

Who's on the Trail?

The Erie Canalway Trail User Count 2015



Prepared by



For the



December 2015

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Executive Summary

Extending 524 miles across New York, the Canalway Trail system offers economic, public health, tourism, and quality of life benefits to the 4.3 million New Yorkers living in the 18 upstate counties through which it passes. With new segments being developed and the reputation of the Canalway Trail growing as a world-class resource, it is likely that the number of Canalway Trail visitors is increasing, but objective information is needed to substantiate those claims.

2015 marks the 11th annual trail count conducted by the New York State Canal Corporation and Parks & Trails New York in an effort to develop a comprehensive picture of trail use throughout the Canalway Trail System.

This year trail counts were conducted on the Erie Canalway Trail (ECT) in seven locations. Resulting estimates for the count locations varied from a low of approximately 15,607 annual users at Rause Road in Ft. Plain to 183,419 annual users at Niawanda Park in Tonawanda, as shown in Table 1.

Table 1: Estimated annual trail use, physical and electronic count locations, 2015

Location	Estimated Annual Trail Use, 2015
Niawanda Park, Tonawanda	183,419*
Bushnell's Basin, Perinton	145,650
Erie Canal Marina, Palmyra	31,711
Cedar Bay Park, Dewitt	155,602
Lock 20 Canal Park, Marcy	49,424
Rause Road, Ft. Plain	15,607
Corning Preserve, Albany	156,714
*Tonawanda figures based on full-year electronic count, rather than an estimate	

Walkers accounted for the largest share of trail users at counting sites in 2015, at 41%. Cyclists and joggers were also well represented, accounting for 35% and 22% of users recorded at counting sites. Of cyclists, the vast majority were riding standard bicycles (98%).

As a complement to the 2015 trail count, volunteers in Palmyra, Dewitt, and Albany also conducted intercept surveys of trail users to learn more about the demographics and preferences of persons using the ECT. After surveying 77 trail users, several characteristics of trail users emerged. In general, those surveyed in 2015 valued the Canalway Trail both for its recreational access and for the place that the Erie Canal holds in New York's history. Many used the trail for a variety of activities – from walking to bird watching. However, biking and walking/hiking were the most common activities. Finally, most (73%) respondents expressed some interest in taking a longer cycling trip on the ECT, although the vast majority had not done so before. These findings are generally in line with data gathered through a more extensive survey commissioned by Parks & Trails New York in 2012 as part of its study, *The Economic Impact of the Erie Canalway Trail: An Assessment and User Profile of New York's Longest Multi-Use Trail*.

There were some differences from previous survey efforts as well. This year's survey respondents were more affluent, on average, than those surveyed previously. The median age observed in 2015,

52, was similar to that found in surveys taken in 2014 in Madison County during the annual count, but older than the 2012 statewide survey.

Understanding the volume and nature of trail use is critical when deciding how best to maintain, enhance and promote this unique resource. The data obtained from the annual Canalway Trail User Count helps justify current and future levels of support for the trail, encourages local involvement in its enhancement and promotion, and provides a base from which to evaluate the impact of the trail on local economies of the towns, villages, cities, and counties that it connects.

Background

Decisions regarding design, funding, operation, maintenance and promotion of the Canalway Trail system are based in large part on understanding the volume and nature of trail use. Estimates of annual trail traffic volume are critically important to justifying current and future expenditures for construction and maintenance as well as gauging the impact that the trail has on the economy of the counties, towns, villages, and cities along its length.

Annual user counts were initiated on the ECT in Monroe County in 2005 to begin to quantify and characterize the nature of trail users at varying locations. While anecdotal evidence had suggested that the ECT was popular with walkers and cyclists, Parks & Trails New York and the New York State Canal Corporation felt more objective information was needed to substantiate those claims.

The 2005 and 2006 counts did not employ standardized count protocols and pre-determined count locations and thus provided only a snapshot of trail use at the time counts were taken. No attempt was made to use this data to estimate weekly, monthly, or yearly trail traffic volume.

Beginning in 2007, in an effort to generate data with greater validity and predictive value, a new approach to counting was undertaken using the methodology and equations developed by Dr. Greg Lindsey and colleagues at Indiana University (Lindsey, Greg, Jeff Wilson, Elena Rubchinskaya, Jihui Yang, Yuling Han, 2007). Lindsey used infrared counts obtained on multi-use trails in the Indianapolis area to design a counting process that could both be easily undertaken by volunteers with a minimum of time expenditure, and also yield valid and highly accurate estimates of annual trail traffic volume.

In 2010, Parks & Trails New York and the New York State Canal Corporation began employing the count protocol and annual trail usage estimation methodology developed for the National Bicycle and Pedestrian Documentation Project (NBPD) (National Bicycle & Pedestrian Documentation Project Count Adjustment Factors, 2009). The NBPD is a nationwide effort designed to provide consistent data collection as well as adjustment factors that will produce annual usage estimates based on counts conducted on multi-use paths and pedestrian districts throughout the country. The NBPD methodology differs from that presented by Lindsey et al. in that it relies on weekend as well as weekday hourly counts. It also includes a set of Adjustment Factors that account for season (April to September or October to March); type of resource (multi-use paths or higher density pedestrian and entertainment areas); day of the week and month when the count was conducted; and type of climate. Additionally, since NBPD methodology is becoming a national standard for these types of studies, it allows the Canalway Trail data to be compared with other annual estimates of trail use from around the country.

Since 2005, counts have been conducted by volunteers in Erie, Monroe, Cayuga, Onondaga, Oneida, Herkimer, Madison, Montgomery, Schenectady, Albany, Warren, Orleans and Washington Counties. 2012 was the first year where counts were conducted on a portion of the Canalway Trail system other than the Erie.

2014 was also the first year that an electronic trail counter was used to obtain trail use data for the annual count, at Niawanda Park in Tonawanda. 2014 was also the first time a user survey was conducted in tandem with the count, with volunteers surveying trail users regarding manner and frequency of trail use, demographic information, and general feelings about the trail.

The 2015 count continues the use of electronic counters, which were used at four sites along the Erie Canalway Trail. Physical counts were conducted at three sites in 2015. As in 2014, count teams at physical count sites also conducted user surveys.

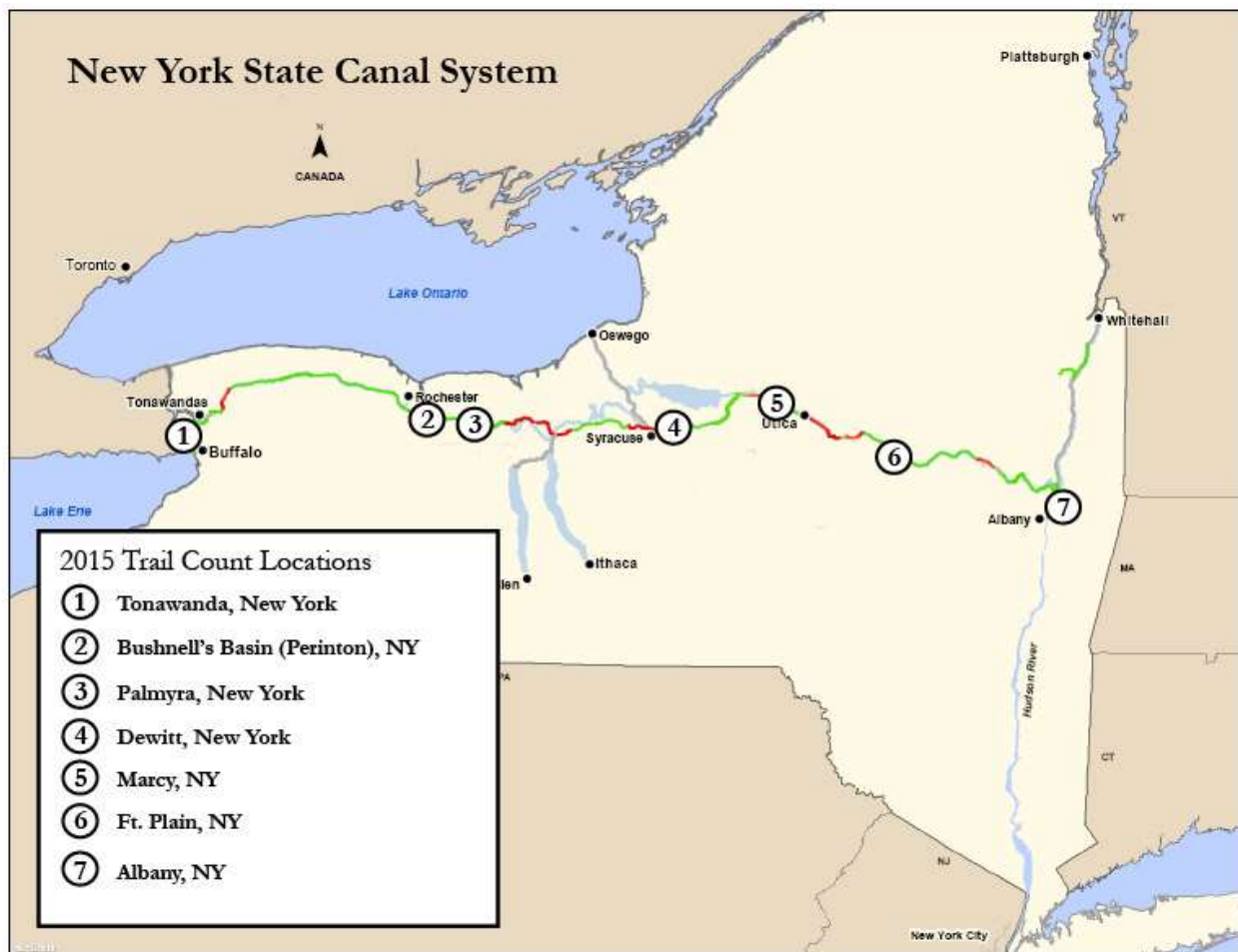
Methodology

Data Collection

All count data collected is available in spreadsheet format in Appendix C.

Location

Figure 1: 2015 Trail count locations



In 2015 counts were taken at seven locations across the canal corridor. This includes four sites where electronic trail counters were used: Tonawanda, Bushnell's Basin, Marcy, and Ft. Plain. Observational counts were conducted by volunteers at three locations: Palmyra, Dewitt, and Albany.

Niawanda Park, Tonawanda

In 2014, an electronic trail counter was installed in Niawanda Park in the City of Tonawanda. The park lies on the east side of the Niagara River, directly upstream from the City of Buffalo. The ECT, referred to locally as the Shoreline Trail, has a paved asphalt surface within Niawanda Park, a stretch

of approximately one mile, and in the sections immediately north and south of the park. The trail is located close to the river's edge, with trail users enjoying views of Grand Island on the opposite side of the river, to the west. The area surrounding Niawanda Park is densely residential.

The trail counter was placed at the approximate midpoint of the park, just south of the Niawanda Park Pavilion (see Figure 2). The trail parallels the alignment of the Enlarged Erie Canal, shown on the map, which was abandoned in the early 20th Century and then filled.

The counter remained in operation through October 2015.

