Special thanks to Debra Frawley, greenways coordinator for Venango, Clarion and Crawford Counties, for assisting with the data collection and research outlined in this report.

This report was financed in part by a grant from the Community Conservation Partnerships Program, Environmental Stewardship Fund, under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

Very special thanks to the late Jim Holden, president of the Council on Greenways and Trails (a coalition of 14 municipalities and nonprofit groups) and founding president of the Erie to Pittsburgh Trail Alliance.
Erie to Pittsburgh Trail
(Between Titusville and Parker, Pa.)
2013 User Survey and Economic Impact Analysis

Patricia Tomes, Program Manager
Carl Knoch, Manager of Trail Development

Northeast Regional Office
Rails-to-Trails Conservancy

January 2014

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

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

railstotrails.org
TrailLink.com
In 2013, Rails-to-Trails Conservancy (RTC) conducted a study of six connected trails (the Trails) that make up the central leg of the developing 270-mile Erie to Pittsburgh Trail (EPT) and are located in northwest Pennsylvania.

The Trails are connected by geography, history and marketing. Owned, operated and maintained by several trail organizations and municipalities, the Trails are also promoted by the Oil Region Alliance of Business, Industry and Tourism, an economic development and tourism promotion agency that also administers the designated Oil Region National Heritage Area.

Together, these trails, located in and adjacent to the Oil Heritage Region of Pennsylvania, represent more than 66 miles of continuous multi-modal corridor. The six trails surveyed are as follows:

- Queen City Trail (1.4 mi)
- Oil Creek State Park Trail (9.7 mi)
- McClintock Trail (3.7 mi)
- Samuel Justus Recreation Trail (5.8 mi)
- Allegheny River Trail (34.2 mi)
- Sandy Creek Trail (12 mi)

An analysis of the data accumulated from infrared counters located along the Trails and paper surveys received from users indicates an estimated 158,507 annual user visits to the combined Trails, resulting in a total economic impact in 2013 of $7,479,348 ($6,928,620 directly into the local economy).

This study utilized a survey methodology previously tested on Pennsylvania trails and documented in RTC’s Trail User Survey Workbook available on the RTC Trail-Building ToolBox (railstotrails.org/resources/documents/resource_docs/UserSurveyMethodology.pdf).

This survey was designed specifically to monitor trail-user characteristics and economic impact.

Five of the trails are directly connected (at grade), forming one continuous route from Titusville in the north to Parker, Pa., in the south. A sixth trail, Sandy Creek Trail, runs east to west and crosses the Allegheny River Trail high above grade via the Belmar Bridge. The trail provides direct access to the 1,385-foot railroad trestle that spans the Allegheny
River and affords visitors spectacular views of the river valley. A physical connection to the north-south route of the Allegheny River Trail is provided via a staircase and side ramp for bicycles.

Survey forms were available at 14 locations along the trails and were also made available during special community events. More than 1,700 surveys were distributed between May and October of 2013. A total of 455 surveys were received and tabulated.

The majority of survey respondents (89.8 percent) are from Pennsylvania, with residents representing 25 mostly regional counties. Local survey respondents included individuals from Venango County (27.1 percent), Butler County (12.2 percent), Allegheny County (11.1 percent), Clarion County (10.6 percent) and Crawford County (9.1 percent).

Close to one quarter of the respondents (24.2 percent) are less than 45 years of age. The predominant age range of the respondents is 56 to 65 (34.4 percent), and less than 15 percent reported having young children with them on the trail. The gender split among the survey respondents was 46.6 percent female and 53.4 percent male.

The trails are used by individuals who are biking (51.8 percent) and walking (27.8 percent) for reasons of health (54.5 percent) or recreation (42.8 percent). The top activities include jogging (6.4 percent), fishing (3.7 percent) and geocaching (2.7 percent).

Most respondents to the survey indicated that they learned of the trail through word of mouth rather than any direct marketing. Just slightly more than 20 percent credited tourist promotion and websites for their introduction to the trail.

Seven questions regarding expenditures while visiting the trail were included on the survey form. The term “hard goods” is used to describe durable items such as bicycles, clothing and accessories, while “soft goods” is applied to non-durable items such as food and drinks.

In 2013, more than 87 percent of the survey respondents reported spending an average of $337.50 on hard goods because of their use of the trail.

Soft goods purchases were reported by 76.8 percent of respondents, for an average dollar amount of $21.62 per visit. These purchases are reported to have been made in conjunction with their trail visit.

Overnight lodging is the third element used to determine an overall economic impact. Of the survey respondents, 13 percent reported paying for overnight lodging in the area, with an average stay of 2.6 nights.

A 2006 study* conducted by the Oil Region Alliance and Allegheny Valley Trails Association estimated that approximately 160,792 users frequented the trail system within the Oil Heritage Region throughout the 2006 calendar year. That survey covered a slightly broader geographic area and included specific costs such as gas expenditures and boat rentals, which are not included in this survey of trail users. However, a general comparison of the two surveys can be made that demonstrates a clear increase in the level of economic impact to the area being contributed by trail users. Compared to the 2006 results, the 2013 survey confirms an annual increase in the trails’ total economic impact of more than $3 million.

* www.avta-trails.org/AVTA-Study-2006.html
Original settlements by the Seneca Indians were built throughout the Allegheny River Valley as early as the 1600s. In 1753, at the start of the French and Indian War, ownership of the land was contested among the French, the Native Americans and the British. The French built Fort Mauchault at the Confluence of French Creek and the Allegheny River in the area that is now Franklin, Pa. At the start of the French and Indian War, it is believed that more than a thousand French and Canadian soldiers with an additional thousand Indians mustered out of Fort Mauchault. As the war was ending and negotiations over land ownership were taking place, the Commonwealth of Pennsylvania awarded land—including what is now Oil City—to Chief Cornplanter of the Iroquois Nation. In 1759, at the end of the French and Indian War, Fort Mauchault was burned to the ground by the French. Fort Franklin was built at the location in 1787 and eventually developed into the town of Franklin, platted in 1795 and incorporated in 1828.

