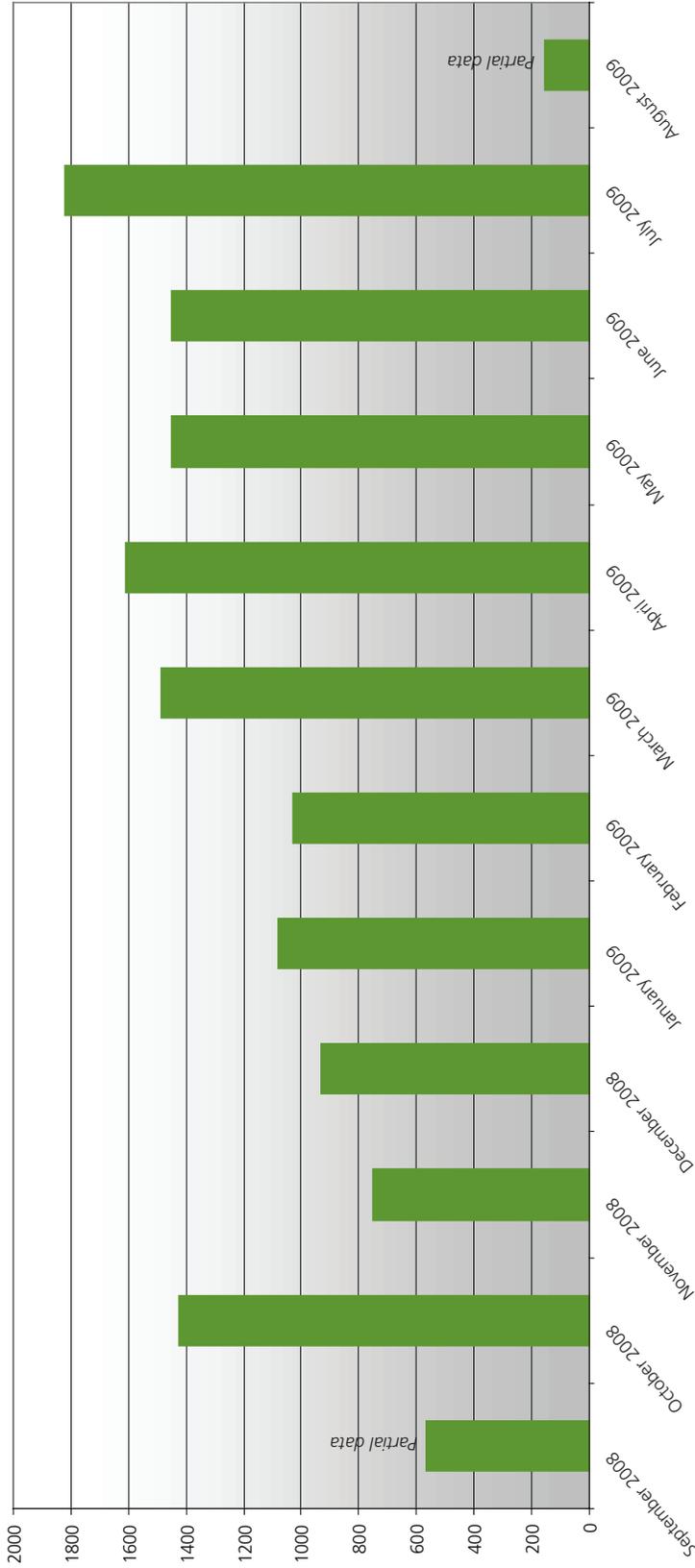
FIVE PEAK PERIODS: July 2009 (3,452), August 2008 (2,559), June 2009 (2,500), May 2009 (2,150), September 2008 (1,994)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Lancaster Avenue

Start: September 2008
 Finish: August 2009

Location: #2, Reading, Pa.
 Comment: Divide by 2 applied



Total Counts:	13,753	Total (1):	13,753
Total Periods:	12	Total (2):	0
Period Length:	1 month	Percentage (1):	100.0
Mean:	1,146.1	Percentage (2):	0.0
Mode:	1,450.0	Mean (1):	1,146.1
Median:	1,251.0	Mean (2):	0.0
Standard Deviation:	484.8	Max/Min (1):	1,822 / 155
Maximum:	1,822	Max/Min (2):	0 / 0
Minimum:	155		
Total Weekday:	9,144		
Total Weekend:	4,608		
Daily Max/Min Weekday:	118 / 0		
Daily Max/Min Weekend:	223 / 0		