Figure 2: Niawanda Park electronic trail counter location, Tonawanda

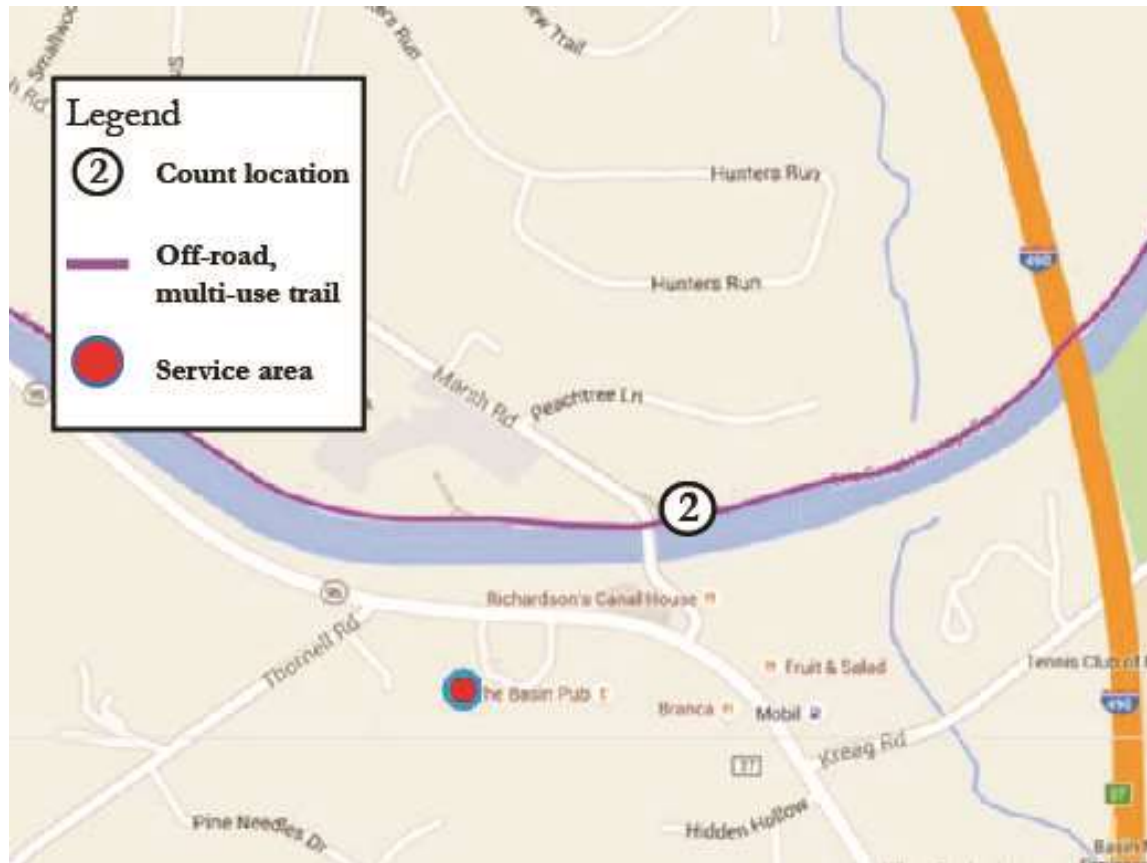


Marsh Road, Bushnell's Basin, Perinton

A counter was installed in the Bushnell's Basin area, in the Town of Perinton, in late July, 2015. The counter was installed just east of the Marsh Road bridge (County Route 38) and trailhead, on the north side of the canal. Bushnell's Basin was an important transfer port in the Original Erie Canal era. In this area, goods travelling east or west on the canal system had to be unloaded and transported over land to the next stretch of water. Unloading and loading meant work for boat handlers, wagon drivers, and warehousemen, as well as business for taverns and inns that were soon created.

The area is now a local preservation district, and home to residences and businesses, including restaurants and shops. It lies approximately three miles east of Pittsford's Schoen Place, and four miles west of Fairport.

Figure 3: Bushnell's Basin electronic trail counter location, Perinton

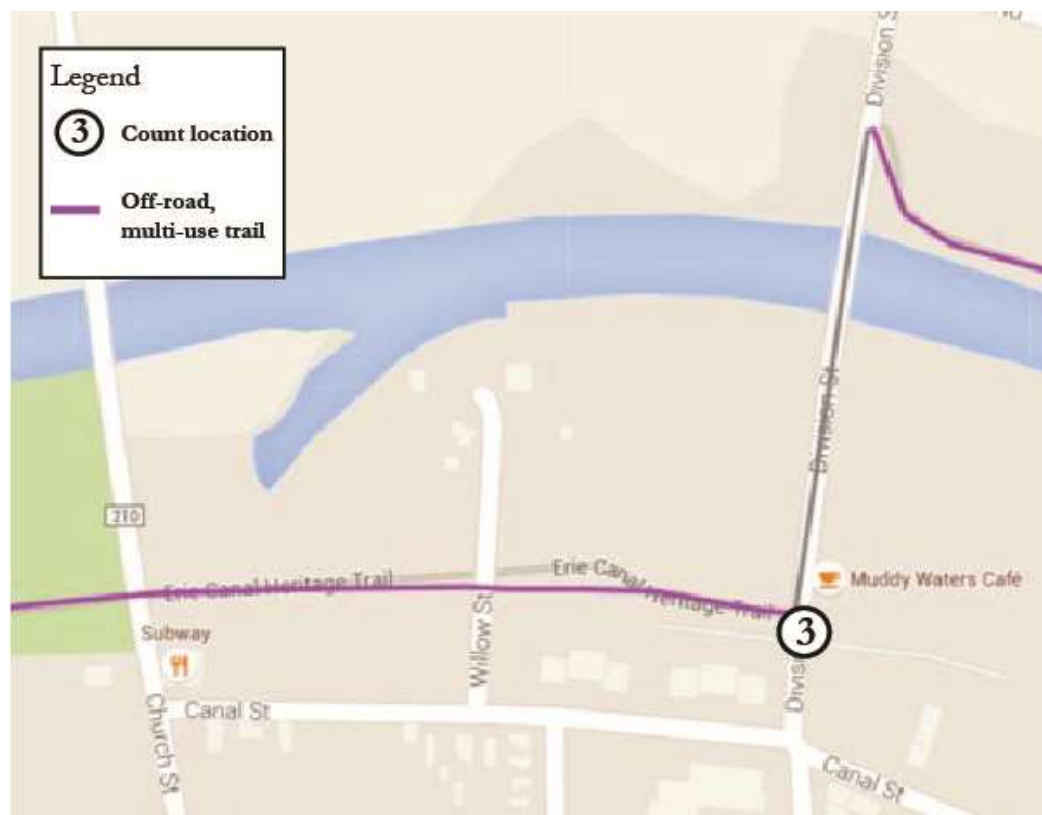


Erie Canal Marina, Palmyra

A physical count was conducted by local volunteers at the Erie Canal Marina in Palmyra. Palmyra is 26 miles east of Rochester's Genesee Valley Park, and 66 miles west of downtown Syracuse. The nearest town to the west is Macedon, about 4 miles on the trail. To the east, the Village of Newark lies 8 miles along the trail.

Palmyra's history pre-dates the Erie Canal, with the Town of Palmyra created in 1789, although it was then referred to as Swift's Landing. The Canal was completed up to Palmyra in 1822, and the area served as the western terminus for several years before construction of the Great Embankment. Palmyra is best known as the birthplace of the Mormon Church, with founder Joseph Smith having his "First Vision" on his area farm. The Book of Mormon was first published in Palmyra in 1830, and the Church of Jesus Christ and Latter-day Saints has purchased and restored many of the properties associated with the church's history, including the Smith family cabin.

The count location, the Erie Canal Marina, lies just to the east of Palmyra's business district. Counters were positioned at the point on the south side of the canal, where west to east trail users must exit the multi-use trail briefly to cross the canal on the Division Street bridge. There is a small café, Muddy Waters, a parking area and picnic pavilion in the park adjacent to the count site.

Figure 4: Marina area count location, Palmyra

Cedar Bay Park, Dewitt

Physical counts were conducted at the Cedar Bay Park in Dewitt. This location is just east of the trailhead and parking area that mark the western terminus of the Old Erie Canal State Park section of the statewide trail. Dewitt's first settlers came in the late 1700's, and the Erie Canal was constructed in the area in 1825. The Town of Dewitt was formed in 1835. Today, Dewitt is the site of Lemoyne College, and considered a suburb of Syracuse.

Old Erie Canal State Park is a linear park that follows the historic Canal and Canalway Trail. Dewitt marks the endpoint of a continuous section of trail, with no gaps to Durhamville, a distance of 23 miles. From the count location in Dewitt, the City of Syracuse lies to the immediate west, where no off-road trail currently exists. Downtown Syracuse (Clinton Square) is approximately 6.5 miles west of Cedar Bay using the route specified in the *Cycling the Erie Canal* guidebook.

The Old Erie Canal section of the ECT traverses active and inactive farmland, as well as skirts some residential neighborhoods. The trail surface in this area varies from unfinished, hard-packed soil to crushed limestone. At the time of the count, the surface at the Cedar Bay count location was crushed stone. The trail in this area has since been paved in asphalt. The next dedicated parking area for trail users is located about 4 miles east, at Lakeport Road, the site of the Chittenango Landing Canal Boat Museum.

Figure 5: Cedar Bay Park count location, Dewitt**Lock 20 Canal Park, Marcy**

Lock 20 Canal Park is located in Marcy, approximately 4.5 miles west of Utica. Lock E-20 is a working lock on the Barge Canal; the site also serves as a Biker-Hiker-Boater campsite, with no-cost camping offered to Canal and Canalway Trail users.

The trail is paved within the Canal Park, and paved surface continues east to Utica. However, the section of trail to the Park's west is stone dust, about 12 miles from Rome. While most of the Canal Park is in Marcy, on the north side of the Canal, the count site and the trail were actually in Whitesboro, on the opposite bank. The counter was installed on a wooden sign post, near to the designated camping area.

Marcy's business district is located about $\frac{3}{4}$ of a mile to the north of Lock 20 Canal Park.

Figure 6: Lock 20 Canal Park electronic counter location, Marcy

Rause Road, Ft. Plain

An electronic counter was installed at the intersection of the ECT and Rause Road in Ft. Plain. The location is just under one mile south of the Village of Ft. Plain. The trail surface in this area, from Ft. Plain through Canajoharie, three miles to the east, is asphalt. Stone dust trail predominates to the west of Ft. Plain.

In the Ft. Plain area, the Canalway Trail runs along the south bank of the Mohawk River. In general, the trail is farther from the water than on western trail stretches that follow Original or Enlarged Erie Canal segments. This section of trail is also often quite close to Interstate 90 (NYS Thruway).

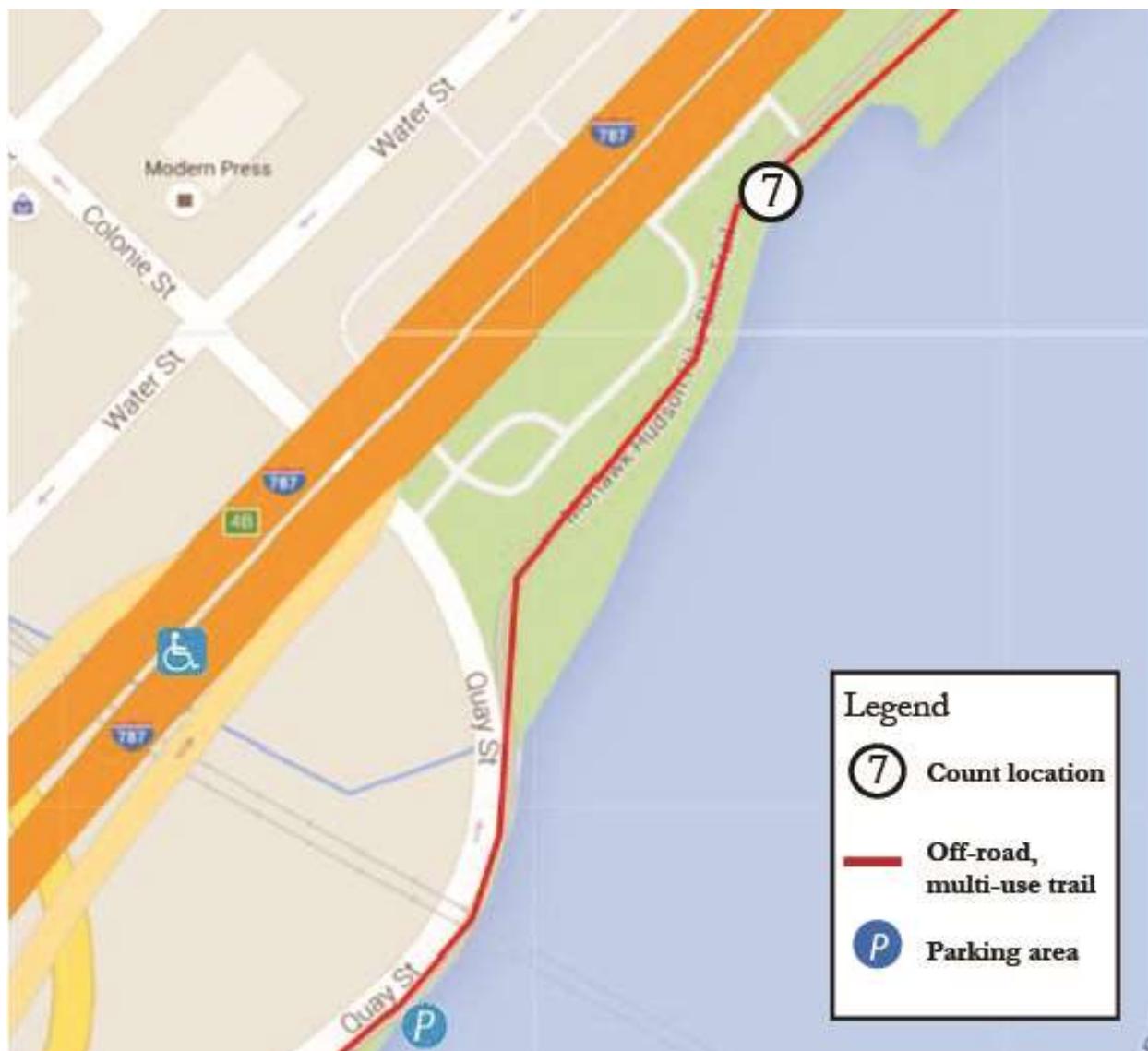
Ft. Plain is named for a military fort built during the American Revolution at the junction of the Mohawk River and its tributary Otsquago Creek. The village, incorporated in 1832, sits downhill from the site of the old fort. With completion of the Erie Canal in the Mohawk Valley, Ft. Plain's economy received a boost, and the area became a manufacturing center.

