

Who's on the Trail?

The Canalway Trail User Count 2012



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For the New York State Canal Corporation
December 2012



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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 where it is located. With new segments being developed and the growing reputation of the Canalway Trail as a world-class resource, there is a strong potential that greater numbers of visitors are using the trail each year.

This year marks the eighth 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. For the first time volunteers conducted counts on a portion of the system other than the Erie Canalway Trail. Focused on the Glens Falls Feeder Canal Trail in Warren and Washington Counties, members of the Feeder Canal Alliance spent several days this summer noting the number and type of trail users that passed by three popular sites on the trail. These sites were Haviland Cove Park, the Silos, and the iconic Five Combines.

Resulting estimates of annual trail traffic volume at the three sites varied from a low of approximately 25,000 persons at the Silos to more than 50,000 persons at Haviland Cove Park.

In a continuing trend from recent years, walkers were again the dominant users observed on the trail. All surveys prior to 2010 found that while the Canalway Trail was popular with walkers, the predominant users were bicyclists.

Understanding the volume and nature of trail use is critical when deciding how best to maintain and enhance this unique resource. It is the hope of both the New York State Canal Corporation and Parks & Trails New York that this trail count data will be used to justify current and future levels of support for the trail, encourage local involvement in its enhancement and promotion, and provide a base from which to evaluate its impact on the local economies of the towns, villages, cities, and counties that it connects.

Background

Extending 524 miles across New York, the Canalway Trail System brings economic, public health, tourism, and quality of life benefits to the 4.3 Million New Yorkers living in the 18 upstate counties where it is located.

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 Erie Canalway Trail 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 Erie Canalway Trail 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. However, it was recognized that the predictive value of Lindsey's coefficients may have been compromised as they did not fully account for the rural and suburban environment and more severe winters found along the trail in Upstate New York.

In light of this discrepancy, Parks & Trails New York and the New York State Canal Corporation decided in 2010 to employ 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 Erie 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, Montgomery, Schenectady, Albany, Warren and Washington Counties. 2012 marks the first year where counts were conducted on a portion of the Canalway Trail system other than the Erie.

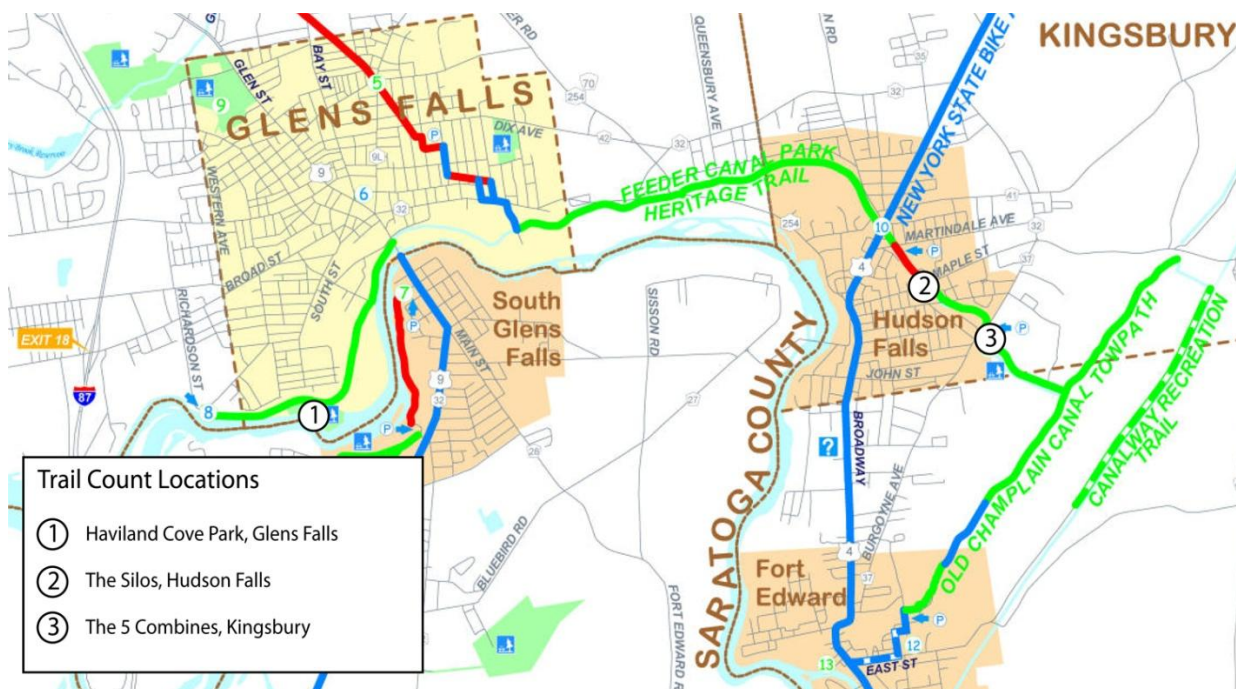
Methodology

Data Collection

All data collected are available in spreadsheet format in Appendix C.