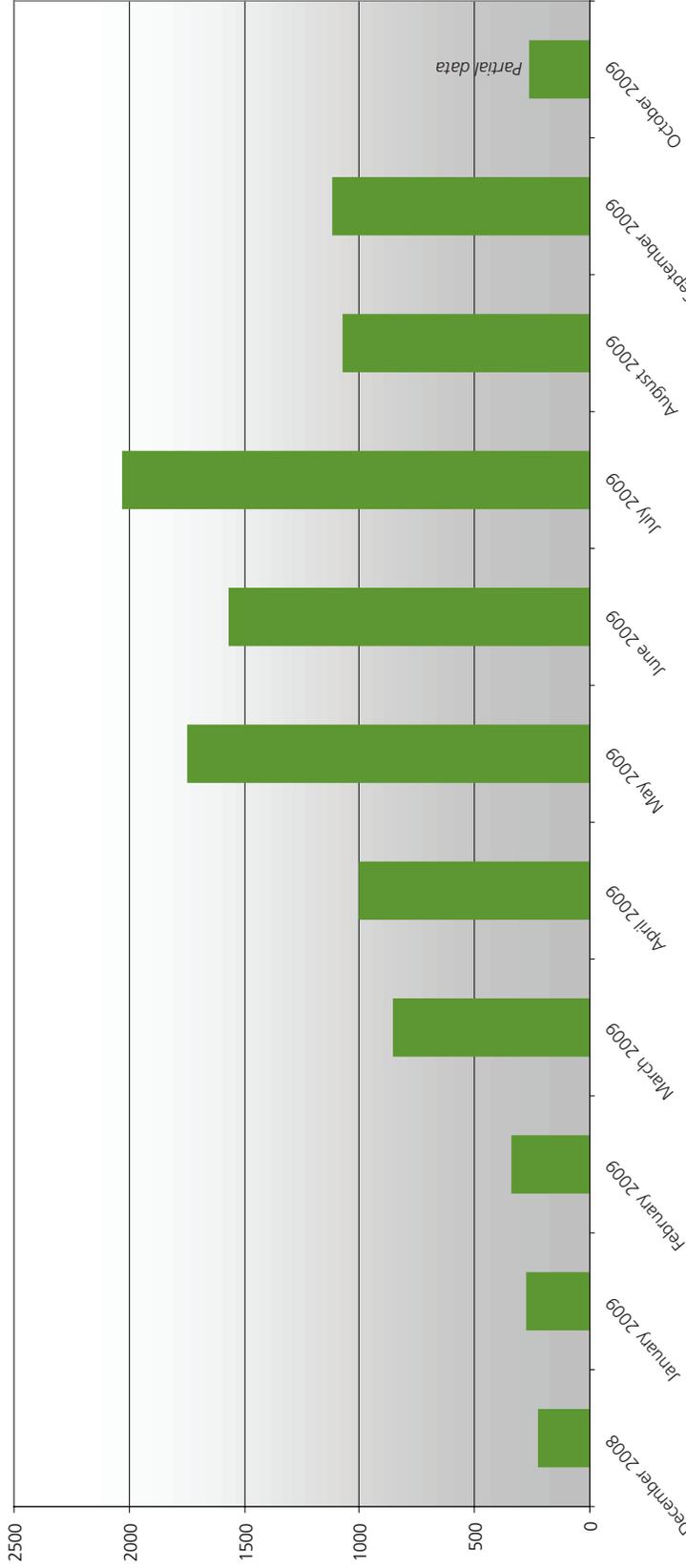
FIVE PEAK PERIODS: July 2009 (1,822), April 2009 (1,608), March 2009 (1,488), May 2009 (1,450), June 2009 (1,450)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Birdsboro

Start: December 2008
 Finish: October 2009

Location: #3, Birdsboro, Pa.
 Comment: Divide by 2 applied



Total Counts:	10,432	Daily Mean Weekday:	27.4	Total (1):	10,432
Total Periods:	11	Daily Mean Weekend:	50.1	Total (2):	0
Period Length:	1 month	Mean Monday:	35.1	Percentage (1):	100.0
Mean:	948.4	Mean Tuesday:	26.4	Percentage (2):	0.0
Mode:	#N/A	Mean Wednesday:	24.6	Mean (1):	948.4
Median:	994.0	Mean Thursday:	22.8	Mean (2):	0.0
Standard Deviation:	637.8	Mean Friday:	28.1	Max/Min (1):	2,024 / 218
Maximum:	2,024	Mean Saturday:	46.5	Max/Min (2):	0 / 0
Minimum:	218	Mean Sunday:	53.6		
Total Weekday:	6,025				
Total Weekend:	4,406				
Daily Max/Min Weekday:	151 / 0				
Daily Max/Min Weekend:	160 / 6				