Figure 7: Rouse Road electronic counter location, Ft. Plain

Corning Preserve, Albany

Volunteers conducted a physical count on the Mohawk Hudson Bike Hike Trail/Erie Canalway Trail, in the Corning Preserve in Albany. The count location was the boat launch and parking area tucked under Interstate 787, approximately 3000 ft (0.6 miles) north of the Maiden Lane pedestrian bridge and Jennings Landing, which mark the eastern terminus of the statewide trail. The count location is one of a limited number of access point to the trail in the Corning Preserve from Albany city streets.

The Mohawk Hudson Bike Hike Trail is the easternmost section of the statewide ECT, stretching 40 miles from Rotterdam Junction in Schenectady County to Jennings Landing in Albany. There is one significant gap section within the Mohawk Hudson section of the ECT, from Green Island to Watervliet. Otherwise, the trail is off-road and entirely paved. Downtown Albany, including the State Capitol and adjacent Empire State Plaza, is located a half mile from the trail's terminus at the Maiden Lane pedestrian bridge, or a mile from the count location.

Figure 8: Corning Preserve count location, Albany

Month

This year's observational trail counts were conducted in the months of July and August. Electronic count data was obtained for this time period, where available, in order to facilitate comparison of data.

Counters

Most observational counts were conducted in teams of two volunteer counters.

Days of the Week

Table 2 details the breakdown of count days at each site.

Table 2. Number of counts by day and location

Count Days	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Niawanda Park, Tonawanda	-	-	-	-	-	-	-	365*
Bushnell's Basin, Perinton	5	4	4	4	4	5	5	31 [†]
Palmyra	0	1	1	1	0	1	0	4
Dewitt	0	2	2	2	0	2	0	8
Marcy	4	4	4	4	4	4	4	28 [‡]
Ft. Plain	5	4	4	4	4	5	5	31**
Albany	0	2	2	2	0	2	0	8
Total	5	9	8	8	4	7	5	46

*Electronic counter in operation from September 1, 2014 to August 31, 2015

[†]Electronic counter in operation from August 1 to August 31, 2015

[‡] Electronic counter in operation from June 20 to July 17, 2015

**Electronic counter in operation from August 1 to August 31, 2015

Observational Count Process

In Palmyra, Dewitt, and Albany, local volunteers conducted the counts. They were provided a count protocol, prepared by PTNY based on the methodology of the National Bike and Pedestrian Documentation Project (NBPD, www.bikepeddocumentation.org, see Appendix A). Counters were asked to conduct three counts on successive week days during the same week or on the same days in at least three successive weeks. The protocol stipulated that weekday counts were to be conducted on Tuesday, Wednesday, and/or Thursday, and not on a holiday, Monday, or Friday. Weekend counts could be taken on either day.

The volunteers were asked to count for two consecutive hours during the period they perceived as the peak time of trail use. Prior to 2010, counts were conducted for one-hour periods. While this means a greater time commitment, the NBPD methodology recommends the use of two-hour survey periods, which can eliminate some of the variability that may be encountered with a single hour of counting.

A detailed counting form, developed by PTNY and similar to that used in previous years, (see Appendix B) was employed to standardize data collection and classify the various types of users.

All volunteer counters were invited to participate in a pre-count webinar during which the count protocol was reviewed and the overall NBPD process was outlined. Slides from the webinar were made available to all volunteers who could not log on for the webinar at the time it was presented.

Trail Traffic Estimation

Estimates of annual trail traffic were derived by following the steps outlined by the National Bicycle and Pedestrian Documentation Project.

1. Calculate average weekday and weekend peak counts.

The NBPD methodology strongly recommends that all estimates be based on the average of at least two and preferably three counts during the same two-hour time period and week, especially for

lower volume areas. As Table One indicates, this year's trail counts achieved the minimum number of counts at each location.

Peak Period Selections

Volunteers were instructed to select the two-hour period that they felt best represented the time of peak use.

Once the respective weekday and weekend average counts are determined, the NBPD project recommends multiplying the average counts by 1.05 if the trail is used between 11:00 PM and 6:00 AM. Consistent with the methodology used in previous years of Canalway Trail counts, the 1.05 factor was omitted from the calculations used in this study. This was done to ensure the most conservative estimates of Canalway Trail usage and because it is unlikely that 5% of Canalway Trail use occurs during these hours.

2. Estimate of average weekday and weekend daily traffic.

The average weekday peak hourly counts were divided by the percentage of total daily traffic represented by the two-hour period when the counts were conducted. The NBPD has developed Hourly Adjustment Factors representing percentages of daily traffic for hourly intervals between 6:00 AM and 9:00 PM which vary by type of trail and season. The methodology has been tailored to calculate estimates for two very different areas: multi-use paths (PATH) and high density pedestrian or entertainment districts (PED). Since none of the observational count locations resemble the high density development indicative of PED areas, the PATH coefficients were used for all calculations. (Niawanda Park is considered a high-density pedestrian district, but because the electronic counter was used to generate an entire year's worth of data, hourly adjustment figures were not used and the PED/PATH determination has no bearing.)

The NBPD methodology considers each hour to represent a proportion of that day's use, with the proportions varying between weekdays and weekends.

Once the percentage of daily use was determined, the average two-hour weekday count was divided by this percentage to determine an estimate for a typical weekday.

3. Estimate average weekly traffic volumes.

To arrive at an average weekly trail traffic volume, the daily weekday estimate was adjusted for the days of the week on which counts were taken. This was accomplished by dividing each number by an average of the NBPD project's Daily Adjustment Factors (Appendix D: Table Two) for the days included in the average weekday count calculation. Since, per NBPD protocol, counts were taken on Tuesday, Wednesday, and Thursday at each location, this adjustment factor was 12.33%. Therefore, according to the NBPD methodology, the estimated daily count for one of these weekdays represents just over 12% of weekly use.

4. Estimate average monthly traffic volumes.

The average weekly volume was multiplied by the number of weeks in the month in which the count occurred to obtain the estimated monthly trail traffic volume.

5. Estimate average annual traffic volumes.

The average monthly volume was divided by the NBPD's Monthly Adjustment Factors for the "Long Winter, Short Summer" climate area and the month in which the counts were taken (Appendix D: Table 3). Monthly Adjustment Factors were applied to each count location based on the month in which the counting occurred.

Electronic Count Process – Bushnell's Basin, Marcy, and Ft. Plain

For the Bushnell's Basin, Marcy, and Ft. Plain counts, electronic trail counters were installed in locations along the multi-use trail. Each operated for a given time period; approximately a month's worth of trail usage was downloaded. The dates for which data was available vary somewhat from counter to counter, but in general trail use data was available in the July/August period. (See Appendix C).

In contrast to the NBPD estimation process, which uses extrapolation and adjustment factors as outlined above, monthly count totals were provided by the counter. The annual count estimates were generated by dividing the month's count total obtained from the electronic trail counter by the NBPD's Monthly Adjustment Factor specified for the specified month and the Long Winter, Short Summer climate areas. Because only the monthly count total was used to obtain the annual trail use figure, no determination of peak use periods was necessary, nor was use of hourly adjustment factors. Average weekday and weekend day counts are displayed for informational purposes only in Appendix C. These calculated averages, however, were not used to generate weekly, monthly, or annual use estimates.

Electronic Count Process – Tonawanda

The counter in Tonawanda operated continuously for over a year. All the data from the time the counter was operating was downloaded in October 2015. Therefore no extrapolation was needed to generate an annual use number. Instead, the raw data for a 365-day period was obtained, checked for any abnormalities, and then reported as an annual use figure.

In addition to the yearly figure, obtained using the September 1, 2014 to August 31, 2015 period, September 2015 count data was also analyzed and displayed for comparison purposes.

Survey

For the second year, a trail survey was administered in conjunction with the volunteer trail count. Volunteers surveyed 30 trail users at the Palmyra count location, 31 trail users in Dewitt, and 16 trail users in Albany - on the same days as counts were performed. No surveys were collected in locations where electronic counters were used.

Surveyors were provided a Survey Protocol, as well as the survey questions. (See Appendix E for the protocol, and Appendix F for the questionnaire.) The survey protocol was also discussed during the pre-count webinar and the slides from this presentation were sent to any volunteers who were not able to log in.

Results

Estimates of Trail Traffic Volume

Table 3 presents estimates of two-hour weekday, two-hour weekend day, daily, monthly, and annual trail traffic volumes calculated following the five steps summarized in the Trail Traffic Estimation section (see pages 15 and 16) and outlined in the Methodology of the National Bicycle and Pedestrian Documentation Project (National Bicycle & Pedestrian Documentation Project Count Adjustment Factors, 2009).

The annual trail traffic estimates ranged from approximately 15,063 annual visitors at Rause Road in Ft. Plain to 183,419 annual visitors at Niawanda Park in Tonawanda.

Table 3: Estimate of weekly, monthly, and annual use, 2015

Location	Average weekday two-hour count	Average weekend two-hour count	Estimated daily volume	Estimated weekly volume	Estimated monthly volume	Estimated annual volume
Niawanda Park, Tonawanda	-	-	-	-	-	183,419*
Bushnell's Basin, Perinton	-	-	-	-	-	145,650
Erie Canal Marina, Palmyra	21	63	115	933	4,122	31,711
Cedar Bay Park, Dewitt	79	96	564	4,557	20,141	155,602
Lock 20 Canal Park, Marcy	-	-	-	-	-	49,424
Rause Road, Ft. Plain	-	-	-	-	-	15,607
Corning Preserve, Albany	100	150	590	4,787	21,156	156,714

*Tonawanda figures based on full-year electronic count; not an estimate

Modes of Use

Observational data regarding modes of use obtained at the Palmyra, Dewitt, and Albany count locations is displayed in Table 4. This data is not available for locations where electronic counters were used.

Table 4: Trail use breakdown by types of cyclist and location

	Cyclists	Walkers	Joggers	In Line Skaters	Baby Carriages	Equestrians	Other	Total
Palmyra	105	18	2	0	0	0	0	125
Dewitt	164	347	138	0	15	0	1	665
Albany	318	335	232	1	3	0	13	902
Total	587	700	372	1	18	0	14	1692

Figure 10 illustrates that 41% of observed trail users at the observational count locations were walkers, 35% were cyclists, and 21% were joggers. Persons pushing baby carriages, and others represented about 2%.

Table 5 compares this year's modes of use to data obtained over the past ten years of counts.