Location

Figure One: 2012 Trail Count Locations



The base map is an excerpt of the Glens Falls Regional Bicycle Map, 2001. Red and green segments denote multi-use trail surfaced in asphalt or stone dust, respectively.

In 2012 counts were focused on three locations on the nine- mile Glens Falls Feeder Canal Trail in Warren and Washington Counties.

Haviland Cove Park, City of Glens Falls

Counts were conducted within this popular city-owned park situated between the Feeder Canal and the Hudson River. The park has ample parking and offers swimming and picnic opportunities beyond serving as a trailhead for the Feeder Canal Trail. There are also public restrooms open to trail users during the summer months.

The Silos, Village of Hudson Falls

Located in the heart of the Village of Hudson Falls, the silos are 30 foot tall silos once used to store coal that came in by canal barge in the early decades of the 20th century. The silos sit to the south of the Feeder Canal Trail's crossing on Maple Street. There are no facilities at this location, though parking is available at the public works department on Maple Street.

The Five Combines, Town of Kingsbury

The Five Combines are a series of five locks located just outside the Village of Hudson Falls in the Town of Kingsbury. Built in 1845, the locks provide a picturesque backdrop for both picnickers and trail users. A public parking area is available to the north, and further south the Feeder Canal Trail merges with the towpath of the Old Champlain Canal.

Month

This year trail counts began in late July and lasted until the end of August. Volunteers at the Haviland Cove location had completed their counts during the last week of July while volunteers at the other two locations completed their counts between mid and late August.

Counters

Three volunteers conducted eleven separate counts between the three sites.

Days of the Week

The table below details the breakdown of count days at each site.

Table One: Number of Counts by Day and Location

Count Days	Tuesday	Wednesday	Thursday	Saturday	Sunday	Total
Haviland Cove – City of Glens Falls	1	1	1	1	0	4
Silos – Village of Hudson Falls	1	0	1	1	0	3
Five Combines – Village of Hudson Falls	1	1	4	1	0	4
Total	3	2	3	3	0	11

Process

Volunteers were provided a count protocol based on the methodology of the National Bike and Pedestrian Documentation Project (NBPD, <http://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 survey 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, project staff felt that a two-hour survey period eliminated some of the variability that may be encountered with a single hour of counting.

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

Trail Traffic Estimation

Estimates of annual trail traffic volume 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 period of peak use. Counts at the Silos and Haviland Cove Park began at either 11 AM or noon, while the weekday Five Combine counts were conducted between 7 and 9 AM. The sole weekend count at the Five Combines began at noon.

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 p.m. and 6:00 a.m. Considering that none of the count locations would likely have 5% of their use occurring during those hours and to ensure more conservative estimates, the 1.05 factor was omitted from the calculations used in this study.

2. Estimate of total weekday and weekend daily traffic.

The average weekday and weekend 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 a.m. and 9:00 p.m. 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 count locations resemble the high density development indicative of PED areas, the PATH coefficients were used for all calculations.

The NBPD methodology considers each hour to represent a proportion of that day's use, with the proportions varying between weekdays and weekends. Due to the selection of different count times, the study periods represent between 11% (Five Combines, 7 - 9 AM on a weekday) and 21% of daily use (Haviland Cove, 11 AM – 1 PM on a weekend). Please refer to Appendix D: Table 1 for a complete listing of hourly adjustment factors.

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. The calculations were then repeated with the average two hour weekend count to determine daily weekend estimates.

3. Estimate average weekly trail traffic volumes.

To arrive at an average weekly trail traffic volume, the daily weekday and weekend estimates were 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 2) for the days included in the average weekday count calculation.

The adjusted weekday and weekend counts were then added and divided by two to arrive at the average weekly trail traffic volume.

4. Estimate average monthly trail traffic volumes.

The average weekly volume was multiplied by the average weeks in a month (4.33) to obtain the estimated monthly trail traffic volume. While current guidance from NBPD suggests multiplying by the actual number of weeks (4.43 for July and August), this study continued using the 4.33 coefficient to provide slightly more conservative estimates while preserving the exact methodology used in previous years.