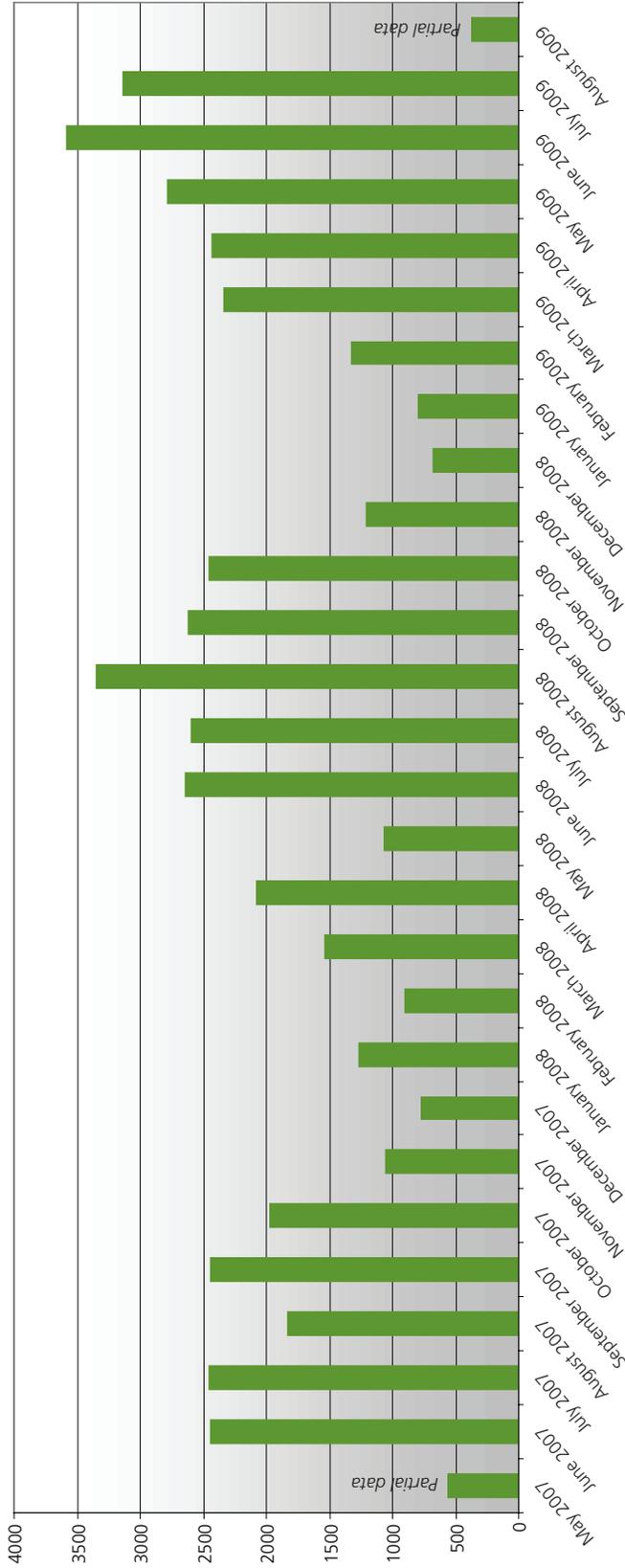
FIVE PEAK PERIODS: July 2009 (2,024), May 2009 (1,742), June 2009 (1,564), September 2009 (1,111), August 2009 (1,070)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Pottstown

Start: May 2007
 Finish: August 2009

Location: #4, Pottstown, Pa.
 Comment: Divide by 2 applied



Total Counts:	52,451	Total (1):	52,451
Total Periods:	28	Total (2):	0
Period Length:	1 month	Percentage (1):	100.0
Mean:	1,873.3	Percentage (2):	0.0
Mode:	#N/A	Mean (1):	1,873.3
Median:	2,017.5	Mean (2):	0.0
Standard Deviation:	910.2	Max/Min (1):	3,573 / 361
Maximum:	3,573	Max/Min (2):	0 / 0
Minimum:	361		
Total Weekday:	31,504		
Total Weekend:	20,946		
Daily Max/Min Weekday:	362 / 0		
Daily Max/Min Weekend:	392 / 0		
Daily Mean Weekday:			
Daily Mean Weekend:			
Mean Monday:			
Mean Tuesday:			
Mean Wednesday:			
Mean Thursday:			
Mean Friday:			
Mean Saturday:			
Mean Sunday:			
54.7			
90.3			
63.5			
57.2			
54.3			
49.4			
49.1			
83.1			
97.5			

