Perkiomen Trail
2008 User Survey
and Economic Impact Analysis
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Perkiomen Trail 2008 User Survey and Economic Impact Analysis

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Executive Summary

The Perkiomen Trail is a multi-use trail traversing 19 miles between Green Lane Park in Upper Frederick Township, Pa., to Oaks in Upper Providence Township, Pa., where it connects to the Schuylkill River Trail. Along its route, the trail passes through some of the most scenic areas in Pennsylvania’s Montgomery County as it follows the course of the Perkiomen Creek.

During 2008 this study of the users of the Perkiomen Trail was conducted by Rails-to-Trails Conservancy under 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 Rails-to-Trails Conservancy’s “Trail User Survey Workbook” (www.railstotrails.org/resources/documents/resource_docs/UserSurveyMethodology.pdf).

This survey was designed to monitor user characteristics and determine the economic impact of the Perkiomen Trail.

Survey forms were available at all official trailheads along the Perkiomen Trail and at merchants who cater to trail users. Completed responses were mailed back to Rail-to-Trails Conservancy. In all, 694 completed survey forms are included in this study.

The vast majority of the survey respondents reside in Montgomery County (75.7%). Adjoining Chester County residents were the next most likely to use the Perkiomen Trail (8.8%). Even though the Perkiomen Trail connects to the Schuylkill River Trail which runs into Philadelphia County, few Philadelphia County residents completed the survey (1.1%). Based upon the survey respondents, less than 6 percent live outside the Pennsylvania five-county, metro-Philadelphia area.

More than half of the survey respondents (55%) indicated that they use the Perkiomen Trail on at least a weekly basis. A quarter (25.1%) of the respondents indicated they used the trail 3 to 5 times per week. And, a stream of new users (5.4%) enjoyed their first outing on the Perkiomen Trail during the survey period.

The age profile of the Perkiomen Trail study respondents is typical of that found from other trail studies across Pennsylvania and nationally. Sixty-five percent of the survey respondents indicated that they were 46 years of age or older. Children under the age of 15 accompanied trail user respondents 16.7 percent of the time. The majority of the accompanying children (48.3%) were between the ages of 10 and 15. The usage of the trail by men (55.2%) and women (44.8%) is fairly typical of what has been found during the course of other trail user studies.

Bicycling (48.8%) is the predominant activity on the Perkiomen Trail. This is more than 20 percent lower than the results of studies on Oil Heritage Region Trails and Heritage Rail Trail County in Pennsylvania. Walkers account for the majority of the difference (27.8%). A new response in this survey was for pet walkers; they accounted for 9.1 percent of the primary trial activity. The type of activity also relates to the amount of time that the survey respondents indicated that they spent on the Perkiomen Trail. The largest percentage of respondents (48.6%) indicated that they spent between one and two hours on a typical trail outing. Just over a quarter of the respondents (26.9%) spent more than two hours on the trail. The remaining quarter of the respondents spent between 30 minutes and an hour engaged in a trail activity.
More than a third of the survey respondents (34.9%) indicated that morning was the time that they generally participated in a trail activity. With the frequency of usage most respondents indicated that they were on the trail on both weekdays and weekends (57%).

Respondents’ knowledge of the trail came primarily from “word of mouth” (29.9%). Roadside signage and “driving by” were cited by nearly a quarter of the respondents (24.6%) as how they found out about the Perkiomen Trail. Information from Montgomery County in the form of trail brochure, county Web site or information from Parks and Heritage Services were selected as the source of trail information by 14.4 percent of the respondents.

In terms of economic impact, 81.5 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 and bike supplies that resulted in an average expenditure of $396.89. While these types of purchases are not annually recurring, even with the most conservative usage estimate they amount to millions of dollars in sales. As a trail that has primarily local users (94% from the Philadelphia metro area), most of these expenditures were made in the communities and counties surrounding the trail.

The purchase of “soft goods” (water, soda, candy, ice cream, lunches, etc.) was less significant along the Perkiomen Trail with 46.7 percent of the survey respondents indicating they didn’t purchase any of these items in conjunction with their most recent trail visit. Of those who did make a purchase, the average amount per person per trip was $11.09.

As a trail that is used primarily by local residents, overnight accommodations do not play a significant role in the economic impact of the trail. Just over 3 percent of the survey respondents indicated that an overnight stay was part of their trail experience. Most of these stays (43.5%) were at area campgrounds.