5. Estimate average annual trail 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). With the Haviland Cove counts occurring at the end of July the average monthly volume was divided by 13% which represents that month's portion of total use. Since the counts at the Five Combines and the Silos were in August, 14% was used for the annual volume calculations at those sites.

Results

Modes of Use

Figure Two illustrates that 55% of the total observed trail users were walkers, 33% were cyclists, and 8% were joggers. Persons with baby carriages represented 3%, while 1% of were using a wheelchair or mobility assistive device. No inline skaters, skateboarders, or scooters were observed – most likely because the trail surface is predominantly stone dust.

The 2012 results continue the trend observed since 2010 of walkers being the majority user type. A possible explanation for lower percentage of cyclists on the Feeder Canal Trail is its lack of large, uninterrupted segments of trail which can be found on the Erie Canalway Trail. Please refer to Table Three for a complete breakdown of use by mode for all years of the Trail Count.

Unlike previous years, only bicycles were observed during counts along the Glens Falls Feeder Canal Trail. There were no children in bike seats, tandems, recumbent, or tricyclists.

Figure Two: Trail Usage by Mode as a Percent of Total Count -2012

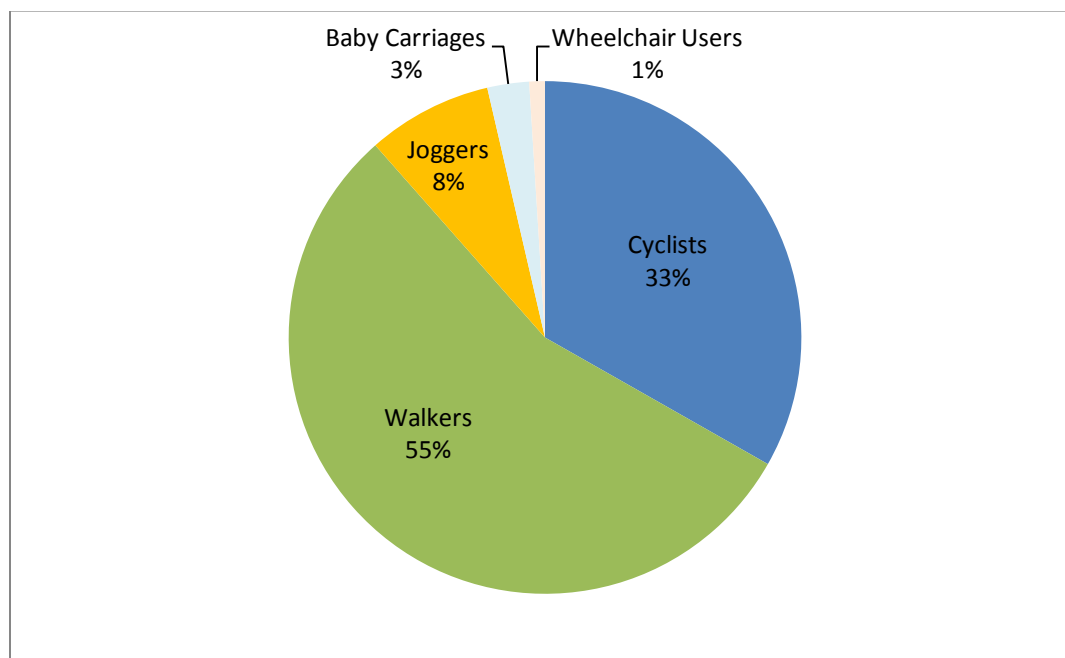


Table Two: Trail Use by Location

Counted Users by Mode of Transportation	Cyclists	Walkers	Joggers	Baby Carriages	Wheelchair Users	Total
Haviland Cove, Glens Falls	47	86	16	4	0	153
The Silos, Hudson Falls	22	28	2	4	3	59
The Five Combines, Hudson Falls	32	54	6	0	0	92