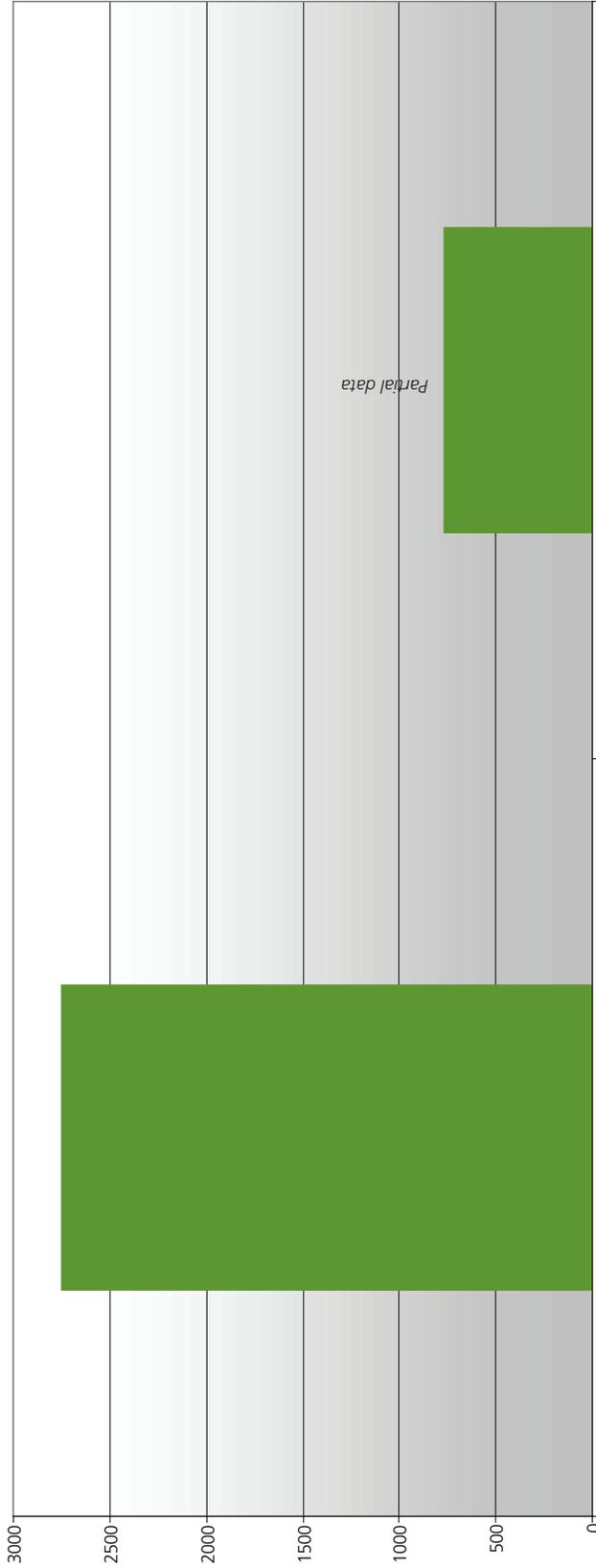
FIVE PEAK PERIODS: June 2009 (3,573), August 2008 (3,337), July 2009 (3,130), May 2009 (2,776), June 2008 (2,632)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Oaks

Start: September 2009
 Finish: October 2009

Location: #5, Valley Forge, Pa.
 Comment: Divide by 2 applied



Total Counts:	3,503	Daily Mean Weekday:	63.1	Total (1):	3,503
Total Periods:	2	Daily Mean Weekend:	192.5	Total (2):	0
Period Length:	1 month	Mean Monday:	105.6	Percentage (1):	100.0
Mean:	1,751.5	Mean Tuesday:	48.7	Percentage (2):	0.0
Mode:	#N/A	Mean Wednesday:	38.2	Mean (1):	1,751.5
Median:	1,751.5	Mean Thursday:	47.6	Mean (2):	0.0
Standard Deviation:	1,400.8	Mean Friday:	75.6	Max/Min (1):	2,742 / 761
Maximum:	2,742	Mean Saturday:	188.5	Max/Min (2):	0 / 0
Minimum:	761	Mean Sunday:	196.5		
Total Weekday:	578				
Total Weekend:	1,925				
Daily Max/Min Weekday:	185 / 0				
Daily Max/Min Weekend:	408 / 3				