Figure 9: Trail usage by mode as a percent of total count

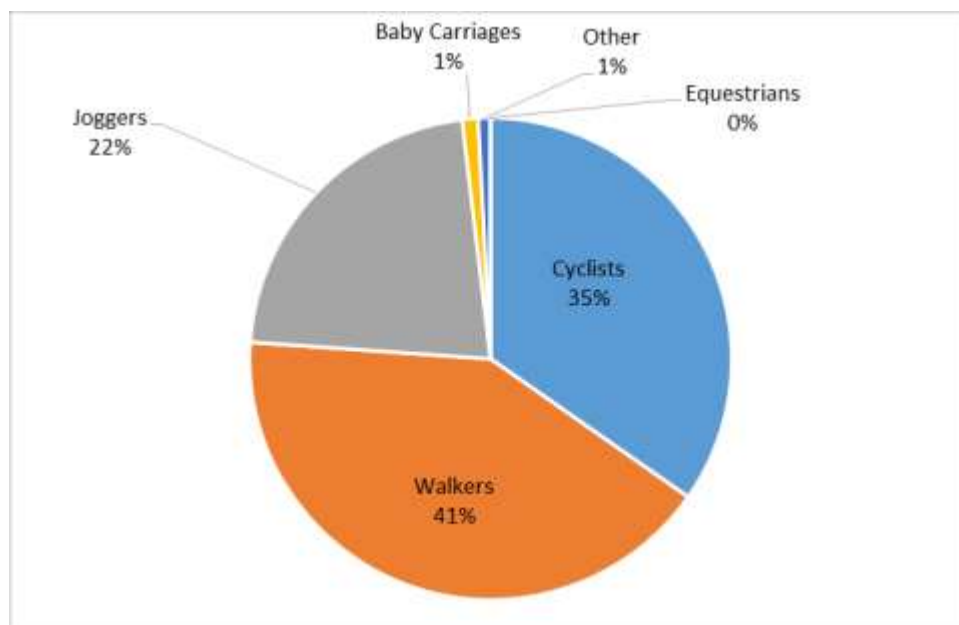


Table 5: Modes of trail use comparison, 2005-2015

Type of Trail User	Year										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bicyclists*	64.00%	43.00%	49.00%	52.00%	53.00%	21.00%	30.00%	33.00%	40.38%	53.01%	34.6%
Walkers	24.00%	36.00%	38.00%	35.00%	30.00%	55.00%	56.00%	55.00%	47.28%	40.69%	41.3%
Joggers	8.00%	20.00%	8.00%	9.00%	12.00%	22.00%	10.00%	8.00%	8.79%	4.01%	21.9%
In Line Skaters	2.00%	0.00%	2.00%	2.00%	4.00%	0.00%	2.00%	0.00%	0.00%	0.00%	0.06%
Baby Carriages	2.00%	2.00%	3.00%	2.00%	0.30%	1.00%	2.00%	3.00%	2.09%	0.57%	1.06%
Wheelchair Users	n/a	0.00%	0.00%	0.10%	0.10%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%
Equestrians	0.00%	0.00%	0.00%	<0.1%	0.00%	0.00%	0.00%	0.00%	0.00%	0.57%	0.00%
Scooters	n/a	n/a	n/a	0.10%	n/a	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other**	n/a	n/a	n/a	n/a	0.90%	0.00%	<0.1%	0.00%	0.84%	1.15%	0.83%

*The Bicyclist category for years 2009-2015 represents all cyclists including bicyclists, tri-cyclists, tandem cyclists, and bicyclists with a child seat or trailer.

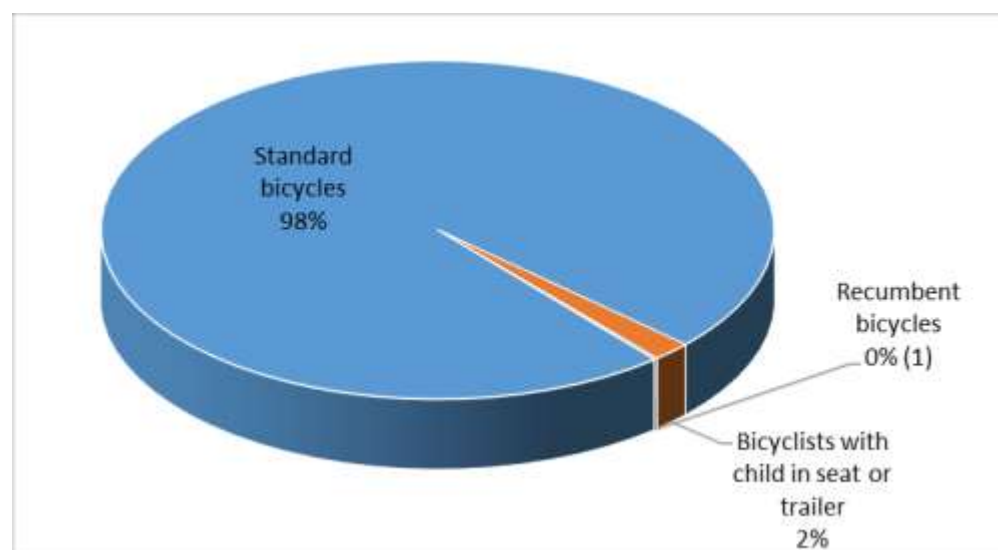
**"Other" trail users include those using the trail for fishing, putting in kayaks, or using trailside exercise stations, among others.

As Table 6 and Figure 11 illustrate, the great majority of cyclists were using bicycles. However, small numbers of bicyclists with children on child seats or in trailers were observed, as was one recumbent cyclist. There were no tandem or tri-cyclists observed at the 2015 trail count locations.

Table 6: Number and nature of cyclists (physical count locations)

Number and Nature of Cyclists	Bicyclists with helmets	Bicyclists with child in seat or trailer with helmet	Tandem bicyclists with helmets	Recumbent Bicyclists with helmet	Tri-cyclists with helmet	Bicyclists Without helmets	Bicyclists with child in seat or trailer without helmet
Palmyra	64	0	0	1	0	35	5
Dewitt	88	1	0	0	0	75	0
Albany	195	5	0	0	0	118	0
Total	347	6	0	1	0	228	5

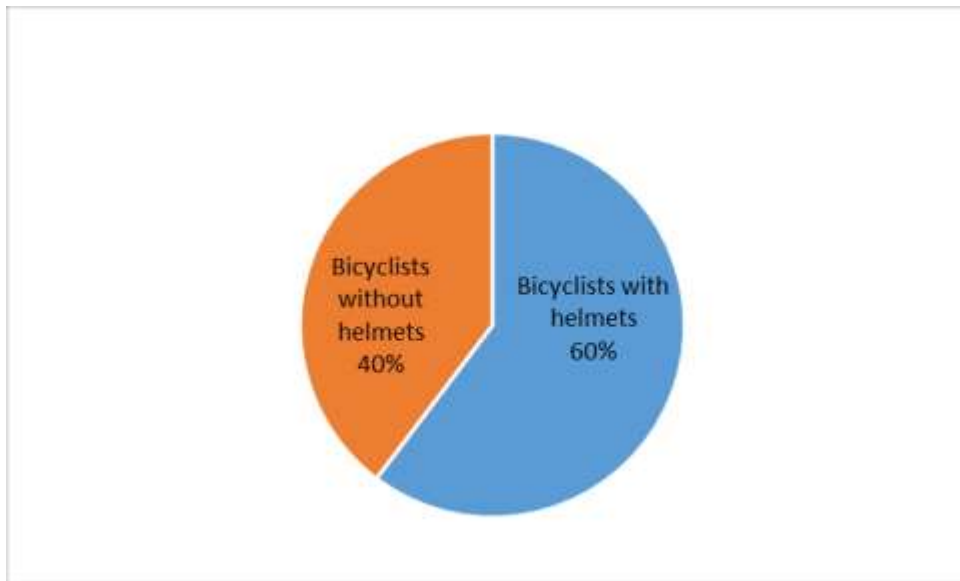
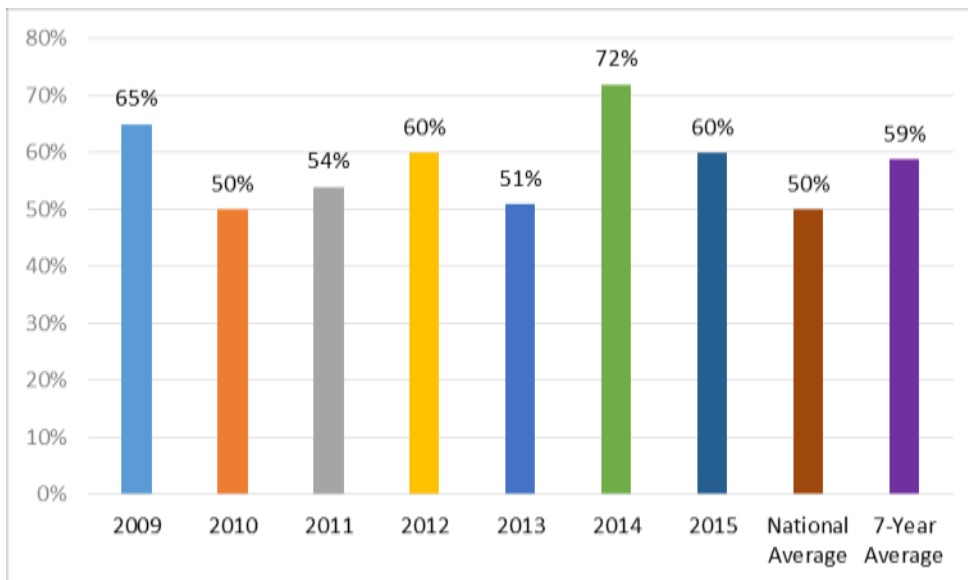
Figure 10: Type of cyclists (physical count locations)



Cyclists Helmet Usage

At the observational count locations, cyclists with helmets made up of 60% of those counted in 2015.

This year's observed helmet use continues a fluctuating trend observed on the Canalway Trail since 2009. The percentage of observed cyclists with helmets since 2009 is provided in Figure 13. Although percentages as low as 50% or as high as 72% have been observed previously, the seven-year average of 59% is significantly higher than the national average of 50% (National Survey of Bicyclist and Pedestrian Attitudes and Behavior, 2012).

Figure 11: Percent helmet use in observed ECT cyclists in 2015 (physical count locations)**Figure 12: Percent of Canalway Trail cyclists with helmets by year**

Analysis and Comparison by Location (physical count locations)

1. Palmyra

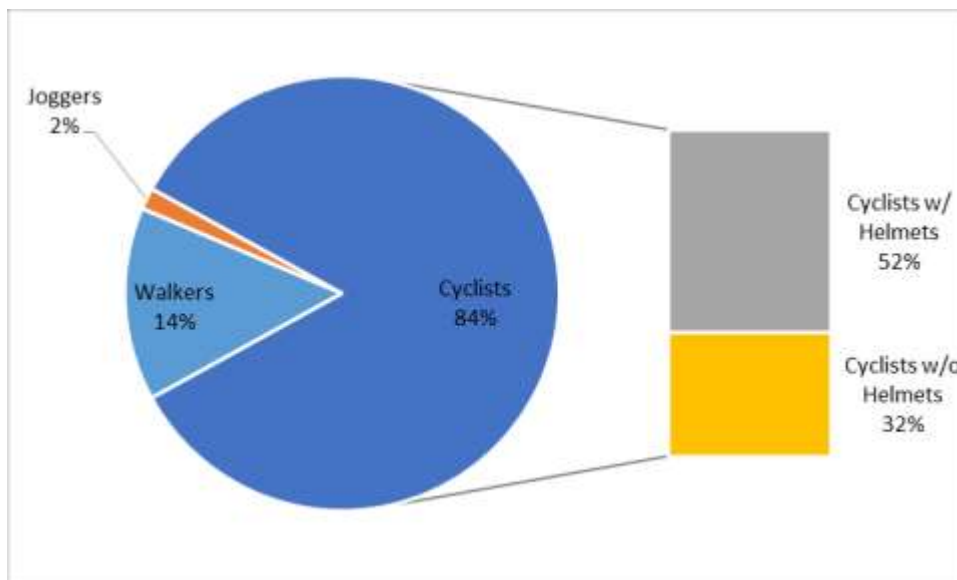
Palmyra's estimated annual trail use of 31,711 is low, ranking in the lowest quarter of counts conducted on Canalway Trail sites since 2007. Palmyra is not close to a large metropolitan area, a factor which may contribute to lower relative use. Another factor which may have affected the count was high temperatures during the count period. Counters reported temperatures of 85 and 90, respectively, on two (of four) count days.