Oil City is located 10 miles northeast of Franklin at the confluence of Oil Creek and the Allegheny River. Early French maps used the label Oyl Creek due to the natural seeps and oil springs along the waterway. Quantities of oil were discovered near Titusville in the Oil Creek Valley in 1859 by Colonel Edwin Drake and William Smith. Almost overnight, towns such as Miller Farm, Pioneer and Petroleum Center blossomed as opportunists rushed to get rich from the “Great Oil Dorado.” The significance of this achievement was not the discovery of oil in western Pennsylvania but rather Colonel Drake’s design for the casing, pump and derrick, which allowed for the commercial production of oil. Up until that time, oil was considered more of a nuisance by-product to salt mining. It wasn’t long after Drake’s announcement of a feasible method for producing commercial quantities of oil that the Allegheny Valley Railroad was extended to Oil City (1868) and connected the oil fields to Pittsburgh, Pa. Prior to that, river barges and steamboats were
the primary means of transporting the wooden barrels of crude petroleum from Oil Creek to the Allegheny River in Franklin and on to Pittsburgh and the Ohio River Valley.

The oil supply in northwestern Pennsylvania became the foundation for the lubricating oils produced by companies such as Pennzoil (Standard Oil Company), Quaker State and Wolf’s Head Oil, all of which had headquarters located in Oil City.

The Allegheny Valley Railroad operated as an independent company until 1910, when it was purchased by the Pennsylvania Railroad. Through a series of mergers, it became part of the Pennsylvania Railroad system in 1900 and fell into disuse in 1945.

*Source material—Oil Region Alliance of Business, Industry and Tourism: www.oilregion.org, and Franklin, Pa.: www.franklinpa.gov*
Location Analysis

The 66 miles of paved trail located on the Erie to Pittsburgh Trail between Titusville and Parker are mostly rail-trail but also use short segments of on-road and other designed connections to create one continuous route. The coverage of this report begins in Titusville, Pa., with the Queen City Trail, a paved community trail. The short (1.4 mile) trail meanders along the edge of town and provides a connection for a senior care facility, private residences, and the popular Drake Well Museum and Oil Creek State Park. The Museum provides interpretive exhibits and working models of the oil derricks that surrounded the valley in the mid-to-late 19th century. Oil Creek State Park, encompassing 7,000 square miles, is bisected north to south by Oil Creek, a 47-mile tributary of the Allegheny River. The state park has 52 miles of hiking trails with camping shelters and 11 miles of cross-country ski trails. The Oil Creek & Titusville excursion train, known locally as the OC & T, runs through the park on a seasonal basis. From Drake Well to Rynd Farm at the southern end of the park, the trail parallels Oil Creek.

The McClintock Trail connects the state park with the next town along the trail system, Oil City. The trail has two segments: one that shares a township road for two miles and a second segment that is off road and adjacent to an active railroad. The Oil Region Alliance of Business, Industry and Tourism has developed the rail-with-trail section of the McClintock Trail, completing the connection between downtown Oil City and Oil Creek State Park.

Continuing south, the Samuel Justus Trail provides the connection between the towns of Oil City and Franklin. This trail was built on the corridor used by the Allegheny Valley Railroad and parallels the Allegheny River to the confluence with French Creek and the town of Franklin.

From Franklin and continuing south, the Allegheny River Trail provides 34.2 miles of continuous paved trail. The trail hugs the high bank on the east side of the Allegheny River and is mostly tree covered. Many private summer cabins as well as year round homes dot the steep hillsides and have been congregated into Summer Camps, which are tiny communities of several homes along the river’s edge. The Allegheny River Trail travels through two very distinct tunnels built by the railroad in the 1800s.

The Sandy Creek Trail is isolated from residential or retail areas, providing a true wilderness experience. The paved trail is distinctive because it runs east to west, high above the Allegheny River at the town of Belmar. The Belmar Bridge, built in 1907 to haul coal trains, is a 1,385 foot railroad truss bridge that has been decked for walking and bicycling across the Allegheny River.
Map of Erie to Pittsburgh Trail
(Between Titusville and Parker, Pa.)
Regional Demographics

Oil Region Trails, 2012 U.S. Census Estimates*

<table>
<thead>
<tr>
<th></th>
<th>Crawford County</th>
<th>Venango County</th>
<th>Clarion County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, 2012 Estimate</td>
<td>87,598</td>
<td>54,272</td>
<td>39,646</td>
</tr>
<tr>
<td>Median Household Income (2008–2012)</td>
<td>$41,664</td>
<td>$41,814</td>
<td>$43,059</td>
</tr>
<tr>
<td>Persons Per Household (2008–2012)</td>
<td>2.41</td>
<td>2.38</td>
<td>2.43</td>
</tr>
<tr>
<td>Population Density Per Square Mile (2012)</td>
<td>87.7</td>
<td>81.5</td>
<td>66.6</td>
</tr>
</tbody>
</table>

Projected Population Growth by County**

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crawford County</td>
<td>89,281</td>
<td>89,515</td>
<td>90,088</td>
</tr>
<tr>
<td>Venango County</td>
<td>55,182</td>
<td>52,844</td>
<td>50,205</td>
</tr>
<tr>
<td>Clarion County</td>
<td>39,662</td>
<td>38,726</td>
<td>37,895</td>
</tr>
</tbody>
</table>

*Source: U.S. Census QuickFacts 2012
**Source: Pennsylvania State Data Center, County Population Projections, 2000–2030
2013 Survey Results –
Erie to Pittsburgh Trail (Titusville to Parker, Pa.)
Question 1
What is your ZIP code?