Table Three: Modes of Trail Use Comparison 2005 – 2012

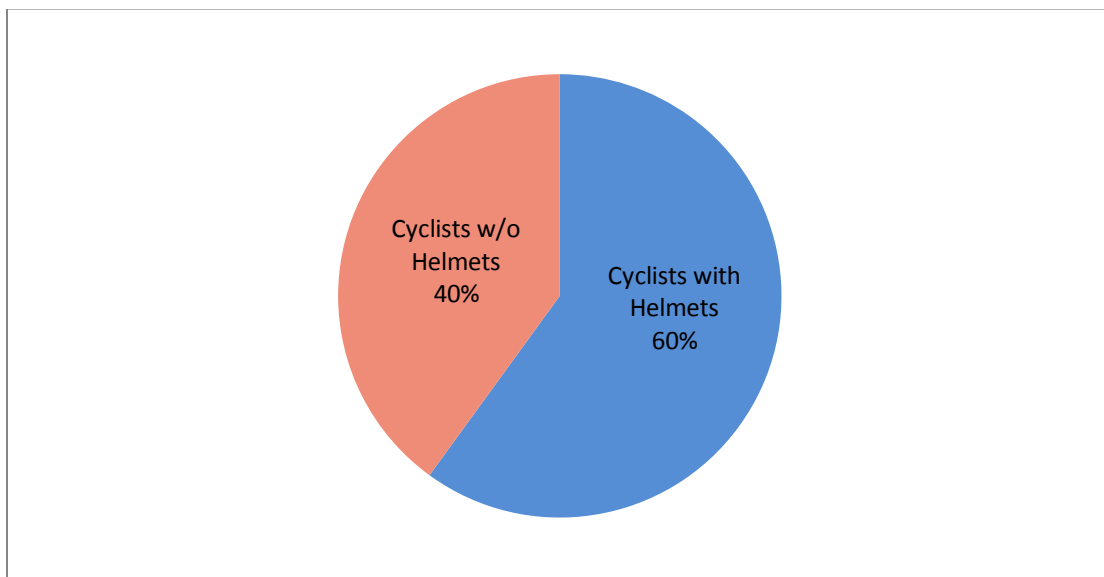
<i>Type of Trail User</i>	Percentage of Total Trail Users Counted							
	2005 Erie CT Monroe Cty	2006 Erie CT Herkimer, Montgomery, & Oneida Ctys	2007 Erie CT Monroe Cty	2008 Erie CT Monroe Cty	2009 Erie CT Schenectady & Albany Ctys	2010 Erie CT Cayuga & Onondaga Ctys	2011 Erie CT Erie, Onondaga, & Monroe Ctys,	2012 Feeder CT Warren & Washington Ctys
Cyclists	64%	43%	49%	52%	53%	21%	30%	33%
Walkers	24%	36%	38%	35%	30%	55%	56%	55%
Joggers	8%	20%	8%	9%	12%	22%	10%	8%
In Line Skaters	2%	0%	2%	2%	4%	0%	2%	0%
Baby Carriages	2%	2%	3%	2%	0.30%	1%	2%	3%
Wheelchair Users	n/a	0%	0%	0.10%	0.10%	0%	0%	1%
Equestrians	0%	0%	0%	<0.1%	0%	0%	0%	0%
Scooters	n/a	n/a	n/a	0.10%	n/a	0%	0%	0%
Other	n/a	n/a	n/a	n/a	0.90%	0%	<0.1%	0%

Cyclists Helmet Usage

Cyclists wearing helmets made up 60% of those observed. This is an increase from the number observed during both the 2011 and 2010 counts (54% and 50%, respectively), while being much closer to the average rate of helmet use observed between 2007 and 2009 (63%).

As can be noted from Figures Four through Six below, the lowest rates of helmet use were at the Silos while the great majority of cyclists at the Five Combines were wearing helmets. With less than a mile separating the two locations, this discrepancy is peculiar. One possible explanation is that with its location in the heart of the Village of Hudson Falls, the Silos site might provide an air of safety for local users. No cyclists were observed during the morning counts at the Five Combines, with nearly all of weekend cyclists wearing helmets (83%). While this proportion is not reflected by the Silos weekend cyclists (20%), the appeal of the Five Combines as a regional destination for weekend cycling trips may explain this high rate of helmet use.