Figure 14 shows the mix of cyclists, walkers and joggers observed at the Erie Canal Marina in Palmyra. It is possible that the mix, and the overall low number of walkers, recorded in Palmyra reflects the high temperatures encountered on several of the count days. Only one week of counts was taken in Palmyra, so it is not possible to average this data with that from another, cooler week.

Survey data from Palmyra noted a significant number of touring and visiting cyclists, some of these on extended, state-wide or longer tours. It is assumed that these cyclists plan their trips out in advance, and so are not deterred by high temperatures as local cyclists may be. This could account for some of the skew towards cyclists in Palmyra's data.

Among cyclists, 62% wore helmets, a percentage significantly higher than the national average and higher than observed at the other count locations. This also may be tied to the presence of experienced, touring cyclists.

Figure 13: Trail user types, Palmyra, 2015



2. Dewitt

Dewitt's estimated annual trail use of 155,602 puts it in the top half of all trail locations counted since 2007. Trail traffic at Cedar Bay Park appears to be on a scale similar to other locations close to large metropolitan areas, including sites in the Rochester and Albany areas. It should be noted that a count was conducted in the Dewitt area in 2010, which generated a much higher use figure. However, the reliability of the 2010 data is in doubt as trail use was not counted according to the NBPB protocol. The current data was generated using the NBPB protocol, and it should be viewed as a baseline for future counts.

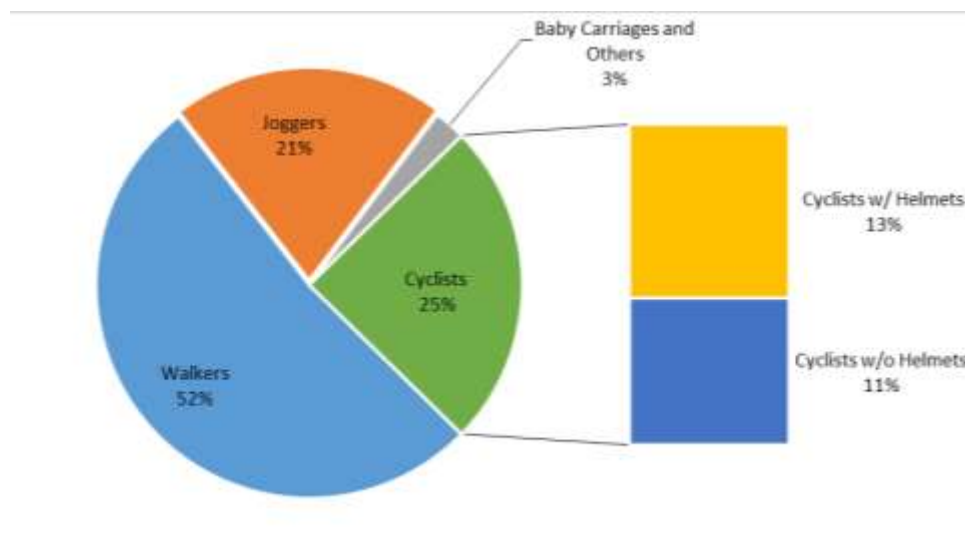
Among trail users recorded at Cedar Bay Park in Dewitt, walkers accounted for the largest share of use, at 52%. Cyclists represented 25% of use, and joggers 21%. Other uses, including taking children for a walk in a stroller, account for 2% of uses.

The presence of a parking area at the western end of Cedar Bay Park makes the location attractive for walkers, as well as those taking children for walks in strollers. The stonedust surface that was in place at the time of the count explains the absence of in-line skaters. Equestrians are allowed on parts of the Old Erie Canal section of trail, and equestrian use was observed at 2014 in Chittenango;

however, Cedar Bay is in a more suburban, and less rural setting than Chittenango, so the absence of equestrians is expected.

Among cyclists, 54% wore helmets. This percentage is lower than was observed in Palmyra. But higher than the national average. Helmet use in nearby Chittenango was nearly 74% as recorded in 2014, significantly higher than this year's observed Dewitt use.

Figure 14: Trail user types, Dewitt, 2015

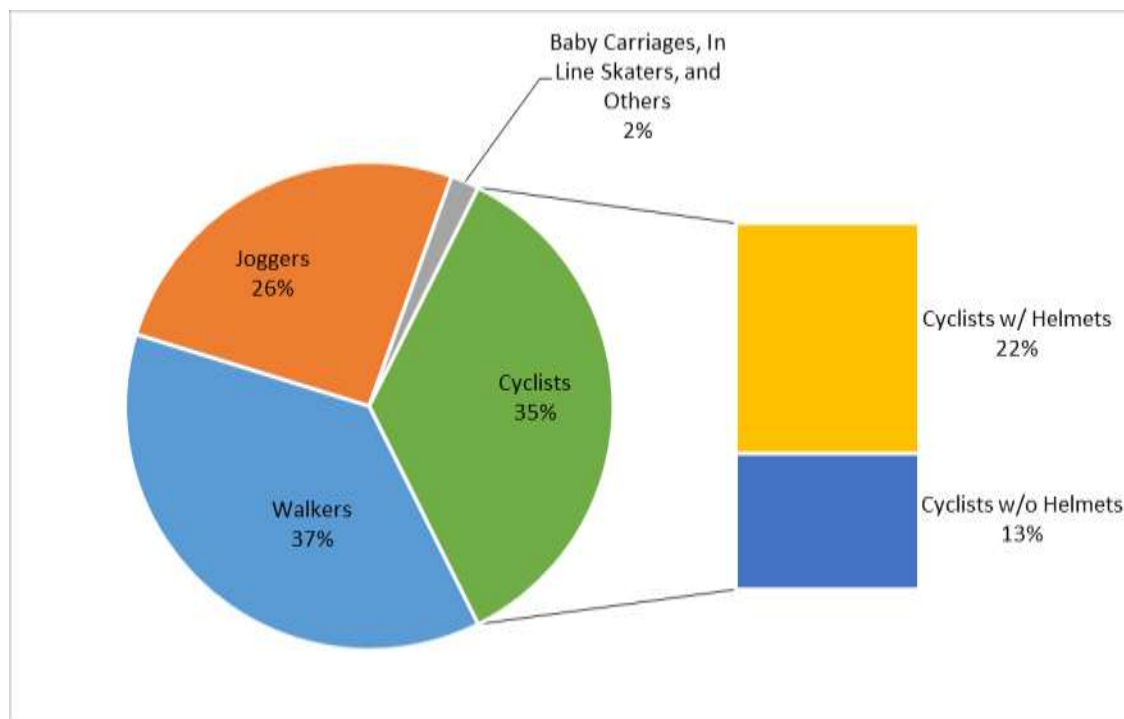


3. Albany

Albany's Corning Preserve's estimated annual trail use of 156,714 ranks in the top half of historical count locations, and is of a similar scale to other trail count locations in large metropolitan areas. It is significantly higher than the other Albany County site observed as part of the annual Canalway Trail Count, Colonie Town Park in 2009 (95,471).

Trail users at Albany's Corning Preserve were most likely to be walking (37%), followed closely by cycling (35%). Joggers made up a larger share of trail users in Albany than the other count sites, at 26%. The proximity to major employment centers, such as the state government and state agencies, and the lunchtime weekday count time may explain the high percentages of walkers and joggers.

Helmet use among cyclists was higher in Albany, observed at 63%, than in Palmyra or Dewitt. This percentage is significantly higher than the national average.

Figure 15: Trail user types, Albany, 2015

Analysis and Comparison by Location (electronic counter locations)

1. Niawanda Park, Tonawanda

An electronic trail counter was installed in August 2014 in Tonawanda, and continuously operated through October 2015, generating a full year's worth of trail use data. Using the September 1, 2014 to August 31, 2015 period, the annual count provided by the counter was 183,419.

This value is about 12% less than the estimated value for the same location in 2014, generated by extrapolating September 2014 use figures to an annual total using the NBPd extrapolation figure. However, 2014 and 2015 data are much closer to each other than to previous counts at this location. Niawanda Park was the location for an observational count in 2011 as part of the annual Canalway Trail Count, with an estimated annual use of 605,033. More recently, in 2012, an electronic trail counter was employed to measure trail use as part of a study on the economic impact of the ECT commissioned by PTNY in 2012.¹ This electronic count was supported by an observational component, and led to an estimated yearly trail use of 359,177.

For comparison purposes, an estimated annual total was also calculated for 2015 using September 2015 data, as well as daily, weekday, and weekend averages. The September count for 2015 was less than in 2014, generating a yearly estimate of 182,136. This is quite close to the raw data generated by the Tonawanda counter (approximately 1%).

¹ *The Economic Impact of the Erie Canalway Trail: An Assessment and User Profile of New York's Longest Multi-use Trail*, https://ptnyenews.files.wordpress.com/2014/07/economic_impact_of_the_erie_canalway_trail_full_document.pdf

The two years of data seem to agree with regards to overall annual trail use at Niawanda Park. These counts point to an annual use figure in the range of 200,000. Secondly, the manner in which the annual figure is derived doesn't seem to impact the results, with raw count data generally matching figures based on NBPD extrapolation factors. This bodes well for continued use of the NBPD factors in future trail counts in Tonawanda and at similar locations across the Canalway Trail.

It seems unwise to attempt to explain the differences in annual figures obtained in counts prior to 2014 with those obtained in 2014 and 2015 due to differences in count protocol, and a lack of specific data regarding count location and timing. (Some attempt was made in 2014's *Who's on the Trail Report*.) However, the 12% differences between observed use in 2014 and recorded use in 2015 may be explained by the historically cold winter experienced in Western New York in 2015. Throughout the 365-day count period, the electronic counter recorded 15 "0 use" days, and 28 days where recorded use was 10 or less. The first single-digit use day was recorded on November 18, 2014 which coincides with the first mega-storm that produced several feet of snow in the Buffalo area. In February, which was officially the coldest month in the history of weather observations for Western and North Central New York State according to the National Weather Service, there were 16 single-digit days, and seven 0 use days.

The cold winter may not be the only factor responsible for the lower count in 2015 than 2014. Looking at the September 2014 versus September 2015 data, it is clear that there are significant differences in the average daily use. Much of this is due to much lower recorded weekend use in 2015. The reason for this is unclear.

Table 7: Recorded trail traffic, 2014 & 2015, Niawanda Park, Tonawanda

	2014	2015
Monthly Count Total (September)	22,935	20,327
Daily Average (September)	765	668
Weekday Average (September)	710	664
Weekend Average (September)	913	677
Estimated Annual Total	208,500	182,136
Annual Total from Counter	-	183,419

2. Bushnell's Basin, Perinton

Recorded trail use at Marsh Road in Bushnell's Basin was high, at 145,650, ranking in the top half of historical trail count locations. In addition to the annual estimate, Table 8 shows count totals recorded in August 2015.

Table 8: Recorded trail traffic, August 2015, Bushnell's Basin, Perinton

	2015
Monthly Count Total (August)	20,391
Daily Average (August)	658
Weekday Average (August)	484
Weekend Average (August)	1,037
Estimated Annual Total	145,650

3. Lock 20 Canal Park, Marcy

Recorded trail use at Lock 20 Canal Park in Marcy was low, at 49,424, ranking in the lowest quarter of historical trail count locations. The count location sits about 4.5 miles outside of one of the larger cities on the Erie Canalway Trail, Utica, so higher use should be expected. However, Utica is farther removed from the trail than other canal communities, with no direct access to downtown from the trail.

In addition to the annual estimate, Table 9 shows count totals recorded in June and July of 2015.