- 70.1% Pennsylvania (Venango County 27.1%; Butler County 12.2%; Allegheny County 11.1%; Clarion County 10.6%; Crawford County 9.1%)
- 19.7% 20 other Pennsylvania counties
- 6.2% Ohio
- 4.0% 13 other states

Question 2
How often, on average, do you use the trail?

- 24.4% A Few times a year
- 17.6% A couple times a month
- 16.9% More than twice a week
- 10.8% Twice a week
- 10.3% First time
- 8.8% Once a week
- 6.6% Daily
- 4.6% Once a month

Question 3
Please identify your age group.

- 34.4% 56–65
- 22.7% 46–55
- 18.7% 66 or older
- 9.4% 36–45
- 8.5% 26–35
- 4.8% 16–25
- 1.5% 15 and under

Question 4
Were any children 15 years of age or younger with you on your trail experience today?

- 14.9% Yes
- 85.1% No

Question 5
What is your gender?

- 53.4% Male
- 46.6% Female

Questions 6
What is your primary activity on the trail?

- 51.8% Biking
- 27.8% Walking/hiking
- 6.4% Jogging/running
- 3.7% Fishing
- 2.7% Geocaching
- 1.4% Cross-country skiing/snowshoeing
- 1.0% Dog walking
- 0.4% Horseback riding
- 0.4% Skating
- 4.6% Other: Hunting, photography, swimming

Question 7
Has the trail had an influence on the type or frequency of activity you participate in?

- 82.2% Yes
- 17.8% No

Question 8
Generally, when do you use the trail?

- 21.6% Weekdays
- 20.3% Weekends
- 58.2% Both

Question 9
How much time do you generally spend on the trail each visit?

- 1.3% Less than 30 minutes
- 15.3% 30 minutes to 1 hour
- 42.5% 1 to 2 hours
- 40.7% More than 2 hours

Question 10
Would you consider your main use of the trail to be for...

- 54.5% Health and exercise
- 42.8% Recreation
- 1.2% Commuting
- 1.0% Event training
- 0.2% Walk to school
- 0.4% Other
Question 11
During your visit to the trail, did you…?

- 39.8% Watch wildlife
- 22.8% Bird watch
- 16.8% Study wildflowers
- 4.0% Fish
- 3.5% Geocache
- 1.8% Go boating
- 1.5% Go hunting
- 9.8% Other

Question 12
How did you find out about the trail?

- 39.7% Word of mouth
- 9.1% Driving past
- 8.0% Roadside signage
- 7.1% Local brochure
- 6.0% Newspaper
- 5.2% Traillink.com
- 3.9% explorePAtrails.com
- 3.6% Bike shop
- 2.8% Tourist bureau
- 1.4% Other website
- 13.2% Other: (A majority live or have a camp in the area.)

Question 13
Has your use of the trail influenced your purchase of…?

- 27.6% Bike supplies
- 22.9% Bicycle
- 15.8% Clothing
- 14.6% Footwear
- 12.9% Nothing
- 6.3% Auto accessories (bike rack, etc.)

Question 14
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 $337.50 (n = 313).

Question 15
In conjunction with your most recent trip to the trail, did you purchase any of the following?

- 23.4% Beverages
- 20.5% Meals at a restaurant along the trail
- 13.1% Candy/snack foods
- 8.5% Ice cream
- 7.0% Sandwiches
- 4.1% Other
- 0.1% Bike rental
- 23.3% None of these

Question 16
Approximately how much did you spend per person on the items above?

The average spent per trip for those who indicated they had made a purchase and provided a dollar amount was $21.62 (n = 271).

Note: This is an average amount spent per person, per trip.

Question 17
Did your visit to the trail involve an overnight stay in one of the following types of accommodations? (n = 112) (24.6% of the total respondents)

- 26.8% Friend or relative’s home
- 25.9% Motel/hotel
- 17.9% Campground
- 2.7% Bed-and-breakfast
- 26.8% Other: (Private vacation camp)

Question 18
How many nights did you stay in conjunction with your visit to the trail?

Average number of nights per stay: 2.6

Question 19
Approximately how much did you spend on overnight accommodations per night?

Average expenditure per night for those who provided an amount was $80.20 (n = 51).
Question 20
In your opinion, the maintenance of the trail is...
50.4% Excellent
41.7% Good
6.6% Fair
1.3% Poor

Question 21
In your opinion, the safety and security along the trail is...
36.4% Excellent
52.9% Good
8.3% Fair
2.5% Poor

Question 22
In your opinion, the cleanliness of the trail is...
51.8% Excellent
40.7% Good
7.1% Fair
0.4% Poor

Question 23
Are you aware of the Erie to Pittsburgh Trail project?
51.7% Yes
48.3% No

Question 24
Which portion of the trail do you use most often?
23.2% Franklin to Belmar
22.6% Rockland to Emlenton
22.9% Belmar to Van
17.9% Drake Well to Petroleum Centre
15.6% Foxburg to Parker
14.1% Kennerdell to Rockland
12.9% Belmar to Fisherman’s Cove
9.5% Titusville to Drake Well
9.4% Brandon to Kennerdell
7.7% Franklin to Drake Well
6.0% Rynd Farm to Oil City
1.1% Other

Question 25
Which trail access point do you generally use when you visit the trail?
24.5% Franklin
21.3% Emlenton
14.1% Oil City
13.0% Belmar
12.5% Petroleum Centre
12.5% Rockland
11.9% Foxburg
8.3% Titusville
7.7% Parker
7.5% Van
3.7% Jersey Bridge
3.0% Miller Farm
2.4% Brandon
1.0% Rynd Farm
0.8% McClintock Well #1
4.8% Other
ZIP CODE MAP for Erie to Pittsburgh Trail Survey Respondents