Figure Three. Helmet Use in Observed Cyclists



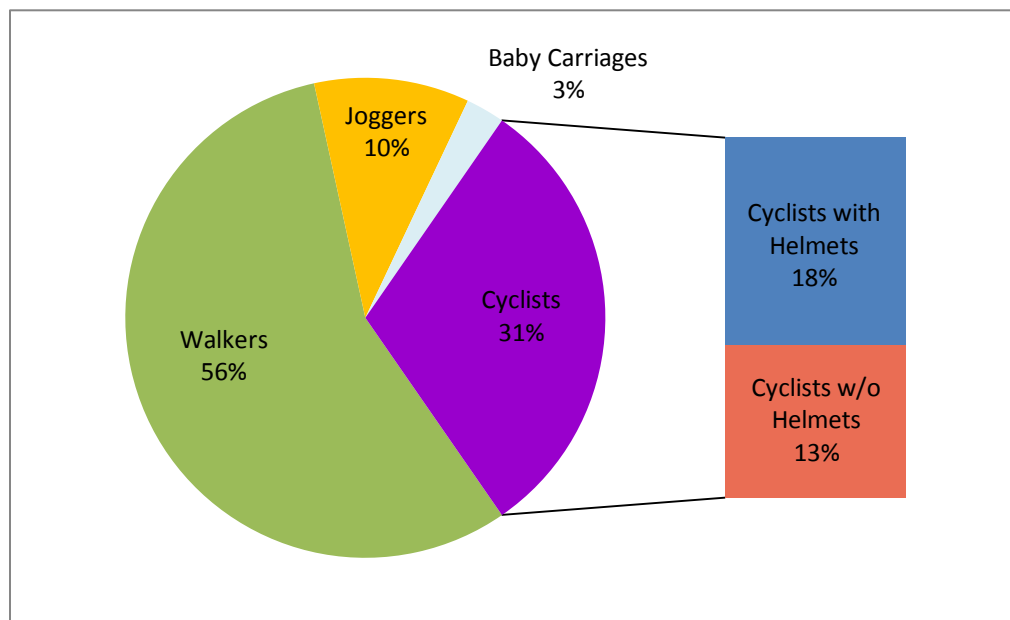
Analysis and Comparison by Location

Haviland Cove Park, City of Glens Falls

Walkers were the clear majority of users (56%) at this picturesque park located between the Hudson River and the Feeder Canal. Beyond the trail, which connects the Feeder Dam to the west and the City of Glens Falls to the east, the park offers numerous amenities such as parking, camping, a kayak launch, picnic areas, and a beach with beach house. Also in the summer, the park offers public restrooms for trail users.

Out of the three locations studied, cyclists at Haviland Cove comprised the lowest proportion of overall users (31%). One reason volunteers may have recorded a lower number of cyclists is that there is a gap of nearly a mile in the Feeder Canal Trail to the east as well as the trail effectively ends at the Feeder dam to the west. However, the trail in Haviland Cove Park exhibited the greatest overall use out the three locations studied this year (153 total users).

Figure Four: Percentage of Observed User Types – Haviland Cove Park



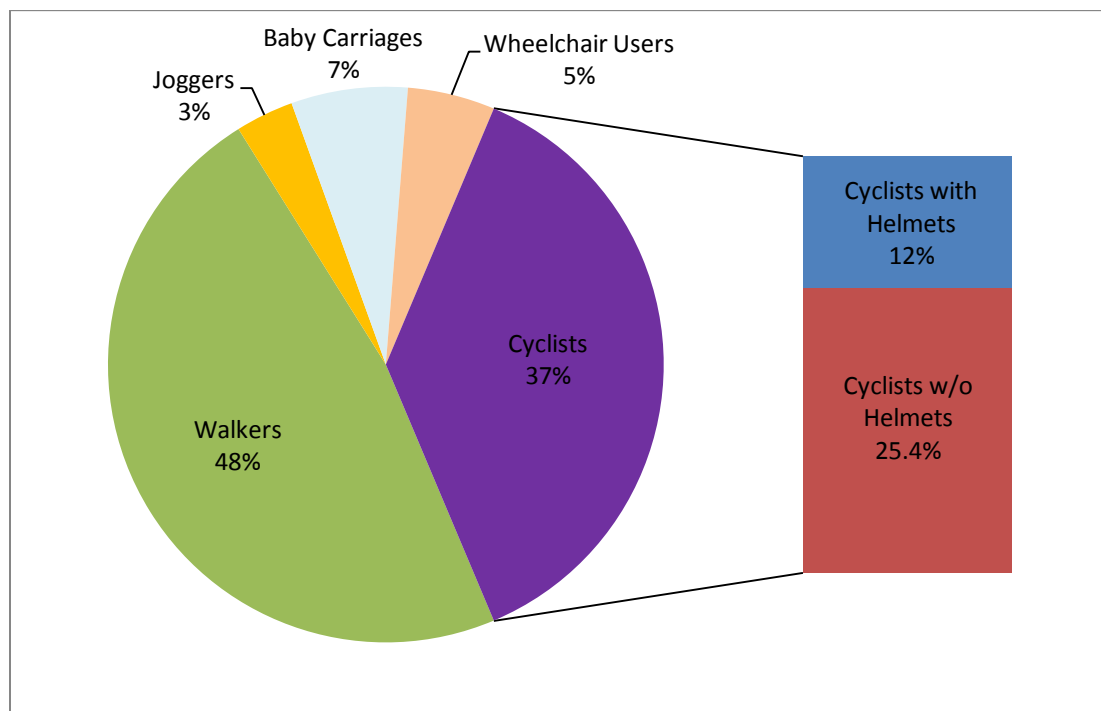
The Silos, Village of Hudson Falls

The Silos are a series of five coal silos located across the Feeder Canal from the Maple Avenue trailhead in the Village of Hudson Falls. Surrounded by homes and with woods along the trail for more than a quarter mile, this segment of the Feeder Canal Trail seems to appeal to a broader range of users than the other study locations. Beyond the majority of walkers (48%), the Silos exhibited relatively high proportions of baby carriages (7%) and wheelchair users (5%).