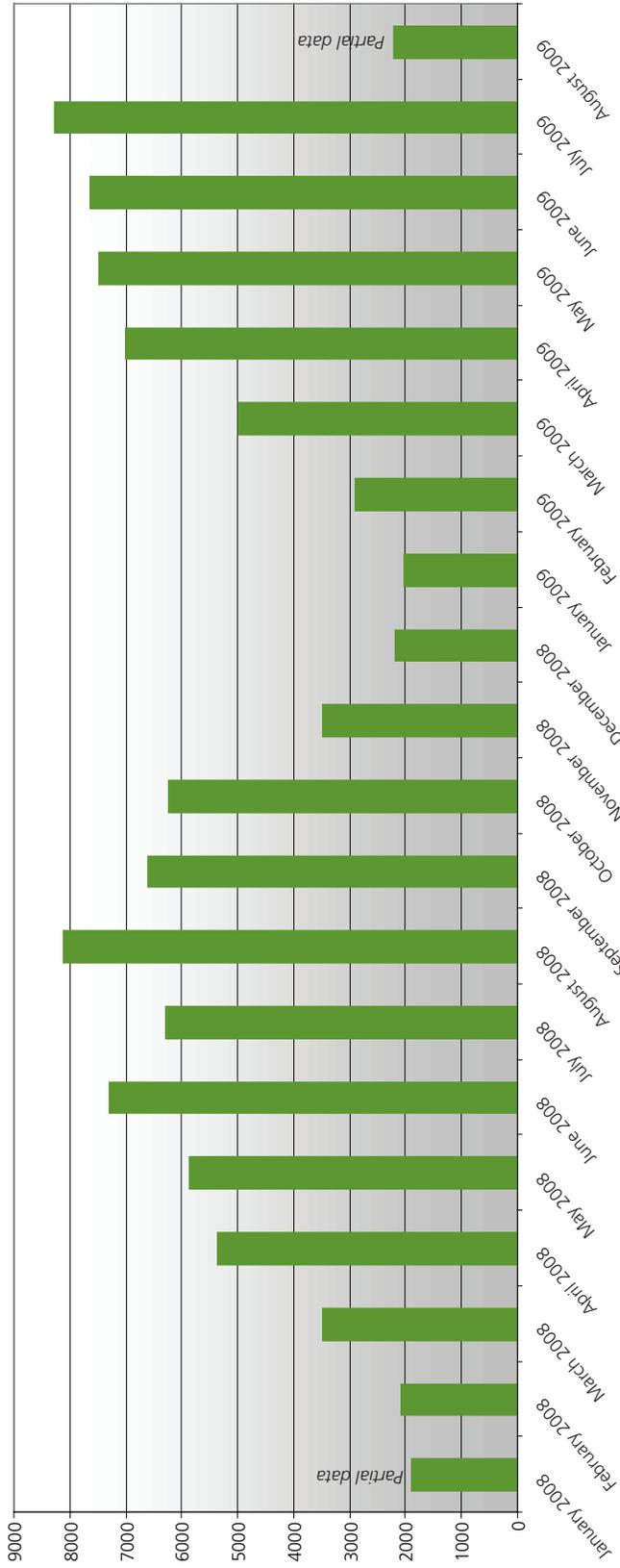
FIVE PEAK PERIODS: September 2009 (2,742), October 2009 (761)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Manayunk

Start: January 2008
 Finish: August 2009

Location: #6, Manayunk, Philadelphia, Pa.
 Comment: Divide by 2 applied



Total Counts:	10,1186	Total (1):	101,186
Total Periods:	20	Total (2):	0
Period Length:	1 month	Percentage (1):	100.0
Mean:	5,059.3	Percentage (2):	0.0
Mode:	#N/A	Mean (1):	5,059.3
Median:	5,602.0	Mean (2):	0.0
Standard Deviation:	2,304.7	Max/Min (1):	8,254 / 1,868
Maximum:	8,254	Max/Min (2):	0 / 0
Minimum:	1,868		
Total Weekday:	59,102		
Total Weekend:	42,085		
Daily Max/Min Weekday:	558 / 17		
Daily Max/Min Weekend:	874 / 23		