Table 9: Recorded trail traffic, 2015, Lock 20 Canal Park, Marcy

	2015
Monthly Count Total (June/July)	6,178*
Daily Average (June/July)	203
Weekday Average (June/July)	210
Weekend Average (June/July)	184
Estimated Annual Total	49,424*

*Counter data was only available for 28 days (from June 20 to July 17); the counter data for these 28 days (5,671) was adjusted to a 30.5 day total (6,178) in order to extrapolate to an estimated annual total

4. Rause Road, Ft. Plain

Recorded trail use at Rause Road in Marcy was quite low, at 15,607, ranking near the bottom of historical trail count locations. No large metropolitan areas are nearby, factoring into the low recorded use. Another factor impacting observed trail use may have been the placement of the trail counter along the trail, west of Rause Road due to the presence of posts needed to mount the counter. Rause Road is the first trail intersection that users encounter as they move south from downtown. Therefore, the location is a natural turn around point for those on a short walk or ride. The counter location meant that anyone on a trail outing such as this was not recorded. Finally, trail closures west of Ft. Plain in the summer of 2015 may have negatively impacted trail use in the area.

In addition to the annual estimate, Table 10 shows count totals recorded in August of 2015.

Table 10: Recorded trail traffic, 2015, Rause Road, Ft. Plain

	2015
Monthly Count Total (August)	2,185
Daily Average (August)	71
Weekday Average (August)	64
Weekend Average (August)	84
Estimated Annual Total	15,607

Survey Findings

Data from trail-user surveys can be used to create a profile of the typical trail user at observational count locations. Moreover, since this year's observational counts occurred in three geographically diverse locations across the statewide Erie Canalway Trail, together they provide a snapshot of who is using the trail across the state.

This year's survey data provides a profile of a typical trail user that is more affluent than the profile generated by the 2012 trail-wide survey, conducted as part of the economic impact study of the Erie Canalway Trail. This year's survey respondents had a median income of \$65,300, which is significantly higher than the \$57,683 reported in the economic impact study. This is also higher than the Madison County figure reported from last year's surveys, \$50,000 to \$55,000. This overall high observed annual income is due in large part to survey respondents in Albany, with a mean annual income figure of over \$80,000. Palmyra- and Dewitt-specific figures were closer to the figure reported in the economic impact study, at \$62,000 and \$60,000, respectively.

Trail users surveyed in 2015 had a median age of approximately 52 years old. This is similar to age findings from Madison County in 2014, but slightly older than the average age bracket of 30-49 obtained in the statewide survey in 2012. Among 2015 count locations, Dewitt users were significantly younger on average, at 46, than Palmyra (55) or Albany (56).

Table 11: Characteristics of "typical" ECT user at 2015 survey sites, 2014 Madison County, and state-wide

	Average Age	Median Income	% Visitors
Palmyra	55	\$61,739	43%
Dewitt	46	\$59,687	37%
Albany	56	\$80,909	21%
Madison County, 2014	>50	\$50,000 - \$55,000	23%
State-wide ECT	30 - 49	>\$57,683	22%

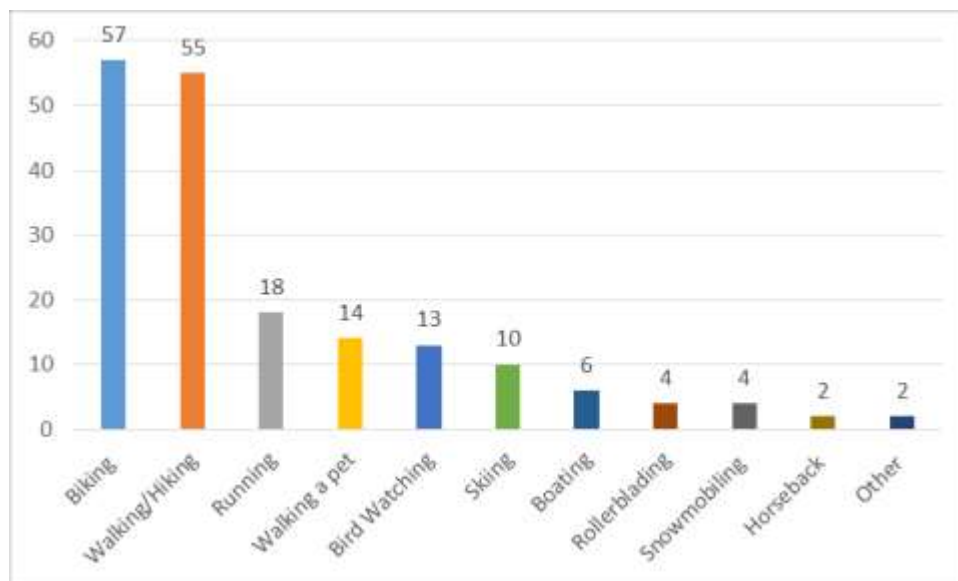
As observed in Madison County in 2014 and in the 2012 statewide survey, 2015 trail users are more likely to be male (54%) than female (46%).

When asked about their appreciation for the trail as a community recreational asset and an important component of New York's history, those surveyed were almost all positive. Approximately 99% of users responded "definitely does" or "somewhat does" when asked if outdoor activities along the trail had a positive effect on them, mirroring the overwhelmingly positive reaction the question received on the 2012 economic impact report and in 2014 surveys in Madison County. The vast majority (93%) of respondents also expressed interest in the history of the Erie Canal, as they have in previous surveys. Finally, although most respondents had not taken an overnight trip on the trail, 73% expressed interest in a trip of greater than 50 miles on the ECT. This interest level compares favorably to the 70% and 69% of interested respondents observed in 2014 and 2013 surveys.

Among trail users, an important group that local leaders should monitor is vacationers, as their per capita economic impact far exceeds that of "day" users. Of those responding to the survey in 2015, just over 26 % indicated that they were vacationing, higher than the finding of 22% vacationers reported in the 2012 economic impact study, or the 23% reported in the Madison County counts in 2014. The presence of vacationers was significantly higher in Dewitt and Palmyra than in Albany, most likely due to the proximity of the Corning Preserve to the downtown employment center, which contributes to high local use.

Among those surveyed, biking was the most popular trail use, and walking a close second. Figure 18 shows the number of these and other responses to “What activities do you engage in along the trail?” This question allowed multiple selections; therefore the high number of “Biking” vs. “Walking/Hiking” responses does not represent a discrepancy with the observational count data. Rather, it is a further indication that trail users generally engage in more than one activity on the trail.

Figure 16: What activities do you engage in along the trail? (multiple selections allowed)



Conclusions

This report represents the ninth year of using trail count data to predict the amount of trail traffic at specific locations on the Canalway Trail System. Table 13 presents the estimated annual trail traffic volumes for multiple locations derived from counts conducted between 2007 and 2015. While the data are displayed side-by-side here, comparison between pre- and post-2010 data must be done with caution due to the use of different methodologies (Lindsey et al. versus NBPD).

Trail Use Estimates

Estimated trail use for locations counted in 2015 is shown in Table 12.

Table 12: Estimated annual trail use, physical and electronic count locations, 2015

Location	Estimated Annual Trail Use, 2015
Niawanda Park, Tonawanda	183,419*
Bushnell's Basin, Perinton	145,650
Erie Canal Museum, Palmyra	31,711
Cedar Bay Park, Dewitt	155,602
Lock 20 Canal Park, Marcy	49,424
Rause Road, Ft. Plain	15,607
Corning Preserve, Albany	156,714
*Tonawanda figures based on full-year electronic count; not an estimate	

Trail traffic at Rause Road in Ft. Plain was observed to be low compared to other sites counted in 2015, and to historical trail count data from across the Canalway Trail. Only Oneida, counted in

2014, has a lower estimated annual trail use. Trail closures in area during 2015 may have affected local use.

Trail counts at Lock 20 Canal Park in Marcy and at the Erie Canal Marina in Palmyra revealed estimated annual use of 49,424 and 31,711, respectively. The 30,000-50,000 range puts these sites in the lowest quarter of historically-recorded count sites.

With estimated annual use around 150,000, Bushnell's Basin, Cedar Bay Park, and the Corning Preserve all rank in the top half of historical counts. Each is within or close to a large metropolitan area, so these results are not surprising.

Niawanda Park in Tonawanda was the busiest of the 2015 count sites. Tonawanda serves as a summer boating hub, and Niawanda Park is an easy ride from downtown Buffalo. Both factors ensure consistently high trail use. However, observed 2015 use was moderately less than 2014, with the extremely cold winter playing some role in the decrease.

Table 13: Estimated annual Canalway Trail use by location, 2007-2014

Location and Year	Estimated Annual Traffic
Lake Road, Oneida, 2014	8,063
Rause Road, Ft. Plain, 2015	15,607*
Centerport, Brutus, Cayuga County, 2010	19,453
The Silos, Hudson Falls, Washington County, 2012	25,246
Albion Canal Park, Albion, Orleans County, 2013	31,024
Erie Canal Marina, Palmyra, 2015	31,711
The Five Combines, Kingsbury, Washington County, 2012	38,610
Lock 20 Canal Park, Marcy, 2015	49,424*
Haviland Cove Park, Glens Falls, 2012	51,209
Lakeport Road, Chittenango, 2014	52,021
Kiwanis Park, Rotterdam, Schenectady County, 2009	56,715
148 Lyman Street, Brockport, Monroe County, 2013	62,700
Park Avenue Bridge, Brockport, Monroe County, 2013	63,874
Newport Road (Warners), Camillus, Onondaga County, 2010	68,264
Main Street Bridge, Brockport, Monroe County, 2013	72,390
Colonic Town Park, Albany County, 2009	95,471
Genesee Valley Park, Monroe County, 2007	98,240
Schenectady Community College, Schenectady County, 2009	105,869
Genesee Valley Park, Monroe County, 2008	106,073
Henpeck Park, Greece, Monroe County, 2011	107,143
Schoen Place, Monroe County, 2007	145,520
Bushnells' Basin, Perinton, 2015	145,650*
Cedar Bay Park, Dewitt, 2015	155,602
Perinton Park, Monroe County, 2008	156,565
Corning Preserve, Albany, 2015	156,714
Perinton Park, Monroe County, 2007	158,144
JCC/Lock 33, Monroe County 2008	163,654
Route 173, Camillus, Onondaga County, 2010	165,333
Train Station, Niskayuna, Schenectady County, 2009	173,927
Sims Store, Camillus, Onondaga County, 2010	174,663
Niawanda Park, Tonawanda, Erie County, 2015	183,419*
Schoen Place, Monroe County, 2008	184,281
JCC/Lock 33, Monroe County, 2007	190,591
Nine Mile Creek Aqueduct, Camillus, Onondaga County, 2011	198,270
Sims Store, Camillus, Onondaga County, 2011	207,381
Niawanda Park, Tonawanda, Erie County, 2014	208,500*
Old Erie Canal State Park, Dewitt-Manlius, Onondaga County, 2010	233,732
Nine Mile Creek Aqueduct, Camillus, Onondaga County, 2010	237,834
Niawanda Park, Tonawanda, Erie County, 2011	605,033
*Indicates count by electronic counter	

Survey Findings

Trail users surveyed in 2015 displayed characteristics similar to those surveyed in previous efforts in terms of gender, appreciation for the trail as a recreational and historic resource, and interest in longer cycling trips. They also used the trail for a wide variety of activities, with biking and walking/hiking the most common.

In terms of demographics and income, this year's respondents deviated somewhat from the 2012 statewide trail survey. The median age of trail users was 52 in 2015, similar to the 2014 finding, but older than that observed in the 2012 effort. Income levels were higher, on average, for 2015 survey respondents than in the 2014 Madison County or 2012 statewide survey.

Appendices

Appendix A: Trail Count Protocol



**Who's On the Trail?
Canalway Trail User Count
2015**

Count Protocol



Timing

1. At least four counts should be taken at each location.
2. Ideally, three counts should be taken during the same week or on the same days in successive weeks.
3. Weekday counts should always be done on Tuesday, Wednesday, and/ or Thursday, and never on a holiday, Monday, or Friday.
4. Weekend counts can be done on either day.
5. Counts should be conducted in July and/or August.