As has been mentioned previously, while 37% of observed users were cyclists, less than a third of those cyclists were wearing helmets. It is likely the residential and wooded setting of the trail, as well as the possibility of using the trail for local trips may loan a false sense of security to cyclists.

Overall, the silos exhibited the lowest number of users overall (59). It should be noted, however, that the volunteer responsible for the counts was unable to complete a third weekday count.

Figure Five: Percentage of Observed User Types – The Silos



The Five Combines, Town of Kingsbury

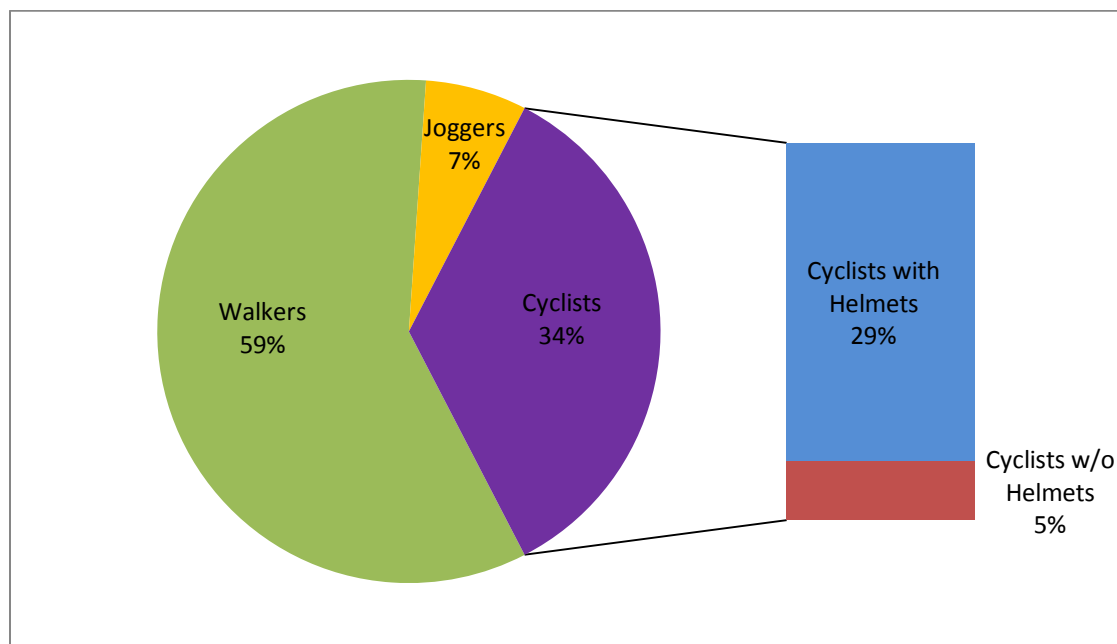
The series of five locks built in 1845 and known as the Five Combines, provide a picturesque backdrop for trail users and picnickers today. At this most iconic location on the Feeder Canal Trail, a parking area is located to the north, while the Feeder Canal Trail joins with the Old Champlain Canal Towpath approximately a mile to the south.

Pedestrians were the dominant user group at 66% with the vast majority of those being walkers (59% of total use). Only 34% of trail users were cyclists but the percentage of cyclists, is based only on the 32 cyclists observed during a single Saturday count (noon to 2 PM). No cyclists were observed during the morning weekday counts (7 AM to 9 AM).

As mentioned previously, 83% of the cyclists were wearing helmets but as the data is from only one observation it is difficult to explain this high level of helmet use.

For example, the riders may have been taking part in a longer regional ride that also included on-road segments. In total, 92 users were counted over the three days of counts at this location, with 54% of those users noted during the Saturday count.

Figure Six: The Five Combines, Kingsbury



Estimates of Traffic and Trail Volumes

Table Four presents estimates of weekday, weekend day, monthly, and annual trail traffic volumes calculated following the five steps summarized in the Trail Traffic Volume Estimation section (see pages 6 and 7) 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 volume estimates ranged from approximately 25,000 at the Silos to more than 50,000 at Haviland Cove Park. When these estimates are averaged together, it provides an overall annual trail traffic volume estimate of 38,355 for the Feeder Canal Trail.