More than 58 percent of the respondents to this survey stated that the maintenance of the trail was excellent. More than 85 percent felt that safety and security along the trail was good to excellent. More than 60 percent of respondents felt the cleanliness of the trail environment was excellent.

When asked if they would be willing to pay an annual “user fee” to help maintain the Perkiomen Trail, more than 60 percent responded that they would.

The trailheads that were used the most by the survey respondents were, in descending order, Spring Mount, Lower Perkiomen Valley Park, Central Perkiomen Valley Park, Pawlings Road and Green Lane Park. Lowest usage was in Green Lane Borough, Cedar Road and Hollywood.

The survey respondents were asked if they had been opposed to the trail when it was first proposed if their opinion had changed. Of the total, 42.4 percent indicated that their opinion had changed. Of those survey respondents, 74.3 percent indicated that they feel more favorable toward the trail than they had previously. Only 2.9 percent indicated that they viewed the trail in a much less favorable light.
Historical Perspective

The Perkiomen Trail runs for 19 miles along the corridor of the Reading Railroad. The Reading discontinued passenger service on the line in 1955. Conrail, which acquired the Reading Railroad in 1976, made the final freight run on the line in 1978. Montgomery County acquired the entire right-of-way for $120,000 and began plans for the development of a trail.

Not everyone was in favor of the trail-conversion of the railroad corridor. Many of the adjacent landowners argued that the agreement with the railroad, which dated back to the mid 1800s, called for the corridor to revert back to the adjacent property owners when the railroad ceased operations. Thus began a legal battle that lasted for nearly a decade.

In 1998, after almost nine years of litigation between the county and roughly 30 property owners who fought the development of the trail, a more creative approach was adopted by the commissioners. Negotiations began to acquire easements or the purchase of parcels. In some cases where there was strong opposition, the trail was routed off of the original rail corridor. Where it was absolutely necessary to acquire a parcel to link sections of the trail, the county used its condemnation powers and adequately compensated the property owner.

It wasn’t until 2000 when the project finally gained substantial traction. Newly elected County Commissioner Chairman Michael D. Marino called County Open Space Planner John Wood into his office and told Wood he wanted to see the trail built before his term ended. To speed the project along, the commissioners decided to construct the trail without federal transportation enhancement funding.

Section by section, the trail began coming together. The first grand opening celebration for a northern five-mile segment was held October 6, 2001. The entire 19-mile trail was officially completed in November 2004.
Location Analysis

The Perkiomen Trail traverses the heart of Montgomery County, Pa., from the Borough of Green Lane to Oaks, in a generally southeast direction. For most of its length, the trail travels along the banks of the Perkiomen Creek. Built on a former railroad grade, the trail is generally flat with broad sweeping curves.

The trail provides a connection between three of Montgomery County's parks: Green Lane Park in Green Lane, Central Perkiomen Park in Schwenksville and Lower Perkiomen Park in Oaks. Additionally, the trail provides access to two historical sites: Mill Grove and Pennypacker Mill. The southern end of the Perkiomen Trail connects to the Schuylkill River Trail, providing access to Valley Forge National Historical Park.

Boroughs and villages along the trail provide access to places to stay, eat and shop. The Perkiomen Creek provides an opportunity for other diversions such as fishing and boating. The trail’s environs are rich in flora and fauna for the casual or dedicated observer. There are a few road crossings but, with the exception of crossing Pennsylvania Route 29, most are low volume rural or residential in nature.

Signage at trailheads provides a map of the trail and distance to trailheads. A trail map brochure is also available at the trailhead kiosks. The 11 trailheads provide easy access along the length of the trail.

The highest point on the trail is in Green Lane Borough. Heading south and east the trail gradually descends to an elevation of 137 feet in Lower Perkiomen Valley Park. A profile of the trail is found below.