Conducting Counts

1. Count for at least two full hours at a time that you judge to be the time of peak activity. You can determine the time of peak activity from your experience or that of others who are familiar with the trail. It is expected that the weekend day hour of peak activity will be different from that during the week. *Contact Parks & Trails New York with questions regarding hours of peak activity.*
2. Counts can be conducted on consecutive weekdays (Tuesday through Thursday) during the same week and at the peak time on the Saturday or Sunday of that week. **OR** Counts can be conducted on the same week day in at least three consecutive weeks in addition to one weekend day. Each count must be taken during the time of peak usage for weekdays and weekend days.
3. Do not worry if you count someone twice because they pass you going in both directions. The formulas used at the end will take that into consideration.

Personnel Required

1. One person can conduct the counting. If you are counting at a location with significant trail traffic, it may be advisable to have two people conduct counts and average their results.

Conducting the count

1. Use a new sheet each time you count.
2. Make a tick in the boxes for the type of trail user that passes by. For a tandem, make a tic for each rider. For someone pushing a baby carriage or stroller, make a tic for each child. Record the person pushing the carriage or stroller as a walker.
3. Stand where you do not block the trail but can easily observe users as they pass.
4. *Please send pictures (500 KB in size or larger) of volunteers taking the count and persons using the trail that we can include in publications and presentations.*

THANK YOU FOR YOUR HELP!!!!

Please mail all forms to:

Canalway Trail User Count 2015
Parks & Trails New York
29 Elk Street
Albany, NY 12207
518-434-1583
jmeerdink@ptny.org
Or FAX to 518-427-0067

Albany, NY 12207

518-434-1583

fgotsik@ptny.org OR FAX to 518-427-0067

Appendix B: Trail Count Form



Who's on the Trail? The Canalway Trail User Count – 2015



Surveyor Name: _____ Phone: _____ Email: _____

Date: _____ Time conducted: _____ to _____ p.m. Location: _____ Town/Village: _____

Trail surface: asphalt ☐ stone dust ☐ Weather Conditions: sunny ☐ partly cloudy ☐ cloudy ☐ partly rainy ☐ rain ☐ Approximate temperature: _____

Make one "tic mark" for each person passing by in either direction engaged in each activity.

User Type	Counts	
	With helmets	Without helmets
Bicyclists		
Human passenger in bicycle seat or trailer <small>One tic for each person</small>		
Tandem bicycles <small>One tic for each person</small>		
Recumbent cycles		
Tricycles		
Hand-powered cycle		
Walkers		
In-line skaters		Joggers
Baby carriages/ Strollers		Wheelchair users
Equestrians		Other <small>specify</small>

Thanks for you help!!! Please return the form(s) to:

Canalway Trail User Count 2015, Parks & Trails New York, 29 Elk Street, Albany, NY, 12207, 518-434-1583, FAX 518-427-0067

Appendix C: Count Data

Erie Canal Marina, Palmyra

Name	Date	Day	Time_From	Time_To	Weather Conditions	Approx. temp.	Cyclists	Bicyclists with helmets	Bicyclists with child in seat or trailer with helmet	Tandem bicyclists with helmets	Recumbent Bicyclists with helmet	Tricyclists with helmet	Bicyclists Without helmets	Bicyclists with child in seat or trailer without helmet	Hand powered cycle	Walkers	In Line Skaters	Joggers	Equestrians	Baby Carriages	Wheelchair users	Other	Total Users
					1=sunny, 2=partly cloudy, 3=cloudy, 4=rain. 5=partly rainy	Σ	105	64	0	0	1	0	35	5	0	18	0	2	0	0	0	0	125
Ken Bradstreet	7/28/15	Tuesday	10 AM	12 PM	1	85	11	3	0	0	0	0	8	0	0	2	0	0	0	0	0	0	13
Ken Bradstreet	7/29/15	Wednesday	10 AM	12 PM	1	90	20	6	0	0	0	0	14	0	0	4	0	0	0	0	0	0	24
Ken Bradstreet	7/30/15	Thursday	10 AM	12 PM	2	80	15	14	0	0	0	0	1	0	0	9	0	1	0	0	0	0	25
Ken Bradstreet	8/1/15	Saturday	10 AM	12 PM	1	75	59	41	0	0	1	0	12	5	0	3	0	1	0	0	0	0	63

Cedar Bay Park, Dewitt

Name	Date	Day	Time_From	Time_To	Weather Conditions	Approx. temp.	Cyclists	Bicyclists with helmets	Bicyclists with child in seat or trailer with helmet	Tandem bicyclists with helmets	Recumbent Bicyclists with helmet	Tricyclists with helmet	Bicyclists Without helmets	Bicyclists with child in seat or trailer without helmet	Hand powered cycle	Walkers	In Line Skaters	Joggers	Equestrians	Baby Carriages	Wheelchair users	Other	Total Users
					1=sunny, 2=partly cloudy, 3=cloudy, 4=rain, 5= partly rainy	Σ	164	88	1	0	0	0	75	0	0	347	0	138	0	15	0	1	665
Kathryn Downing	7/21/15	Tuesday	10 AM	12 PM	3	74	11	7	0	0	0	0	4	0	0	36	0	8	0	1	0	0	56
Stephanie Nick	7/22/15	Wednesday	5 PM	7 PM	1	75	33	18	0	0	0	0	15	0	0	89	0	30	0	3	0	1	156
Kathryn Downing	7/23/15	Thursday	5 PM	7 PM	2	76	15	5	0	0	0	0	10	0	0	67	0	17	0	2	0	0	101
Bryce Mandal	7/25/15	Saturday	9 AM	11 AM	2	75	32	13	1	0	0	0	18	0	0	52	0	33	0	0	0	0	117
Stephanie Nick	7/28/15	Tuesday	9:45 AM	11:45 AM	1	88	28	18	0	0	0	0	10	0	0	25	0	12	0	0	0	0	65
Brianna, Bryce, Vanessa	7/29/15	Wednesday	5 PM	7 PM	1	91	7	5	0	0	0	0	2	0	0	5	0	6	0	0	0	0	18
Vanessa	7/30/15	Thursday	5:00 PM	7:00 PM	1	82	16	8	0	0	0	0	8	0	0	40	0	15	0	7	0	0	78
Stephanie Nick	8/8/15	Saturday	11:30 AM	1:30 PM	1	70	22	14	0	0	0	0	8	0	0	33	0	17	0	2	0	0	74

Corning Preserve, Albany

Name	Date	Day	Time_From	Time_To	Weather Conditions	Approx. temp.	Cyclists	Bicyclists with helmets	Bicyclists with child in seat or trailer with helmet	Tandem bicyclists with helmets	Recumbent Bicyclists with helmet	Tricyclists with helmet	Bicyclists Without helmets	Bicyclists with child in seat or trailer without helmet	Hand powered cycle	Walkers	In Line Skaters	Joggers	Equestrians	Baby Carriages	Wheelchair users	Other	Total Users
					1=sunny, 2=partly cloudy, 3=cloudy, 4=rain, 5= partly rainy	Σ	318	195	5	0	0	0	118	0	0	335	1	232	0	3	0	13	902
Lorenz Worden & Claire Nolan	7/28/15	Tuesday	11 AM	1 PM	1	70	40	16	1	0	0	0	23	0	0	80	0	27	0	0	0	0	147
Lorenz Worden	7/29/15	Wednesday	11 AM	1 PM	1	70	39	23	0	0	0	0	16	0	0	31	0	25	0	0	0	2	97
Lorenz Worden & Glenn Sandberg	7/30/15	Thursday	11 AM	1 PM	1	68	19	10	0	0	0	0	9	0	0	32	0	24	0	0	0	2	77
Lorenz Worden	8/1/15	Saturday	9 AM	11 AM	1	75	68	50	2	0	0	0	16	0	0	36	0	28	0	0	0	2	134
Lorenz Worden	8/18/15	Tuesday	11 AM	1 PM	1	75	29	18	0	0	0	0	11	0	0	30	0	25	0	0	0	3	87
Lorenz Worden & Sheridan	8/19/15	Wednesday	11 AM	1 PM	2	65	26	15	0	0	0	0	11	0	0	39	0	31	0	0	0	2	98
Lorenz Worden & Sheridan	8/20/15	Thursday	11 AM	1 PM	2	70	27	16	0	0	0	0	11	0	0	43	1	23	0	0	0	2	96
Lorenz Worden	8/22/15	Saturday	9 AM	11 AM	2	70	70	47	2	0	0	0	21	0	0	44	0	49	0	3	0	0	166

Niawanda Park, Tonawanda

Month	Total Volume	Daily Average
September 2014	22,935	765
October 2014	9,106	294
November 2014	4,492	150
December 2014	3,171	102
January 2015	1,566	51
February 2015	400	14
March 2015	3,040	98
April 2015	13,360	445
May 2015	29,264	944
June 2015	29,490	983
July 2015	36,021	1,162
August 2015	30,574	986
Total	183,419	503

Bushnell's Basin, Perinton

Date	Day of Week	Daily Count Total
08/01/15	Saturday	917
08/02/15	Sunday	1041
08/03/15	Monday	415
08/04/15	Tuesday	388
08/05/15	Wednesday	681
08/06/15	Thursday	582
08/07/15	Friday	584
08/08/15	Saturday	1012
08/09/15	Sunday	1298
08/10/15	Monday	313
08/11/15	Tuesday	376
08/12/15	Wednesday	458
08/13/15	Thursday	684
08/14/15	Friday	352
08/15/15	Saturday	732
08/16/15	Sunday	916
08/17/15	Monday	433
08/18/15	Tuesday	315
08/19/15	Wednesday	404
08/20/15	Thursday	240
08/21/15	Friday	669
08/22/15	Saturday	1149
08/23/15	Sunday	1229
08/24/15	Monday	860
08/25/15	Tuesday	391
08/26/15	Wednesday	362
08/27/15	Thursday	314
08/28/15	Friday	671
08/29/15	Saturday	1001
08/30/15	Sunday	936
08/31/15	Monday	668
Monthly Total		20,391
Daily Average		658
Weekday Average		484
Weekend Average		1037

Lock 20 Canal Park, Marcy

Date	Day of Week	Daily Count Total
06/20/15	Saturday	200
06/21/15	Sunday	132
06/22/15	Monday	256
06/23/15	Tuesday	164
06/24/15	Wednesday	270
06/25/15	Thursday	228
06/26/15	Friday	223
06/27/15	Saturday	142
06/28/15	Sunday	65
06/29/15	Monday	164
06/30/15	Tuesday	75
07/01/15	Wednesday	113
07/02/15	Thursday	229
07/03/15	Friday	237
07/04/15	Saturday	132
07/05/15	Sunday	346
07/06/15	Monday	254
07/07/15	Tuesday	177
07/08/15	Wednesday	274
07/09/15	Thursday	102
07/10/15	Friday	154
07/11/15	Saturday	264
07/12/15	Sunday	189
07/13/15	Monday	252
07/14/15	Tuesday	187
07/15/15	Wednesday	223
07/16/15	Thursday	280
07/17/15	Friday	339
Monthly Total		5,671
Daily Average		203
Weekday Average		210
Weekend Average		184

Rause Road, Ft. Plain

Date	Day of Week	Daily Count Total
08/01/15	Saturday	93
08/02/15	Sunday	96
08/03/15	Monday	78
08/04/15	Tuesday	59
08/05/15	Wednesday	73
08/06/15	Thursday	46
08/07/15	Friday	52
08/08/15	Saturday	103
08/09/15	Sunday	121
08/10/15	Monday	64
08/11/15	Tuesday	42
08/12/15	Wednesday	85
08/13/15	Thursday	67
08/14/15	Friday	37
08/15/15	Saturday	65
08/16/15	Sunday	72
08/17/15	Monday	42
08/18/15	Tuesday	42
08/19/15	Wednesday	60
08/20/15	Thursday	60
08/21/15	Friday	90
08/22/15	Saturday	96
08/23/15	Sunday	90
08/24/15	Monday	65
08/25/15	Tuesday	81
08/26/15	Wednesday	101
08/27/15	Thursday	59
08/28/15	Friday	73
08/29/15	Saturday	49
08/30/15	Sunday	50
08/31/15	Monday	74
Monthly Total		2,185
Daily Average		71
Weekday Average		64
Weekend Average		84