Distribution of the user survey respondents based on ZIP code. Respondents to the survey represented 14 states, and 89.6 percent of the respondents were from Pennsylvania.
Utilizing RTC’s Trail User Survey Workbook template as a starting point, the survey form was refined with input from the staff and volunteers of the Council on Greenways and Trails, Oil Region Alliance and Allegheny Valley Trails Association. The sample was self-selecting, meaning trail users could pick up survey forms that were available at each of the trail’s primary trailheads between Titusville, Pa., and Parker, Pa. The survey forms were folded into a postage-paid self-mailer that was addressed to Rails-to-Trails Conservancy, Washington, D.C. office.

The survey collection was conducted from the end of May 2013 to the end of October 2013. Approximately 1,700 survey forms were distributed, and 455 completed forms were received and tabulated.

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

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

For the purpose of this analysis, the data from the 2013 respondents’ surveys has been compared with data collected in the 2012 survey of the D & L Trail* in eastern Pennsylvania. Like the trails between Titusville and Parker, the D & L Trail also anchors a National Heritage Area. The 2012 D & L Trail Survey separated the collected data into three distinct regions. The “North” region of the 165-mile D & L Trail is not unlike the trails included in this reach of the Erie to Pittsburgh Trail. Both areas are anchored by large state parks with additional connections to hiking and mountain-bike trails, both areas bisect areas originally developed by industry for harvesting of natural resources, and both areas are reliant on public-private partnerships for continued development and maintenance of the trails. The north section of the D & L Trail is approximately 55 miles long, and while it does pass through rural areas, the population is more than twice the density of the area surrounding the trails between Titusville and Parker, Pa.

*www.railstotrails.org/resources/documents/wherewework/northeast/dl_trailusersurvey.pdf
Comparative Analysis

As with most rail-trails surveyed, this section of the Erie to Pittsburgh Trail appears to have a majority of users over age 45. Since this was not an intercept survey, there is the possibility that the majority age reflected in these results may be influenced by people who are most likely to fill out a paper survey; however, visual observations of users made during the course of the survey support the figures of an older population being the majority user.

What is your age group?

![Graph showing age distribution]

Comparison among regions

The activities reported are similar in both areas, with the exception of dog walking and geocaching. Less than 1 percent geocache activity was reported on the northern section of the D & L Trail in 2012. Dog walking is likely higher along the D & L Trail than in the trails in the Oil Heritage Area due to the proximity of more residential areas near the trail. At least 22 caches were listed on the Geocache.com website for the trails at the time of this writing. Activities specified in the other category include horseback riding (very limited), photography, hunting and bird watching.

What is your primary activity?

![Graph showing primary activities]

Comparison among regions
National averages for walking speed are 3 miles per hour, with an average bike speed of 10 miles per hour. With speed of travel in mind, a correlation can be seen between the primary activity (bicycling) and the amount of time spent on the trail. More important to the local economic impact is the fact that the more time a user spends on the trail, the more likely they are to spend money on food or lodging in the immediate vicinity. Since the majority of users are on the trails between 1 and 2 hours, we can assume they are walking between 3 and 6 miles or riding a bike between 10 and 20 miles or more. The majority of the D & L Trail’s surface in the north region is crushed stone, while the Erie to Pittsburgh Trail between Titusville and Parker is primarily a paved surface, which does allow for a faster average speed while bicycling.

How much time did you spend on each trail visit?

Comparison among regions

More than 76 percent of the users surveyed reported purchasing some food item in conjunction with their trail use. This could be anything from a single bottle of water or snack bar at a convenience store to a full meal at a local restaurant. The percentage closely resembles the activity seen on the D & L Trail in eastern Pennsylvania and is higher than the purchasing activity found on the Armstrong Trail section of the Erie to Pittsburgh Trail. The higher percentage is indicative of a trail that people travel to get to versus a trail that is near their home.

Number of people who purchased “soft goods”

Comparison among regions
Using data culled from a 2006 user survey of the same trails in the Oil Region National Heritage Area, we were able to extrapolate a per person expenditure on soft goods only. These items include bike rental, snacks and beverages. Gas and lodging expenses are not included in this total. An online inflation calculator (usinflationcalculator.com) equates the 2006 value of $16.16 to $18.68 today, indicating trail users are spending approximately $2.52 more per trip in 2013.
Survey respondents were asked to estimate the amount of expenditures they have made for supply items such as a bicycle, bike or auto accessories, and clothing. A comparable figure was not available from the 2006 Oil Region Survey results. The higher amount reported by the D & L Trail survey respondents may be accounted for by a slightly higher household income* found in the area of the D & L Trail. More than 87 percent of the 2013 survey respondents reported purchasing items, and in 2012, just slightly more than 82 percent of the D & L survey respondents reported making expenditures on these items.

Average $ spent per person on “hard goods”

Comparison among regions

*U.S. Census QuickFacts: $42,179 is the average Median Household Income in 2012 for the three-county region of the Erie to Pittsburgh Trail; $46,718 is the average Median Household Income in the north region of the D & L Trail.
Trail User Estimate

During the summer of 2013, passive infrared counters were placed at 12 locations along the 66 miles of trail between Titusville and Parker, Pa. These counters collect data on the number of trail users passing the counter by detecting each user’s “heat signature.”

In order to develop an annual user estimate for the trails of the Oil Heritage Region, the data collected from mid-May through October was extrapolated to a 12-month estimate using a User Visit Model developed by RTC. This model examines data collected using electronic counters at 95 different locations on rail-trails across the United States.