![Perkiomen Trail Profile](chart.png)
<table>
<thead>
<tr>
<th>Landmark</th>
<th>Miles</th>
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<tbody>
<tr>
<td>Green Lane Borough</td>
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<tr>
<td>Green Lane Park/Snyder Avenue</td>
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<tr>
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<td>Harmon Road</td>
<td>13.5</td>
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<tr>
<td>Spring Mount Village</td>
<td>12.0</td>
</tr>
<tr>
<td>Schwenksville Borough</td>
<td>10.5</td>
</tr>
<tr>
<td>Central Perkiomen Valley Park</td>
<td>9.5</td>
</tr>
<tr>
<td>Rahns Village/PA Route 113</td>
<td>7.0</td>
</tr>
<tr>
<td>Collegeville Borough – Main Street</td>
<td>5.5</td>
</tr>
<tr>
<td>Collegeville Borough – 2nd Ave. &amp; RT 29</td>
<td>4.75</td>
</tr>
<tr>
<td>Lower Perkiomen Valley Park</td>
<td>0.5</td>
</tr>
<tr>
<td>Schuylkill River Trail</td>
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</tr>
</tbody>
</table>

Map courtesy of Montgomery County Planning Commission, Norristown, Pa.
Perkiomen Trail Area Demographics

The Perkiomen Trail is located in Montgomery County, Pa., one of the five counties that make up the Philadelphia metropolitan area. The most populous municipality along the trail is the Borough of Collegeville.

<table>
<thead>
<tr>
<th>Perkiomen Trail Region Demographic Profile* (by county)</th>
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<tbody>
<tr>
<td>Montgomery</td>
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<tr>
<td>Population (2006 est.)</td>
</tr>
<tr>
<td>Median Household Income (2004 est.)</td>
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<tr>
<td>Households (2000 Census)</td>
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<td>Persons per household (2000 Census)</td>
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</table>

<table>
<thead>
<tr>
<th>Perkiomen Trail Region Population Growth** (by county)</th>
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<tr>
<td>Montgomery</td>
</tr>
<tr>
<td>1990</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2010</td>
</tr>
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<td>2020</td>
</tr>
</tbody>
</table>

* SOURCE: U.S. CENSUS QUICK FACTS
** SOURCE: U.S. CENSUS AND PA BULLETIN 38
Qualitative Values of the Perkiomen Trail

The best way to evaluate the qualitative values of the Perkiomen Trail is to let trail users describe how they feel about the trail. The following are verbatim comments taken from the 2008 Perkiomen Trail User Survey forms:

“Great trail! Great asset to Montgomery County.”

“The trail is one of the best things about living in Green Lane!”

“As I have no children this is the only thing I have gotten for my tax dollars and I love it!”

“The trail is an excellent resource in Montgomery County. I have used the trail for four years. I wish there was something comparable closer to my home.”

“The trail is a real asset for residents and visitors providing a low-cost way to see the beauty of the county.”

“The trail is a real asset to the community. I have been on many trails within a hundred-mile radius and this trail is one of the nicest.”

“This trail, and others in the area, is one of the most attractive features to the region, and one of the primary reasons why I would never move from the area.”

“Trail system is a great investment!”

“I look forward to future expansion of trail as I would like to try to commute throughout county and surrounding counties by bike. Thank you for a great job so far.”

“I would like to see more activities going on at the trail.”

“I would suggest a twice-yearly volunteer trail maintenance project. Many of the habitual users of the trail would be willing to spend a weekend or two to repair and maintain.”

“I think the trail systems are an excellent way to get exercise and be outdoors in nature. I wish the trail system would expand [10-times] it size. I would be happy to support the effort with some time or money. The trails represent my “Health Club” and a way to enjoy the outdoors. I appreciate appropriate businesses along the way like restaurants, retail, Wawa etc.”

“The trail is a wonderful asset to the area—I love that it highlights the Perkiomen Corridor and showcases its natural assets. I value it as a non-road alternative for running errands in town, as well.”

“I walk two miles to Spring Mt. almost every day—and enjoy the beauty, the wildlife and birds, the quietness and solitude of the trail. Thanks for making it happen and for maintaining it.”

“I bought my house in this area because of the trail.”
2008 Survey Results

Question 1.
What is your ZIP Code?
- 75.7% Montgomery County, PA
- 8.8% Chester County, PA
- 3.0% Berks County, PA
- 2.2% Lehigh County, PA
- 2.0% Bucks County, PA
- 1.1% Philadelphia County, PA
- 1.7% All other PA Counties
- 1.9% All other states

Question 2.
How did you get to the trail?
- 68.5% Drive
- 18.2% Bike
- 8.4% Walk
- 3.7% Run/Jog
- 1.2% Horseback

Question 3.
How often, on average, do you use the trail?
- 4.9% Daily
- 25.1% Between 3 and 5 times a week
- 21.5% 1 or 2 times a week
- 8.4% Once a week
- 17.0% A couple of times a month
- 4.1% Once a month
- 13.6% Few times a year
- 5.4% First time

Question 4.
Please identify your age group.
- 1.7% 15 and under
- 5.1% 16 – 25
- 9.1% 26 – 35
- 19.1% 36 – 45
- 29.4% 46 – 55
- 24.5% 56 – 65
- 11.1% 66 or older
Question 5.
Were any children 15 years of age or younger with you on your trail experience today?