Appendix D: NBPd Adjustment Factors

Table 1: Hour to Day					(6AM - 10PM = 95% OF ALL USAGE)				
APR-SEP					OCT-MAR				
6am - 9pm					6am - 9pm				
---- PATH-----		-----PED District-----			---- PATH-----		-----PED District-----		
wkdy	wkend	wkdy	wkend		wkdy	wkend	wkdy	wkend	
Hour									
600	2%	1%	1%	1%		2%	0%	1%	0%
700	4%	3%	2%	1%		4%	2%	2%	1%
800	7%	6%	4%	3%		6%	6%	3%	2%
900	9%	9%	5%	3%		7%	10%	5%	4%
1000	9%	9%	6%	5%		9%	10%	6%	5%
1100	9%	11%	7%	6%		9%	11%	8%	8%
1200	8%	10%	9%	7%		9%	11%	9%	10%
1300	7%	9%	9%	7%		9%	10%	10%	13%
1400	7%	8%	8%	9%		9%	10%	9%	11%
1500	7%	8%	8%	9%		8%	10%	8%	8%
1600	7%	7%	7%	9%		8%	8%	7%	7%
1700	7%	6%	7%	8%		7%	5%	6%	6%
1800	7%	5%	7%	8%		6%	3%	7%	6%
1900	5%	4%	7%	8%		4%	2%	7%	6%
2000	4%	3%	7%	8%		2%	1%	6%	6%
2100	2%	2%	6%	8%		2%	1%	5%	5%

Table 2: Day to Week

DAILY ADJUSTMENT FACTORS	
SUN	18%
MON	14%
TUES	13%
WED	12%
THURS	12%
FRI	14%
SAT	18%

Table 3: Region and Month

MONTHLY ADJUSTMENT FACTORS			
CLIMATE REGION	Long Winter Short Summer	Moderate Climate	Very Hot Summer Mild Winter
JAN	3%	7%	10%
FEB	3%	7%	12%
MAR	7%	8%	10%
APR	11%	8%	9%
MAY	11%	8%	8%
JUN	12%	8%	8%
JUL	13%	12%	7%
AUG	14%	16%	7%
SEP	11%	8%	6%
OCT	6%	6%	7%
NOV	6%	6%	8%
DEC	3%	6%	8%

Appendix E: Survey Protocol

Who's On the Trail? Canalway Trail User Survey – 2015

Survey Protocol

Survey Purpose

The trail user survey is the qualitative counterpart to the trail count. The main goal of surveying trail users is to gain demographic insights, i.e. who trail users are, and their motivations for using the trail. We also ask questions related to their economic behavior as it relates to their trail use. This information can be very useful when designing programming or planning new sections of trail, considering improvements to trail facilities, or marketing the Canalway Trail.

Survey Positioning & Approach

- If performing the survey in conjunction with the trail user count, position yourself approximately 50 feet from the person conducting the count, i.e. up or down trail
- Make sure you are visible to approaching trail users, in a location that maintains safety for all parties
- Randomly select trail users to be surveyed. Be sure to include those cycling as well as walking.
- Approach cyclists and pedestrians in a friendly and engaging manner. Greet them, introduce yourself, and tell them you are volunteering to help the statewide nonprofit Parks & Trails New York and the New York State Canal Corporation gather information on usage of the Erie Canalway Trail.

For example:

“Hello, do you have time to answer a few questions about your use of the Canalway Trail?”

If yes:

“My name is _____ and I’m a volunteer conducting this survey for the statewide nonprofit Parks & Trails New York and the New York State Canal Corporation. The information will be used to better understand how people use the Erie Canalway Trail. The survey is 100% anonymous -- no names, phone numbers or home addresses will be collected. The survey should take about 10 minutes.”

Survey Completion

Hand over the clipboard and let respondents fill in the data themselves, asking questions of you when necessary.

Allowing respondents to read the questions for themselves can eliminate some of the unintentional cues that survey collectors often give when reading questions aloud, called interviewer bias. These cues include such practices as skipping questions or reading questions quickly based on assumed information. If you feel that reading the questions aloud to a specific respondent is necessary, please try to be uniform in reading of all questions, and try not to make assumptions about the answers you’ll receive.

Each person should try to obtain surveys from about five persons. However, you are free to conduct more surveys if you like.

Personnel Required

- One or more people can do surveying simultaneously.

- It is also possible for one person to administer surveys to more than one person by having multiple clipboards available, and simply handing them out to respondents.

Please mail all forms to:

Canalway Trail User Count 2014
Parks & Trails New York
29 Elk Street
Albany, NY 12207
518-434-1583
fgotcsik@ptny.org
Or FAX to 518-427-0067

THANK YOU FOR YOUR HELP!!!!

Appendix F: Survey Questionnaire**2015 Erie Canalway Trail User Survey**

Thank you for helping the New York State Canal Corporation and the statewide non-profit Parks & Trails New York learn more about the economic impact of the Erie Canalway Trail. Completing this questionnaire takes less than 10 minutes. Your participation will be kept 100% anonymous. If you would like more information about the survey, please e-mail Fran Gotcsik at Parks & Trails New York at fgotcsik@ptny.org or call 518-434-1583.

1. Please select the areas of the Canal you have visited and circle the areas you are visiting on this trip.

- ☐ Buffalo Waterfront, The Tonawandas, Pendleton
- ☐ Downtown Lockport to Albion
- ☐ Albion to Rochester (west of the Genesee River)
- ☐ Rochester to Newark
- ☐ Port Byron to Camillus
- ☐ DeWitt to Oneida
- ☐ Oneida to Oriskany
- ☐ Oriskany to Herkimer
- ☐ Herkimer to Canajoharie
- ☐ Canajoharie to Amsterdam
- ☐ Amsterdam to Schenectady
- ☐ Schenectady to Trail-end at Hudson River in Waterford
- ☐ Cohoes to Albany

2. Roughly, how many miles from the part of the trail you are visiting today do you live? _____

About you

3. Gender ☐ Female ☐ Male

4. Age ☐ 17 and under ☐ 18 -29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60-69 ☐ 70-79 ☐ 80+

5. What is your zip code? : _____

6. What is your county of residence? : _____

7. What is your highest level of education?

- ☐ Less than High School Diploma
- ☐ High School Diploma
- ☐ Some College
- ☐ 2-year degree
- ☐ 4-year degree
- ☐ Graduate or Professional school

8. How many people are in your group, including yourself? _____

9. Are there any children with you under the age of 15? ☐ Yes ☐ No How many? _____

Trail Usage

10. How did you first find out about the trail? Please choose all that apply.

- ☐ Word of mouth
- ☐ Roadside signage
- ☐ Driving past
- ☐ Live by the trail
- ☐ Trail kiosk
- ☐ Newspaper
- ☐ Magazine
- ☐ Bike shop
- ☐ County tourism office
- ☐ Tourist agency
- ☐ PTNY Cycling the Erie Canal guidebook
- ☐ PTNY website
- ☐ NYS Canal Corporation website
- ☐ Internet search
- ☐ Other: _____

11. What activities do you engage in along the trail? Please choose all that apply and circle your most common activity.

- ☐ Walking/Hiking
- ☐ Biking
- ☐ Horseback
- ☐ Running
- ☐ Walking a pet
- ☐ Bird Watching
- ☐ Skiing
- ☐ Snowmobiling

- ☐ Rollerblading
- ☐ Boating
- ☐ Other: _____

12. When do you primarily use the trail? Please choose one: ☐ Weekday ☐ Weekend ☐ Both

13. How often, on average, do you use the trail? Please choose only one of the following:

- ☐ Daily
- ☐ Between 3-5 times a week
- ☐ 1 or 2 times a week
- ☐ A couple of times a month
- ☐ Once a month
- ☐ Few times a year

14. How much time do you spend on the trail during a typical visit? Please choose only one:

- ☐ Less than 30 minutes
- ☐ 30-60 min
- ☐ 60-120 min
- ☐ >120 min

15. In what seasons do you make use of the trail? Please choose all that apply and circle the season of most frequent visits:

- ☐ Spring
- ☐ Summer
- ☐ Fall
- ☐ Winter

16. What would you consider your use of the trail to be primarily for? Please choose one:

- ☐ Recreation
- ☐ Health, exercise and fitness
- ☐ Commuting to job, school or somewhere else
- ☐ Tourism

17. If you commute, how far is your typical journey, one way, in miles? _____

18. How do you generally get to the trail entrance? Please choose only one of the following:

- ☐ Car/Truck/Van
- ☐ Bike
- ☐ Walk
- ☐ Horseback
- ☐ Other

Vacationing on the trail

19. Are you vacationing in the area, away from your home? ☐ Yes ☐ No

20. Do you ever take overnight or longer trips along the Erie Canalway Trail? ☐ Yes ☐ No

How many nights did you, or do you plan to, stay away from home? _____

21. What is your preferred overnight accommodation for trips to the Canalway Trail? Please choose only one of the following:

- ☐ Bed and breakfast/inn
- ☐ Hotel/motel
- ☐ Campground
- ☐ Staying with friends in the area

22. What resources did you use to plan your trip? Please choose all that apply.

- ☐ Map
- ☐ Roadside signage
- ☐ County tourism office
- ☐ Tourist agency
- ☐ PTNY Guidebook
- ☐ PTNY website map
- ☐ Canal Corporation website
- ☐ Internet search
- ☐ Other: _____

Spending

23. Please fill out the following questions with the amount of money you spend in each category during a typical day on the Canalway Trail. If you are on a multi-day trip, please provide the average spending values for a single day for each category. For example, if you are on a 7-day trip and spend about \$100 per day on a hotel room please report \$100 not \$700. Please only include spending for yourself, not the rest of your party. For example, if you split a \$100 hotel room with another user, report the amount of spending attributed to you as \$50.

Total expenditures within one typical day on the trail:

Motel, hotel, cabin or B&B	_____
Camping fees	_____
Restaurants & bars	_____
Groceries, take-out food/drinks	_____
Gas & oil	_____
Other vehicle expenses	_____
Local transportation	_____
Admissions & fees (amusement parks, state park entrance fees, etc.)	_____
Clothing	_____
Sporting goods	_____
Gambling	_____
Souvenirs and other expenses	_____

Interests

Please tell us how much each statement describes your experiences, preferences and/or views using the following 4-point answer scale:

24. Overall, outdoor activities along the trail have had a very positive effect on me.

- ☐ Definitely Does
- ☐ Does Somewhat
- ☐ Not Very Well
- ☐ Not at all

25. I am interested in the history of the Erie Canal and specific historical spots along the trail.

- ☐ Definitely Does
- ☐ Does Somewhat
- ☐ Not Very Well
- ☐ Not at all

26. How interested would you be in biking along a significant (greater than 50 miles) portion of the trail?

- ☐ Definitely Does
- ☐ Does Somewhat
- ☐ Not Very Well
- ☐ Not at all

Final Questions

27. My current work status is: Please choose only one of the following:

- ☐ I work full-time
- ☐ I work part-time
- ☐ I am looking for work
- ☐ I am retired
- ☐ I am a student

28. My approximate annual household income is: Please choose only one of the following:

- ☐ Less than \$10,000
- ☐ \$10,000 to \$24,999
- ☐ \$25,000 to \$34,999
- ☐ \$35,000 to \$49,999
- ☐ \$50,000 to \$74,999
- ☐ \$75,000 to \$99,999
- ☐ \$100,000 to \$149,999
- ☐ \$150,000 to \$199,999
- ☐ \$200,000 or more

Thank you for completing this survey

If you would like more information about Parks & Trails New York or the Canalway Trail please visit www.ptny.org. Also connect with PTNY on [Facebook](#) and Twitter.

Works Cited

Lindsay, Greg, Jeff Wilson, Elena Rubchinskaya, Jihui Yang, Yuling Han. (2007). Estimating urban trail traffic: Methods for Existing and Proposed Trails. *Landscape Urban Planning* , 299-325.

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