Table Four: Estimate of Weekly, Monthly, and Annual Trail Traffic Volume

Location	Ave weekday two hour count	Ave weekend two hour count	daily weekday	daily weekend	Adjusted weekday count	Adjusted weekend users	Ave weekly volume	Monthly volume	Annual Total
Haviland Cove	30	62	176	295	1,435	1,640	1,537	6,657	51,209
Silos	18	23	120	121	960	673	816	3,534	25,246
Five Combines	14	50	127	263	1,035	1,462	1,248	5,405	38,610

Conclusions

This report represents the sixth year of using trail count data to predict the amount of trail traffic at specific locations on the Erie Canalway Trail. The studies conducted between 2007 and 2009 utilized the Lindsey method based on observations made in a limited geographic area, specifically the city and suburbs of Indianapolis. In 2010, the decision was made to switch methodologies to those set forth by the National Bicycle and Pedestrian Documentation Project due to its ability to be tailored to the climatic conditions of western and upstate New York. This is now the third year that the National Bicycle and Pedestrian methodology has been utilized to generate estimates of annual trail traffic volumes. This year's estimates ranged from 25,246 annual visitors at the Silos to 51,209 annual visitors at Haviland Cove Park.

In comparison to the findings of previous years from the Erie Canalway Trail, the annual trail traffic volume estimates of the Glens Falls Feeder Canal Trail are among the lowest. This is likely due to several factors. The City of Glens Falls and its environs are more sparsely populated than the study locations near Rochester, Syracuse, and Buffalo which had the highest trail traffic volume estimates. The Feeder Canal Trail is a short, discrete nine-mile, predominately stone dust trail with on-road breaks while the Erie Canalway Trail is composed of much longer trail segments, some of them

paved, which makes it more attractive to the long-distance cyclist. Also, it is unknown whether the weekday count times reflected the hours of peak use. Clearly establishing the period of peak weekday use could result in an even more accurate annual trail traffic volume estimate.

Table Five presents the estimated annual trail traffic volumes for multiple locations derived from counts conducted between 2007 and 2011. While the data are equally presented here, comparison between pre and post 2010 data must be done with caution due to the use of different methodologies.

Table Five: Estimated Annual Use by Trail Location 2007 - 2012

Location and Year	Estimated Annual Traffic
Centerport, Brutus, Cayuga County 2010	19,453
The Silos, Hudson Falls, Washington County, 2012	25,246
The Five Combines, Kingsbury, Washington County, 2012	38,610
Haviland Cove Park, Glens Falls, 2012	51,209
Kiwanis Park, Rotterdam, Schenectady County 2009	56,715
Newport Road (Warners), Camillus, Onondaga County 2010	68,264
Colonie 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
Perinton Park, Monroe County, 2008	156,565
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
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
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

When the estimates for many locations are grouped together a limited picture of statewide usage begins to emerge. It was decided to use the data in Table Five to calculate an average annual estimate for those trail segments that are geographically close to one another, as shown in Table Six. If it is assumed that few users travel beyond each of the regions detailed below, one could add these annual estimates to begin to approximate the volume of usage across the state. Considering that these estimates do not reflect a trail-wide assessment, nor do they account for the fact that sites within a region may be drawing different users than their neighboring sites, 1,771,859 is a very conservative approximation of persons using the Canalway Trail system each year.

Table Six: Estimated Annual Use by Trail Region 2007 - 2012

Location	Average Estimated Annual Traffic
Niawanda Park, Tonawanda, Erie County	605,033
Henpeck Park, Greece, Monroe County	107,143
Genesee Valley Park/JCC, Monroe County	139,640
Perinton Park/Schoen Place, Monroe County	161,128
Centerport, Brutus, Cayuga County	19,453
Four trail heads, Camillus, Onondaga County	175,291
Old Erie Canal State Park, Dewitt-Manlius, Onondaga County	233,732
Kiwanis Park, Rotterdam, Schenectady County	56,715
Niskayuna Train Station/Schenectady Community College, Schenectady County	139,898
Colonie Town Park, Albany County	95,471
Glens Falls Feeder Canal Trail, Warren & Washington Counties	38,355
TOTAL	1,771,859

Recommendations for Next Steps

Installation of automated counters

The purchase and installation of automated counters is still recommended to aid in providing another means of gathering data at select locations over a longer period of time. Additionally, automated counts would better determine times of peak use and validate the techniques used for trail traffic estimation.