16.7% Yes
83.3% No

Questions 5a.
If yes, please indicate the number of children in each age of the following age groups.

21.6% Under 5
30.1% 5 – 9
48.3% 10 – 15

Question 6.
What is your gender?

55.2% Male
44.8% Female

Questions 7.
What is your primary activity on the trail?

27.8% Walking/hiking
46.8% Biking
11.8% Jogging/running
2.3% Horseback riding
9.1% Walking a pet
2.3% Other

Question 8.
Generally, when do you use the trail?

16.6% Weekdays
26.4% Weekends
57.0% Both

Question 9.
What time of the day do you generally use the trail?

34.9% Morning
24.5% Afternoon
13.0% Evenings
27.6% Anytime

Question 10.
How much time do you generally spend on the trail on each visit?

0.4% Less than 30 minutes
24.1% 30 minutes to 1 hour
48.6% 1 to 2 hours
26.9% More than 2 hours

Question 11.
Would you consider your main use of the trail to be for...

30.4% Recreation
59.8% Health and Exercise
2.1% Commuting
6.0% Fitness Training
1.7% Other

Question 12.
During your visit to the trail, did you...

2.7% Fish
0.5% Canoe
2.0% Kayak
0.3% Tube
32.3% Watch birds
40.7% Watch wildlife
21.5% Study flowers

Question 13.
How did you find out about the trail?

29.9% Word of mouth
8.0% Roadside signage
16.6% Driving past
6.8% Trail brochure at kiosk
7.9% Newspaper
5.3% Bike Shop
0.3% Convention and Visitors Bureau
3.4% Montgomery County Department of Parks and Heritage Services
6.1% Information from Rails-to-Trails Conservancy
4.2% Montgomery County Web site
1.3% Other Web site
10.1% Other
Question 14.
Has your use of the trail influenced your purchase of…?
21.7% Bike
25.5% Bike supplies
4.1% Auto accessories (bike rack, etc.)
15.3% Footwear
14.8% Clothing
18.5% 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 $396.89 (n=433).

Question 16.
In conjunction with your most recent trip to the trail, did you purchase any of the following?
17.8% Beverages
6.1% Candy/snack foods
4.1% Sandwiches
10.1% Ice cream
13.2% Meals at a restaurant along the trail
1.9% Other
46.7% 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 $11.09 (n=259).
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=23)?
13.0% Motel/Hotel
8.7% Bed and Breakfast
17.4% Friend or Relatives Home
43.5% Campground
17.4% Other

Question 19.
How many nights did you stay in conjunction with your visit to the trail?
Average number of nights per stay 4.6.

Question 20.
Approximately how much did you spend on overnight accommodations per night?
Average expenditure per night for those who provided an amount was $56.31 (n=16).

Question 21.
In your opinion, the maintenance of the trail is...
58.7% Excellent
36.9% Good
3.9% Fair
0.4% Poor

Question 22.
In your opinion, the safety and security along the trail is...
36.9% Excellent
50.0% Good
10.8% Fair
2.4% Poor
Question 23.
In your opinion, the cleanliness of the trail is...
61.3% Excellent
33.6% Good
4.2% Fair
0.9% Poor

Question 24.
Would you be willing to pay a voluntary fee to help maintain the trail?
62.8% Yes
37.2% No

Question 25.
Which trail access point do you generally use when you visit the trail?
1.3% Green Lane Borough
9.7% Green Lane Park
8.6% Crusher Road
2.6% Harmon Road
12.3% Spring Mount
5.8% Schwenksville Borough
9.8% Central Perkiomen Valley Park
1.0% Hollywood
5.1% Graterford
5.5% Rahns
9.5% Collegeville
1.1% Cedar Road
10.9% Lower Perkiomen Valley Park
9.8% Pawlings Road
6.9% Other

Question 26:
If you live near the trail and were opposed to its construction has your opinion changed now that the trail has been open for a few years?
42.4% Yes
57.6% No

Question 26a:
If yes, how has your opinion changed?
74.3% Feel more favorable toward the trail
14.3% Feel somewhat more favorable toward the trail
8.6% Feel somewhat less favorable toward the trail
2.9% Feel much less favorable toward the trail
Utilizing Rails-to-Trails Conservancy’s “Trail User Survey Workbook” survey form template as a starting point, the survey form was refined with input from Montgomery County Department of Parks and Heritage Services. The sample was self-selecting; that is trail users could pick-up survey forms that were available at each of the trail’s primary trailheads and trailside businesses and mail them to Rails-to-Trails Conservancy via the provided business reply postage. Survey collection was conducted from the end of April 2008 through the end of October 2008.