<table>
<thead>
<tr>
<th>Trail Counter Location</th>
<th>Actual Count (1 month)</th>
<th>Estimated 12-Month Count*</th>
<th>Adjusted for Passing Multiple Counters</th>
<th>Adjusted for Missing Counts</th>
<th>Adjusted for Out-&amp;-Back Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queen City Trail</td>
<td>212</td>
<td>1,637</td>
<td>NA</td>
<td>1,964</td>
<td>1,144</td>
</tr>
<tr>
<td>Drake Well</td>
<td>2,870</td>
<td>22,162</td>
<td>19,942</td>
<td>23,930</td>
<td>13,939</td>
</tr>
<tr>
<td>Oil Creek State Park</td>
<td>653</td>
<td>5,042</td>
<td>4,538</td>
<td>5,446</td>
<td>3,172</td>
</tr>
<tr>
<td>Samuel Justus Trail</td>
<td>5,634</td>
<td>43,506</td>
<td>NA</td>
<td>52,207</td>
<td>30,411</td>
</tr>
<tr>
<td>Allegheny River Trail-Salt Box</td>
<td>5,624</td>
<td>43,436</td>
<td>NA</td>
<td>52,123</td>
<td>30,342</td>
</tr>
<tr>
<td>Allegheny River Trail – Brandon</td>
<td>377</td>
<td>2,911</td>
<td>NA</td>
<td>3,493</td>
<td>2,033</td>
</tr>
<tr>
<td>Allegheny River Trail – Rockland</td>
<td>1,496</td>
<td>11,552</td>
<td>10,397</td>
<td>12,476</td>
<td>7,267</td>
</tr>
<tr>
<td>Allegheny River Trail – Emlenton</td>
<td>4,466</td>
<td>34,486</td>
<td>31,037</td>
<td>37,244</td>
<td>21,694</td>
</tr>
<tr>
<td>Allegheny River Trail – Foxburg</td>
<td>1,252</td>
<td>9,668</td>
<td>8,701</td>
<td>10,441</td>
<td>6,082</td>
</tr>
<tr>
<td>Allegheny River Trail – Parker</td>
<td>2,467</td>
<td>19,050</td>
<td>17,145</td>
<td>20,574</td>
<td>11,984</td>
</tr>
<tr>
<td>Sandy Creek Trail – Rockland</td>
<td>1,951</td>
<td>15,066</td>
<td>NA</td>
<td>18,079</td>
<td>10,524</td>
</tr>
<tr>
<td>Sandy Creek Trail – Belmar</td>
<td>3,692</td>
<td>28,510</td>
<td>NA</td>
<td>34,212</td>
<td>19,915</td>
</tr>
<tr>
<td><strong>Total Estimated Annual Trail User Visits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>158,507*</td>
</tr>
</tbody>
</table>

*Annual estimate developed from actual counter data extrapolated using the RTC User Visit Model.
Economic Impact

Non-Consumable, Hard Goods

The economic impact of the trails in the Erie to Pittsburgh Trail between Titusville and Parker, Pa., comprises several elements. From the survey, the percentage of respondents who have purchased durable goods or “hard goods” (bikes, bike equipment, running/walking shoes, etc.), was determined. Most respondents also indicated how much they spent on these types of purchases during the past 12 months.

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>Bicycle</td>
<td>22.9%</td>
</tr>
<tr>
<td>Bicycle supplies</td>
<td>27.6%</td>
</tr>
<tr>
<td>Auto accessories</td>
<td>6.3%</td>
</tr>
<tr>
<td>Running/walking/hiking shoes</td>
<td>14.6%</td>
</tr>
<tr>
<td>Clothing</td>
<td>15.8%</td>
</tr>
<tr>
<td>Nothing</td>
<td>12.9%</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 $337.50

Consumable, Soft Goods

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

In conjunction with your most recent visit 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>23.4%</td>
</tr>
<tr>
<td>Candy/snack foods</td>
<td>13.1%</td>
</tr>
<tr>
<td>Sandwiches</td>
<td>7.0%</td>
</tr>
<tr>
<td>Ice cream</td>
<td>8.5%</td>
</tr>
<tr>
<td>Meals at a restaurant along the trail</td>
<td>20.5%</td>
</tr>
<tr>
<td>Bike rental</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other</td>
<td>4.1%</td>
</tr>
<tr>
<td>None of these</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

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

Average consumable goods purchase per trip $21.62
Lodging

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

The number of overnights and average amount paid for rooms were determined directly from the 2013 survey responses.

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

<table>
<thead>
<tr>
<th>Type of Accommodation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motel/hotel</td>
<td>25.9%</td>
</tr>
<tr>
<td>Bed-and-breakfast</td>
<td>2.7%</td>
</tr>
<tr>
<td>Friend or relative’s home</td>
<td>26.8%</td>
</tr>
<tr>
<td>Campground</td>
<td>17.9%</td>
</tr>
<tr>
<td>Other</td>
<td>26.8%</td>
</tr>
</tbody>
</table>

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

| Average | 2.6 nights |

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

| Average | $80.20 |

The total number of people who reported paying for an overnight stay was calculated to be 13 percent.
Economic Impact Analysis

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

<table>
<thead>
<tr>
<th>Category</th>
<th>% Usage</th>
<th>Avg. $</th>
<th>Avg. Life</th>
<th>Avg. # of Trips**</th>
<th>Avg. # of Nights</th>
<th>Total Est. Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Goods*</td>
<td>87.1%</td>
<td>$337.50</td>
<td>6 years</td>
<td>14.1</td>
<td></td>
<td>$550,728</td>
</tr>
<tr>
<td>Soft Goods</td>
<td>76.8%</td>
<td>$21.62</td>
<td></td>
<td></td>
<td></td>
<td>$2,631,876</td>
</tr>
<tr>
<td>Lodging</td>
<td>13.0%</td>
<td>$80.20</td>
<td></td>
<td></td>
<td>2.6</td>
<td>$4,296,744</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: ((0.871 x ($337.50 ÷ 6)) x (158,507 ÷ 14.1) = $550,728.