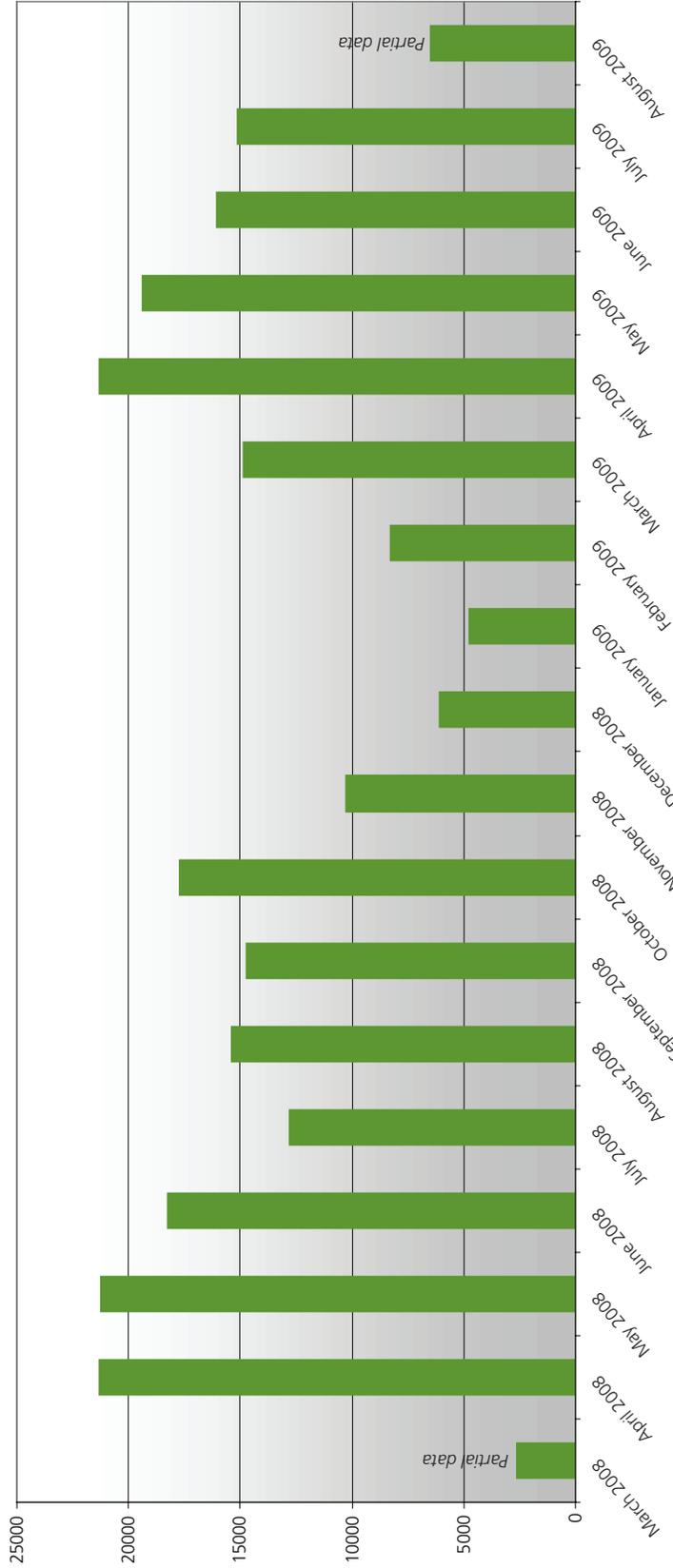
FIVE PEAK PERIODS: July 2009 (8,254), August 2008 (8,113), June 2009 (7,634), May 2009 (7,458), June 2008 (7,279)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: East Falls

Start: March 2008
 Finish: August 2009

Location: #7, East Falls, Pa.
 Comment: Divide by 2 applied



Total Counts:	245,953	Total (1):	245,953
Total Periods:	18	Total (2):	0
Period Length:	1 month	Percentage (1):	100.0
Mean:	13,664.1	Percentage (2):	0.0
Mode:	#N/A	Mean (1):	13,664.1
Median:	14,945.0	Mean (2):	0.0
Standard Deviation:	5,986.4	Max/Min (1):	21,263 / 2,569
Maximum:	21,263	Max/Min (2):	0 / 0
Minimum:	2,569		
Total Weekday:	146,704		
Total Weekend:	99,247		
Daily Max/Min Weekday:	1,592 / 19		
Daily Max/Min Weekend:	1,984 / 53		