For the purpose of this analysis, 694 survey forms were completed.

Because several questions called for multiple responses and some survey respondents did not answer all of the questions, the percentages presented in this analysis are based upon the total number of responses to each individual question, not the 694 usable surveys.

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

For the purpose of this analysis, the data from the Perkiomen Rail Trail User Survey will be compared with data collected in a 2007 survey on the Heritage Rail Trail County Park in York County, Pa., and a 2004 survey conducted on the Torrey C. Brown Rail Trail (formerly the Northern Central Rail Trail) in Baltimore County, Md. The data-collection methodology and the survey questions from the Heritage Rail Trail and Torrey C. Brown Rail Trail surveys are in most cases identical to those in the Perkiomen Rail survey.

The Heritage Rail Trail is part of the York County Park system and runs for 21 miles from the Maryland state line to York, Pa. The trail passes through small boroughs and agricultural areas before reaching the more populated areas around the city.

The 22-mile Torrey C. Brown trail is a unit within Maryland Department of Natural Resources’ Gunpowder Falls State Park. The trail begins in Cockeysville, Md., just a few miles outside of the Baltimore beltway and extends through suburbs, small towns, rural residential developments and undeveloped park land to the Pennsylvania state line.
In all three studies, the vast majority of trail users are over the age of 45. The survey respondents to the Perkiomen Trail study are slightly younger than the respondents to the Heritage Rail Trail and the Torrey C. Brown Rail Trail. Beyond the three studies, the age profile is consistent with what has been learned from other studies across the country.
The distribution of primary trail activities on the three trails represented in the graph indicates that the Perkiomen Trail is used somewhat differently than the other two trails in this comparative analysis. There are more users walking on the Perkiomen Trail and fewer users cycling than on the Heritage Rail Trail or Torrey C. Brown Rail Trail. Activities included in the “Other” category vary from trail to trail. For the Perkiomen Trail, the inclusion of “Walking a pet” was selected as the primary trail activity by more than 9 percent of the respondents. This was not an option in the other two studies.

What’s your primary activity?

Comparison
A considerably higher percentage of Perkiomen Trail users spend less than two hours on the trail than is the case for the users of the Heritage Trail or Torrey C. Brown Rail Trail. These three trails are all about the same length: Perkiomen Trail—19.5 miles; Heritage Rail Trail—21 miles; Torrey C. Brown Trail—22 miles. The length of time spent on the trail may be more of a function of the activity than the length of the trail. Along the Perkiomen Trail an early morning walk, a stroll after dinner or walking the dog are common activities where less than two hours would be sufficient for a pleasant experience.

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

Comparison
A much lower percentage of the users of the Perkiomen Trail purchased “soft goods,” which, for the purpose of this survey, included items such as snacks, water, ice cream and meals. As with the amount of time spent on the trail, spending on these types of items may be more a function of the type of trail activity. It would appear that the Perkiomen Trail is used primarily by local residents for short walks, bike rides or pet walks as a way of getting some healthy exercise.

In conjunction with your trail visits, did you purchase any “soft goods?”

Comparison
Spending on soft goods is pretty consistent across the three trails. It is a little lower on the Torrey C. Brown Rail Trail but this survey is four years old and there are few opportunities to purchase goods along that trail which runs through state park land and suburban residential areas. Also, nearly half of the Perkiomen Trail users do not purchase “soft goods” during their trail outing.
In the case of all three studies, use of the rail-trail has influenced a “hard goods” purchase by more than 80 percent of the respondents. For the purpose of the three studies, “hard goods” included bikes, bike supplies, auto accessories (bike racks, etc.) footwear and clothing.

Has your use of the trail influenced your purchase of any “hard goods” during the past year?