Soft Goods = (% Usage x Users Avg. $ x # Users)
In the above example, the calculation would look like this: (0.768 x $21.62 x 158,507) = $2,631,876.

Overnight Accommodations = (% Usage x User Avg. $ x Avg. # of Nights x # Users)
In the above example, the calculation would look like this: (0.130 x $80.20 x 2.6 x 158,507) = $4,296,744.

*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, we assumed the average life of a “hard good” to be six years. 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.

**This amounts to calculating the average spending on “hard goods” to a per-trip depreciation amount.
Questions about trail maintenance, safety and cleanliness are important to the trail managers and other area stakeholders who work hard to maintain the condition of their trails. Survey respondents also had an opportunity to make open-ended comments about the trail. A total of 455 written comments were received and will be made available to the trail managers along the trails. A general summary of the types of comments made has been included in this report.

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

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

In your opinion, the safety and security along the trail is...
Qualitative Values of the Trails

The following are a sampling of verbatim comments that were taken from the 2013 Oil Region Trails User Survey forms:

It is great to have this trail. I enjoy it so much. I go every possible day…5 miles. I am 82 years old, and it is good exercise. Thanks so much!!!

The Porta Johns in the parking lot are a good idea. Also, I think they need to print lines in the tunnels with reflective paint instead of the reflectors.

Had a great time but would like to see better maps of all the trails and surrounding roads and access points.

Often use trail as stretch point. Often bike other units when we are in the area up here. Very interested in Erie to Pittsburgh stretch, especially through Meadville area!

What a treasure! Sandy Creek was the most beautiful trail we’ve been on. The tunnels were great fun. Thank you!

There need[s] to be restrooms at 8-10 mile intervals.

Would like signs telling what little creek you might be crossing.

The trails and their upkeep are great; thanks to those who were behind the construction and the maintenance.

Wish our trails in New York were as nice as these ones.

Need to clean excess gravel off of trail to Oil City; four wheelers on oil leases throw gravel onto trail as well as cars going too fast.

We hope the trail from Foxburg to Emlenton will soon be complete.

Hope you can open the Emlenton to Foxburg. And the Parker to East Brady trails. Lots of luck.

Thanks for everyone’s efforts to maintain and expand the trails. They have fostered family and conservation values!

Excellent trail; one issue: the pylons are too close together for some recumbent trikes; 6 inches more would make a world of difference.

The trails and their upkeep are great thanks to those who were behind the construction and the maintenance.

Was in the area on business. I ride rail-trails when I travel, when there is one close by. Great trail!
Appendix – Trail Counter Data
TRAFx REPORT:

Project: EPT_North User Count
Start: 2013-06-01
Location: Queen City Trail - Titusville
Counter: QCT S Martin June_Oct2013
Finish: 2013-10-31
Comment: NO Divide by 2

FIVE PEAK PERIODS: 2013-10-05 (169), 2013-10-06 (52), 2013-10-18 (52), 2013-10-21 (52), 2013-08-24 (44)
TRAFx REPORT:

Project: EPT-North
Counter: Drake Well June_Oct2013
Start: 2013-06-01
Finish: 2013-10-31
Location: Drake Well-Titusville
Comment: NO Divide by 2

Total Counts: 17770
Total Periods: 153
Period Length: 1 day
Mean: 116.1
Mode: 116.0
Median: 99.0
Standard Deviation: 81.3
Maximum: 585
Minimum: 6
Total Weekday: 9836
Total Weekend: 7934
Daily Max/Min Weekday: 212 / 6
Daily Max/Min Weekend: 585 / 34

TRAFx REPORT:

Project: EPT_North User Count
Counter: Oil Creek SP June_Oct2013
Start: 2013-06-01
Finish: 2013-06-30
Location: Oil Creek State Park Trail
Comment: NO Divide by 2

Total Counts: 3625
Total Periods: 153
Period Length: 1 day
Mean: 23.7
Mode: 4.0
Median: 17.0
Standard Deviation: 24.2
Maximum: 129
Minimum: 0

Daily Mean Weekday: 16.0
Daily Mean Weekend: 42.8
Mean Monday: 13.5
Mean Tuesday: 15.5
Mean Wednesday: 16.0
Mean Thursday: 13.5
Mean Friday: 21.6
Mean Saturday: 45.4
Mean Sunday: 40.3

Total (1): 3625
Total (2): 0
Percentage (1): 100.0
Percentage (2): 0.0
Mean (1): 23.7
Mean (2): 0.0
Max/Min (1): 129 / 0
Max/Min (2): 0 / 0

Total Weekday: 1741
Total Weekend: 1884
Daily Max/Min Weekday: 94 / 0
Daily Max/Min Weekend: 129 / 0

FIVE PEAK PERIODS: 2013-10-12 (129), 2013-08-25 (100), 2013-09-28 (98), 2013-07-26 (94), 2013-08-04 (94)
### TRAFx REPORT:

**Project:** EPT_North User Count  
**Counter:** Justus Trail June_Oct2013  
**Start:** 2013-06-01  
**Finish:** 2013-10-31  
**Location:** Samuel Justus Trail - Oil City  
**Comment:** No Divide by 2