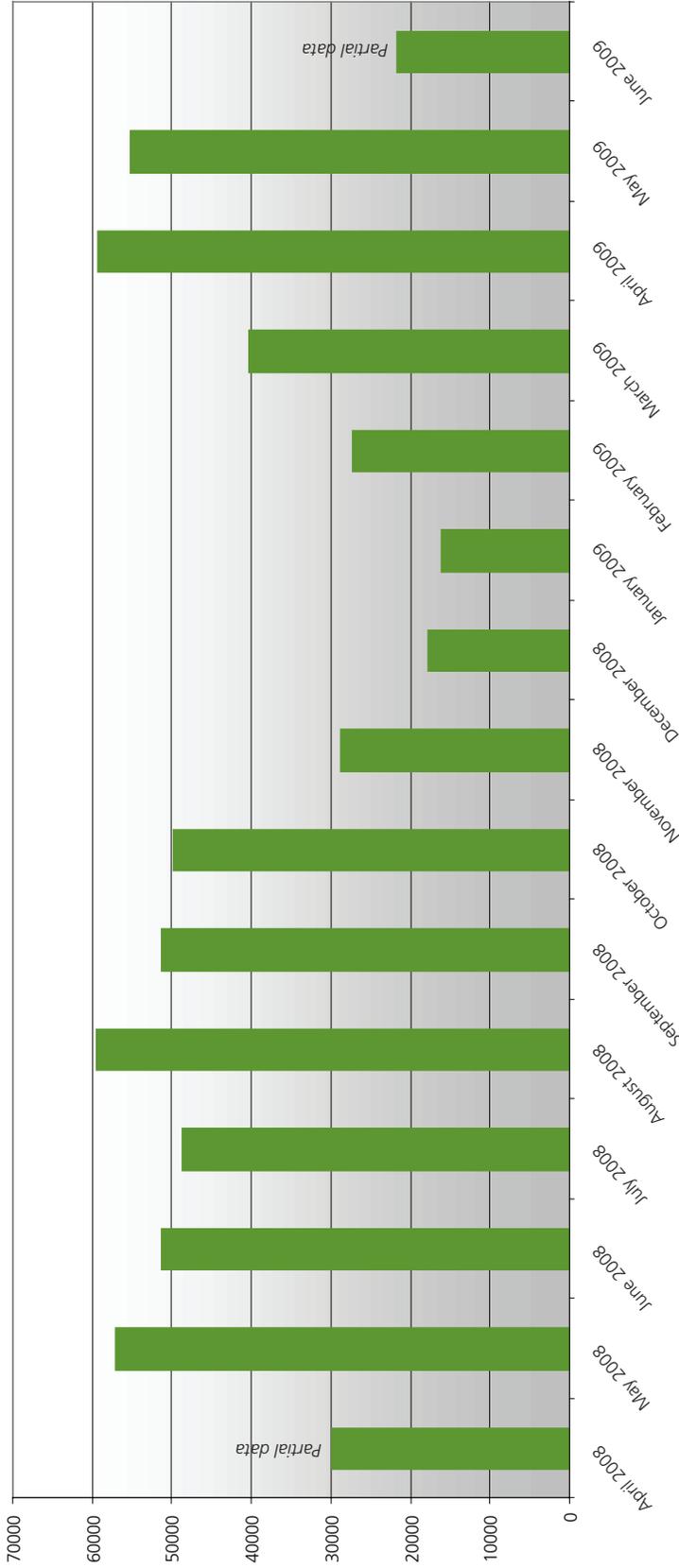
FIVE PEAK PERIODS: April 2009 (21,263), April 2008 (21,258), May 2008 (21,238), May 2009 (19,334), June 2008 (18,214)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Boathouse Row

Start: April 2008
 Finish: June 2009

Location: #8, Kelly Drive, Philadelphia, Pa.
 Comment: Divide by 2 applied



Total Counts:	612,201	Daily Mean Weekday:	1,236.8	Total (1):	612,201
Total Periods:	15	Daily Mean Weekend:	1,936.1	Total (2):	0
Period Length:	month	Mean Monday:	1,243.0	Percentage (1):	100.0
Mean:	40,813.4	Mean Tuesday:	1,304.4	Percentage (2):	0.0
Mode:	#N/A	Mean Wednesday:	1,218.2	Mean (1):	40,813.4
Median:	48,642.0	Mean Thursday:	1,238.9	Mean (2):	0.0
Standard Deviation:	15,772.0	Mean Friday:	1,179.3	Max/Min (1):	59,412 / 15,918
Maximum:	59,412	Mean Saturday:	1,873.5	Max/Min (2):	0 / 0
Minimum:	15,918	Mean Sunday:	1,998.6		
Total Weekday:	375,998				
Total Weekend:	236,203				
Daily Max/Min Weekday:	3,720 / 80				
Daily Max/Min Weekend:	5,770 / 144				