Comparison
The amount that the respondents reported spending on “hard goods” across all three studies is remarkably similar. The variation is less than $65, and the Torrey C. Brown Rail Trail study data is four years older than the Perkiomen Trail data. The median household income in Montgomery County, Pa., is also considerable higher than in York County, Pa., or Baltimore County, Md. More than 60 percent of the Perkiomen Trail User Survey respondents provided a dollar amount of expenditures.
Perkiomen Trail User Estimates

From mid-August through late-November 2008, Rails-to-Trails Conservancy placed three infrared counters along the Perkiomen Trail. The counters were placed at the following locations: just north of the intersection of the Perkiomen Trail and Cider Mill Road; at the south end of Central Perkiomen Valley Park off of Plank Road; just south of the Crusher Road trailhead. The counters were approximately 7.5 miles apart. During the course of the data collection period, 62,554 hits were recorded on the counters. The daily output reports generated by the counter software can be found in Appendix A. These reports reflect the assumption that all users were out-and-back and thus passed a counter twice, so the actual number of hits on the counters is divided by two in each of the reports.

For the purpose of creating this estimate, the data collected by the counters during September and October was subjected to a thorough analysis. This analysis is based upon methodologies used previously to make estimates of trail-user volume.

The following are the set of assumptions made in order to account for users who may not have passed one of the counters or may have passed multiple counters. These assumptions result in an estimate of all unique trail users during the time period under consideration.

**Assumptions:**

- Infrared trail counters were positioned approximately 7.5 miles apart therefore, only trail users who were out-and-back and thus passed a counter twice, so the actual number of hits on the counters is divided by two in each of the reports.

- All trips were out-and-back, meaning each unique user passed a counter twice.

- The distribution of usage across the full year is unknown; therefore distribution examples from secondary sources have been employed to obtain an annual user estimate.

- For the purpose of estimating annual trail user visits, the data from September 1 through September 30 and October 1 through October 31 were used to establish a base estimate.

- The following table represents the estimate of the annual number of user visits based upon the average distribution of recreational facility users over a twelve-month period.
### Perkiomen Trail User Visit Projections 2008

<table>
<thead>
<tr>
<th>Month</th>
<th>Average Distribution of Trail Visitation*</th>
<th>Monthly Estimate of Perkiomen Trail Users</th>
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<tr>
<td>January</td>
<td>.03</td>
<td>11,934</td>
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<tr>
<td>February</td>
<td>.033</td>
<td>13,128</td>
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<td>March</td>
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<td>Total</td>
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</tbody>
</table>

*Average Distribution of Trail Visitation — The percentages represent the average monthly distribution of trail users from studies conducted on seven different parks and trails in the United States.*
The economic impact of the Perkiomen Trail is comprised of a number of elements. From the survey, the percentage of respondents that 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 what 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 also an important aspect for determining the economic impact.

Very few of the respondents to the Perkiomen Trail User Survey indicated that an overnight stay was part of their trail experience. Of the 694 completed survey forms, only 23 indicated an overnight stay. At a respondent rate of a little over 3 percent, there is insufficient data to include this category of spending in the economic impact analysis.

Estimates of the overall economic impact of the Perkiomen Trail are presented in the form of a table representing a range of annual usage estimates.

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike</td>
<td>21.7%</td>
</tr>
<tr>
<td>Bike supplies</td>
<td>25.5%</td>
</tr>
<tr>
<td>Auto accessories</td>
<td>4.1%</td>
</tr>
<tr>
<td>Running/walking/hiking shoes</td>
<td>15.3%</td>
</tr>
<tr>
<td>Clothing</td>
<td>14.8%</td>
</tr>
<tr>
<td>Nothing</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

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

| Average hard goods purchase | $396.89* |

*This average is influenced by the purchase of some bicycles costing as much as $3,000 each.

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages</td>
<td>17.8%</td>
</tr>
<tr>
<td>Candy/snack foods</td>
<td>6.1%</td>
</tr>
<tr>
<td>Sandwiches</td>
<td>4.1%</td>
</tr>
<tr>
<td>Ice cream</td>
<td>10.1%</td>
</tr>
<tr>
<td>Meals at a restaurant along the trail</td>
<td>13.2%</td>
</tr>
<tr>
<td>Other</td>
<td>1.9%</td>
</tr>
<tr>
<td>None of these</td>
<td>46.7%</td>
</tr>
</tbody>
</table>

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

| Average soft goods purchase | $11.09* |

*The average amount spent per person, per trip.
The following chart takes the data provided above and extrapolates the purchases over a range of annual usage. 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 trip basis by users.