<table>
<thead>
<tr>
<th>Total Counts</th>
<th>22843</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Periods</td>
<td>153</td>
</tr>
<tr>
<td>Period Length</td>
<td>1 day</td>
</tr>
<tr>
<td>Mean</td>
<td>149.3</td>
</tr>
<tr>
<td>Mode</td>
<td>127.0</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>84.8</td>
</tr>
<tr>
<td>Maximum</td>
<td>744</td>
</tr>
<tr>
<td>Minimum</td>
<td>18</td>
</tr>
</tbody>
</table>

**Daily Mean Weekday:** 138.5  
**Total (1):** 22843  
**Total (2):** 0

**Daily Mean Weekend:** 176.1  
**Percentage (1):** 100.0  
**Percentage (2):** 0.0

**Mean Monday:** 146.2  
**Mean Tuesday:** 150.0  
**Mean Wednesday:** 137.8  
**Mean Thursday:** 131.9  
**Mean Friday:** 126.0  
**Mean Saturday:** 172.1

**Max/Min (1):** 744 / 18  
**Max/Min (2):** 0 / 0

**Total Weekday:** 15093  
**Total Weekend:** 7750

**Daily Max/Min Weekday:** 348 / 29  
**Daily Max/Min Weekend:** 744 / 18

**FIVE PEAK PERIODS:** 2013-06-08 (744), 2013-07-11 (348), 2013-06-05 (302), 2013-08-04 (300), 2013-06-09 (299)
### TRAFx REPORT:

<table>
<thead>
<tr>
<th>Project:</th>
<th>EPT_North_User Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counter:</td>
<td>ART Saltbox June_Oct2013</td>
</tr>
<tr>
<td>Start:</td>
<td>2013-06-01</td>
</tr>
<tr>
<td>Finish:</td>
<td>2013-10-31</td>
</tr>
<tr>
<td>Location:</td>
<td>Allegheny River Trail - Franklin</td>
</tr>
<tr>
<td>Comment:</td>
<td>No Divide by 2</td>
</tr>
</tbody>
</table>

#### Daily Counts:

<table>
<thead>
<tr>
<th>Date</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-06-01</td>
<td>23259</td>
</tr>
<tr>
<td>2013-06-03</td>
<td>153</td>
</tr>
<tr>
<td>2013-06-05</td>
<td>1 day</td>
</tr>
<tr>
<td>2013-06-07</td>
<td>152.0</td>
</tr>
<tr>
<td>2013-06-09</td>
<td>53.0</td>
</tr>
<tr>
<td>2013-06-11</td>
<td>140.0</td>
</tr>
<tr>
<td>2013-06-13</td>
<td>Standard Deviation: 88.6</td>
</tr>
<tr>
<td>2013-06-15</td>
<td>572</td>
</tr>
<tr>
<td>2013-06-17</td>
<td>Minimum: 14</td>
</tr>
<tr>
<td>2013-06-19</td>
<td>Total Weekday: 13732</td>
</tr>
<tr>
<td>2013-06-21</td>
<td>Total Weekend: 9527</td>
</tr>
<tr>
<td>2013-06-23</td>
<td>Daily Max/Min Weekday: 298 / 14</td>
</tr>
<tr>
<td>2013-06-25</td>
<td>Daily Max/Min Weekend: 572 / 16</td>
</tr>
</tbody>
</table>

#### Five Peak Periods:

- 2013-06-29 (572)
- 2013-06-08 (451)
- 2013-10-26 (450)
- 2013-08-04 (330)
- 2013-08-17 (324)
TRAFx REPORT:

Project: EPT North User Count  Start: 2013-06-01  Location: Allegheny River Trail Brandon

Total Counts: 1872  Daily Mean Weekday: 8.5  Total (1): 1872
Total Periods: 153  Daily Mean Weekend: 21.5  Total (2): 0
Period Length: 1 day  Mean Monday: 8.5  Percentage (1): 100.0
Mean: 12.2  Mean Tuesday: 7.1  Percentage (2): 0.0
Mode: 0.0  Mean Wednesday: 6.0  Mean (1): 12.2
Median: 9.0  Mean Thursday: 6.5  Mean (2): 0.0
Standard Deviation: 12.3  Mean Friday: 14.6  Max/Min (1): 67 / 0
Maximum: 67  Mean Saturday: 26.0  Max/Min (2): 0 / 0
Minimum: 0  Mean Sunday: 17.1
Total Weekday: 924
Total Weekend: 948
Daily Max/Min Weekday: 41 / 0
Daily Max/Min Weekend: 67 / 0

FIVE PEAK PERIODS: 2013-08-24 (67), 2013-07-06 (58), 2013-08-11 (50), 2013-08-31 (42), 2013-08-02 (41)
**TRAFx REPORT:**

|--------------|----------------------|---------|------------|------------------------------------------|