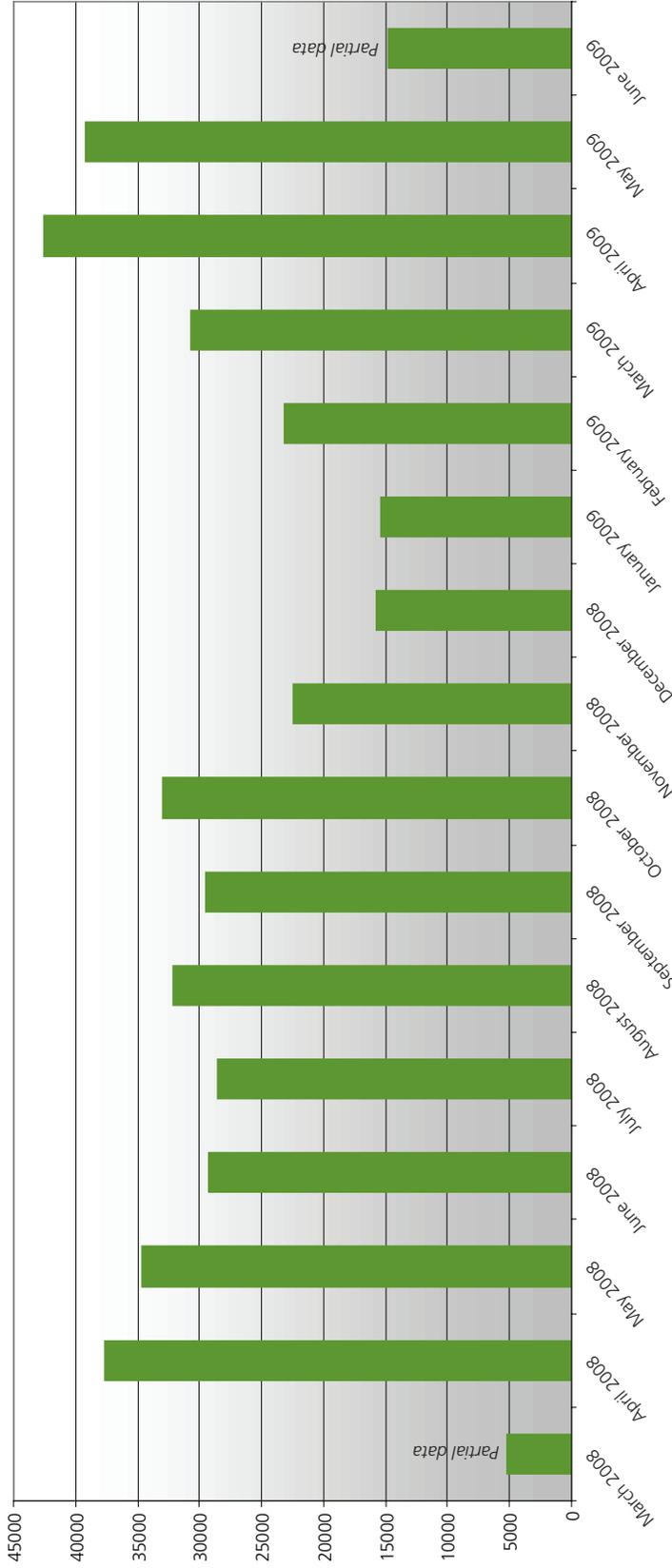
FIVE PEAK PERIODS: August 2008 (59,412), April 2009 (59,169), May 2008 (56,944), May 2009 (55,118), September 2008 (51,134)

TRAFx REPORT:

Project: Schuylkill River Trail User Survey
 Counter: Schuylkill Banks

Start: March 2008
 Finish: June 2009

Location: #9, Schuylkill Banks, Philadelphia, Pa.
 Comment: Divide by 2 applied



Total Counts:	432,925	Daily Mean Weekday:	881.8	Total (1):	432,925
Total Periods:	16	Daily Mean Weekend:	1,177.6	Total (2):	0
Period Length:	1 month	Mean Monday:	866.1	Percentage (1):	100.0
Mean:	27,057.8	Mean Tuesday:	942.1	Percentage (2):	0.0
Mode:	#N/A	Mean Wednesday:	894.0	Mean (1):	27,057.8
Median:	29,276.0	Mean Thursday:	877.7	Mean (2):	0.0
Standard Deviation:	10,252.2	Mean Friday:	829.2	Max/Min (1):	42,476 / 5,122
Maximum:	42,476	Mean Saturday:	1,125.5	Max/Min (2):	0 / 0
Minimum:	5,122	Mean Sunday:	1,229.8		
Total Weekday:	282,186				
Total Weekend:	150,736				
Daily Max/Min Weekday:	2,413 / 48				
Daily Max/Min Weekend:	3,219 / 106				

FIVE PEAK PERIODS: April 2009 (42,476), May 2009 (39,136), April 2008 (37,622), May 2008 (34,632), October 2008 (32,947)



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