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
<th>Usage Avg. $</th>
<th>Avg. Life</th>
<th>Annual Users</th>
<th>350,000</th>
<th>400,000</th>
<th>450,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Goods</td>
<td>81.5%</td>
<td>$396.89</td>
<td>6 years</td>
<td>$2,837,415</td>
<td>$3,242,760</td>
<td>$3,648,105</td>
<td></td>
</tr>
<tr>
<td>Soft Goods</td>
<td>53.3%</td>
<td>$11.09</td>
<td></td>
<td>$2,068,840</td>
<td>$2,364,388</td>
<td>$2,659,937</td>
<td></td>
</tr>
</tbody>
</table>

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

In the above example the calculation would look like this:

\[
\left(0.815 \times \left(\frac{396.89}{6}\right)\right) \times \left(\frac{350,000}{6.65}\right) = 2,837,415
\]

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

In the above example the calculation would look like this:

\[
0.533 \times 11.09 \times 350,000 = 2,068,840
\]

*Major “hard good” purchases such as a bike may be replaced every 5 to 10 years. Running shoes may be replaced every couple of months. For the purpose of this analysis it is assumed an average life of 6 years.

To get a figure that is usable on an annual user basis, the hard goods needs 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.
Total construction costs for the Perkiomen Trail were $8.5 million. Of this amount, $2 million was for the rehabilitation of three bridges across the Perkiomen Creek.

Routine maintenance cost for the Perkiomen Trail averages to about $45,000 per year.
One of the most important aspects of the trail user survey is that it allows the trails management organization to receive feedback, both positive and negative, from trail users. The 2008 Perkiomen Trail User Survey can serve as a benchmark upon which future maintenance, security and cleanliness issues can be compared.

According to the respondents to this survey the Perkiomen Trail is extremely well maintained. This high standard will represent a challenge to the Montgomery County Department of Parks and Heritage Service as the trail ages. The Heritage Trail in York County is maintained by the York County Department of Parks and the Torrey C. Brown Rail Trail is maintained by the Maryland Department of Natural Resources.
The feeling of security that trail users have is influenced by the presence of other trail users, visual observation of rangers, familiarity with the trail, and the user's general perception of the safety of their overall environment. From the chart it appears that the survey respondents to the Perkiomen Trail User Survey feel somewhat less safe than users of the Heritage Rail Trail and the Torrey C. Brown Rail Trail.

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

Comparison
Survey respondents rate the cleanliness of the Perkiomen Trail very high. This 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 as they should have been. The decision to make the trail a “pack out what you pack in” facility has resulted in a much cleaner environment. This statement also applies to the Heritage Trail and the Torrey C. Brown Rail Trail.
At the end of the survey form, respondents were encouraged to add any additional comments regarding their experience on the Perkiomen Trail. More than 330 comments were recorded. A review of the comments revealed they could be generally grouped into seven different categories. The following table presents a summary of the categorized comments:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliments</td>
<td>52%</td>
<td>Love the trail, good use of tax dollars, why we moved here</td>
</tr>
<tr>
<td>Complaints</td>
<td>19%</td>
<td>Horse manure on trail, fast moving bikes, standing water</td>
</tr>
<tr>
<td>Amenities</td>
<td>11%</td>
<td>Port-A-Pots, water fountains, interpretive signage</td>
</tr>
<tr>
<td>Paving Trail Surface</td>
<td>7%</td>
<td>Pave the entire trail, pave additional sections south</td>
</tr>
<tr>
<td>Extensions/Connections</td>
<td>5%</td>
<td>Extend trail north, connect to neighborhoods</td>
</tr>
<tr>
<td>Security</td>
<td>3%</td>
<td>More ranger patrols, higher visibility of rangers</td>
</tr>
<tr>
<td>Enforcement</td>
<td>3%</td>
<td>Leash laws, clean-up after horses and dogs</td>
</tr>
</tbody>
</table>
TRAFx REPORT:
Counter #1 - Cider Mill Road Intersection

Project:  Start:  2008-08-14  Location:

Total Counts:  9947  Daily Mean Weekday:  65.9  Total (1) :  9947
Total Periods:  104  Daily Mean Weekend:  169.0  Total (2) :  0
Period Length:  1 day  Percentage (1) :  100.0
Mean:  95.6  Percentage (2) :  0.0
Mode:  86.0  Mean Monday:  87.1  Mean (1) :  95.6
Median:  69.0  Mean Tuesday:  57.7  Mean (2) :  0.0
Standard Deviation:  82.4  Mean Wednesday:  70.7  Max/Min (1) :  421 / 6
Maximum:  421  Mean Thursday:  57.6  Max/Min (2) :  0 / 0
Minimum:  6  Mean Friday:  56.4  Total Weekday:  4876
Total Weekend:  5071
Daily Max/Min Weekday:  421 / 6  Daily Max/Min Weekend:  350 / 28

TRAFx REPORT:
Counter #2 Central Perkiomen Valley Park

Project:   Start: 2008-08-14
Counter:   MergedMasterFile   Location:
Finish: 2008-11-25

Comment:  Divide by 2 applied.

Total Counts: 13336
Total Periods: 104
Period Length: 1 day
Mean: 128.2
Mode: 56.0
Median: 99.5
Standard Deviation: 95.6
Maximum: 452
Minimum: 4

Daily Mean Weekday: 95.6  Total (1) : 13336
Daily Mean Weekend: 208.7  Total (2) : 0
Mean Monday 109.4  Percentage (1) : 100.0
Mean Tuesday 90.5  Percentage (2) : 0.0
Mean Wednesday 108.5  Mean (1) : 128.2
Mean Thursday 84.3  Mean (2) : 0.0
Mean Friday 86.5  Max/Min (1) : 452 / 4
Mean Saturday 174.9  Max/Min (2) : 0 / 0
Mean Sunday 242.6

Total Weekday: 7076
Total Weekend: 6260
Daily Max/Min Weekday: 428 / 4
Daily Max/Min Weekend: 452 / 30

FIVE PEAK PERIODS: 2008-10-12 (452), 2008-09-01 (428), 2008-09-21 (375), 2008-08-31 (335), 2008-10-11 (332)
### TRAFx REPORT:

**Counter #3 South of Crusher Road Trailhead**

**Project:** Start: 2008-08-14  
**Counter:** MergedMasterFile  
**Finish:** 2008-11-25  
**Location:**  
**Comment:** Divide by 2 applied.

<table>
<thead>
<tr>
<th>Total Counts:</th>
<th>7994</th>
<th>Daily Mean Weekday:</th>
<th>53.9</th>
<th>Total (1): 7994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Periods:</td>
<td>104</td>
<td>Daily Mean Weekend:</td>
<td>133.6</td>
<td>Total (2): 0</td>
</tr>
<tr>
<td>Period Length:</td>
<td>1 day</td>
<td>Mean Monday:</td>
<td>69.8</td>
<td>Percentage (1): 100.0</td>
</tr>
<tr>
<td>Mean:</td>
<td>76.9</td>
<td>Mean Tuesday:</td>
<td>48.2</td>
<td>Percentage (2): 0.0</td>
</tr>
<tr>
<td>Mode:</td>
<td>22.0</td>
<td>Mean Wednesday:</td>
<td>59.3</td>
<td>Mean (1): 76.9</td>
</tr>
<tr>
<td>Median:</td>
<td>64.0</td>
<td>Mean Thursday:</td>
<td>45.2</td>
<td>Mean (2): 0.0</td>
</tr>
<tr>
<td>Standard Deviation:</td>
<td>68.8</td>
<td>Mean Friday:</td>
<td>47.2</td>
<td>Max/Min (1): 313 / 2</td>
</tr>
<tr>
<td>Maximum:</td>
<td>313</td>
<td>Mean Saturday:</td>
<td>91.5</td>
<td>Max/Min (2): 0 / 0</td>
</tr>
<tr>
<td>Minimum:</td>
<td>2</td>
<td>Mean Sunday:</td>
<td>175.6</td>
<td></td>
</tr>
<tr>
<td>Total Weekday:</td>
<td>3986</td>
<td>Daily Max/Min Weekday:</td>
<td>313 / 2</td>
<td></td>
</tr>
<tr>
<td>Total Weekend:</td>
<td>4008</td>
<td>Daily Max/Min Weekend:</td>
<td>311 / 10</td>
<td></td>
</tr>
</tbody>
</table>

**FIVE PEAK PERIODS:** 2008-09-01 (313), 2008-10-12 (311), 2008-09-07 (260), 2008-08-17 (240), 2008-09-21 (238)