**FIVE PEAK PERIODS:** 2013-09-01 (359), 2013-08-18 (305), 2013-10-12 (286), 2013-08-11 (273), 2013-10-05 (266)

<table>
<thead>
<tr>
<th>Total Counts:</th>
<th>10635</th>
<th>Daily Mean Weekday:</th>
<th>38.1</th>
<th>Total (1):</th>
<th>10635</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Periods:</td>
<td>153</td>
<td>Daily Mean Weekend:</td>
<td>147.3</td>
<td>Total (2): 0</td>
<td></td>
</tr>
<tr>
<td>Period Length:</td>
<td>1 day</td>
<td>Mean Monday</td>
<td>39.1</td>
<td>Percentage (1):</td>
<td>100.0</td>
</tr>
<tr>
<td>Mean:</td>
<td>69.5</td>
<td>Mean Tuesday</td>
<td>32.1</td>
<td>Percentage (2): 0.0</td>
<td></td>
</tr>
<tr>
<td>Mode:</td>
<td>33.0</td>
<td>Mean Wednesday</td>
<td>30.5</td>
<td>Mean (1): 69.5</td>
<td></td>
</tr>
<tr>
<td>Median:</td>
<td>40.0</td>
<td>Mean Thursday</td>
<td>35.7</td>
<td>Mean (2): 0.0</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation:</td>
<td>72.2</td>
<td>Mean Friday</td>
<td>53.8</td>
<td>Max/Min (1): 359 / 0</td>
<td></td>
</tr>
<tr>
<td>Maximum:</td>
<td>359</td>
<td>Mean Saturday</td>
<td>144.7</td>
<td>Max/Min (2): 0 / 0</td>
<td></td>
</tr>
<tr>
<td>Minimum:</td>
<td>0</td>
<td>Mean Sunday</td>
<td>149.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Weekday:</td>
<td>4154</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Weekend:</td>
<td>6481</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Max/Min Weekday:</td>
<td>207 / 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Max/Min Weekend:</td>
<td>359 / 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TRAFx REPORT:


Daily Max/Min Weekday: 272 / 11  Daily Max/Min Weekend: 398 / 9
TRAFx REPORT:

Project: EPT_North User Count  Start: 2013-06-01  Location: Allegheny River Trail Foxburg

Total Counts: 6603  Daily Mean Weekday: 35.8  Total (1): 6603
Total Periods: 153  Daily Mean Weekend: 61.4  Total (2): 0
Period Length: 1 day  Mean Monday: 33.5  Percentage (1): 100.0
Mean: 43.2  Mean Tuesday: 45.4  Percentage (2): 0.0
Mode: 38.0  Mean Wednesday: 33.8  Mean (1): 43.2
Median: 38.0  Mean Thursday: 25.7  Mean (2): 0.0
Standard Deviation: 27.7  Mean Friday: 40.8  Max/Min (1): 152 / 1
Maximum: 152  Mean Saturday: 60.7  Max/Min (2): 0 / 0
Minimum: 1  Mean Sunday: 62.0
Total Weekday: 3902
Total Weekend: 2701
Daily Max/Min Weekday: 102 / 1
Daily Max/Min Weekend: 152 / 10

TRAFx REPORT:

Project: EPT_North User Count    Start: 2013-06-01    Location: Allegheny River Trail-Parker
Counter: ART Parker June_Oct2013_missing Finish: 2013-10-31    Comment: NO divide by 2

Total Counts: 8056    Daily Mean Weekday: 54.6    Total (1): 8056
Total Periods: 125    Daily Mean Weekend: 88.8    Total (2): 0
Period Length: 1 day    Mean Monday: 60.9    Percentage (1): 100.0
Mean: 64.4    Mean Tuesday: 62.7    Percentage (2): 0.0
Mode: 69.0    Mean Wednesday: 54.8
Median: 62.0    Mean Thursday: 46.1    Mean (1): 64.4
Standard Deviation: 36.9    Mean Friday: 48.2    Mean (2): 0.0
Maximum: 179    Mean Saturday: 78.2    Max/Min (1): 179 / 2
Minimum: 2    Mean Sunday: 99.4    Max/Min (2): 0 / 0

Total Weekday: 4859
Total Weekend: 3197
Daily Max/Min Weekday: 141 / 2
Daily Max/Min Weekend: 179 / 11

Safety

Total Counts: 8314
Total Periods: 153
Period Length: 1 day
Mean: 54.3
Mode: 50.0
Median: 41.0
Standard Deviation: 45.8
Maximum: 238
Minimum: 0
Total Weekday: 4141
Total Weekend: 4173
Daily Max/Min Weekday: 102 / 0
Daily Max/Min Weekend: 238 / 0

Daily Mean Weekday: 38.0
Daily Mean Weekend: 94.8
Mean Monday: 39.6
Mean Tuesday: 34.5
Mean Wednesday: 34.3
Mean Thursday: 33.4
Mean Friday: 48.7
Mean Saturday: 84.8
Mean Sunday: 104.9

Total (1): 8314
Total (2): 0
Percentage (1): 100.0
Percentage (2): 0.0
Mean (1): 54.3
Mean (2): 0.0
Max/Min (1): 238 / 0
Max/Min (2): 0 / 0

FIVE PEAK PERIODS: 2013-07-21 (238), 2013-08-04 (234), 2013-08-11 (204), 2013-08-25 (193), 2013-08-17 (192)
TRAFx REPORT:

- Project: EPT_North User Count
- Counter: SCTBELMAR June_Oct2013
- Start: 2013-06-10
- Finish: 2013-10-31
- Location: Sandy Creek Trail-Belmar
- Comment: NO Divide by 2

Total Counts: 17111
Total Periods: 132
Period Length: 1 day
Mean: 129.6
Mode: 127.0
Standard Deviation: 96.3
Maximum: 407
Minimum: 7

Daily Mean Weekday: 87.5
Daily Mean Weekend: 242.0
Mean Monday: 85.7
Mean Tuesday: 77.7
Mean Wednesday: 84.0
Mean Thursday: 83.1
Mean Friday: 108.8
Mean Saturday: 230.6
Mean Sunday: 253.4

Total (1): 17111
Total (2): 0
Percentage (1): 100.0
Percentage (2): 0.0
Mean (1): 129.6
Mean (2): 0.0
Max/Min (1): 407 / 7
Max/Min (2): 0 / 0

Our thanks to Marilyn Black, Drake Well Museum, Victor Foose, Debra Frawley, Harry Freeman, Kim Harris, Michael Henderson, Carl Knoch, Bernadette Lagamba, Bob Nelson, Oil Region Alliance, Diana Shoff, Mike Sholley, Brian Symonds, David Tiffany and Venango County Historical Society, for the photos throughout this report.