While a trail counter was used as part of the recent Economic Impact study, this counter was on loan from Parks & Trails New York's *Healthy Trails, Healthy People* program and cannot be expected to be deployed on the trail in the future.

Addition of new count locations

Counts need to be conducted in the Lockport to Holley area and in the Mohawk Valley as there are no annual estimates available for these trail sections.

Revisiting previous count locations

An effort should be made to perform counts at those sites in Monroe County and the Capital Region that were evaluated using the Lindsey Methodology. Not only would this provide up-to-date information, it would also provide for a more reliable comparison between site estimates using the same methodology.

Application of demographic and economic data

This past year Parks & Trails New York and SUNY Geneseo conducted a comprehensive study of the background and spending habits of trail users on the Erie Canalway Trail. In next year's trail count report, we will be able to combine the trail counts with the findings of the economic impact study to provide a more complete picture of the economic impact of Canalway Trail users.

Appendix A: Trail Count Protocol



Who's On the Trail? Canalway Trail User Count – 2012 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.

Count Locations

1. Haviland Cove
2. Murray Park
3. Five Combines
4. Five Silos (pending availability of volunteers)

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. *If you wish, 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 2012
Parks & Trails New York
29 Elk Street
Albany, NY 12207
518-434-1583
eyearick@ptny.org or fax to 518-427-0067

Appendix B: Trail Count Form



Who's on the Trail? The Canalway Trail User Count – 2012



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		
Bicyclists with child in seat or trailer One tic for each person		
Tandem bicycles One tic for each person		
Recumbent cycles		
Tricycles		
Hand-powered cycle		
Walkers		
In-line skaters		Joggers
Baby carriages/ Strollers		Wheelchair users
Equestrians		Other specify

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

Canalway Trail User Count 2012, Parks & Trails New York, 29 Elk Street, Albany, NY, 12207, 518-434-1583, FAX 518-427-0067

Appendix C: Count Data

Haviland Cove Park, City of Glens Falls

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
Judy Bulova	7/25/12	Tuesday	11:00 AM	1:00 PM	Sunny	80	21	14	0	0	0	0	7	0	0	24	0	5	0	2	0	0	52
Judy Bulova	7/26/12	Wednesday	11:00 AM	1:00 PM	Partly Rainy	70	2	1	0	0	0	0	1	0	0	3	0	1	0	0	0	0	6
Judy Bulova	7/27/12	Thursday	11:00 AM	1:00 PM	Cloudy	75	2	2	0	0	0	0	0	0	0	25	0	6	0	0	0	0	33
Judy Bulova	7/29/12	Saturday	11:00 AM	1:00 PM	Partly Cloudy	75	22	10	0	0	0	0	12	0	0	34	0	4	0	2	0	0	62

The Five Combines, Village of Hudson Falls

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
Chris Reed	8/14/12	Tuesday	7:00 AM	9:00 AM	Partly Cloudy	65	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15
Chris Reed	8/15/12	Wednesday	7:00 AM	9:00 AM	Cloudy	65	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
Chris Reed	8/16/12	Thursday	7:00 AM	9:00 AM	Sunny	70	0	0	0	0	0	0	0	0	0	14	0	1	0	0	0	0	15
Chris Reed	8/18/12	Saturday	12:00 PM	2:00 PM	Sunny	75	32	27	0	0	0	0	5	0	0	13	0	5	0	0	0	0	50

The Silos, Village of Hudson Falls

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
James Robinson	8/18/12	Saturday	Noon	2:00 PM	N/R	N/R	10	2	0	0	0	0	8	0	0	8	0	2	0	1	2	0	23
James Robinson	8/23/12	Thursday	Noon	2:00 PM	N/R	N/R	6	3	0	0	0	0	3	0	0	11	0	0	0	2	0	0	19
James Robinson	8/30/12	Thursday	Noon	2:00 PM	N/R	N/R	6	2	0	0	0	0	4	0	0	9	0	0	0	1	1	0	17

Appendix D: NBPD Adjustment Factors

Table 1: Hourly Adjustment Factors
for Multi-use Trails

	weekday	weekend
Hour		
600	2%	1%
700	4%	3%
800	7%	6%
900	9%	9%
1000	9%	9%
1100	9%	11%
1200	8%	10%
1300	7%	9%
1400	7%	8%
1500	7%	8%
1600	7%	7%
1700	7%	6%
1800	7%	5%
1900	5%	4%
2000	4%	3%
2100	2%	2%

Table 2: Daily Adjustment Factors

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

Table 3: Estimated Monthly Use
For Long Winter Short Summer
Climatic Regime

JAN	3%
FEB	3%
MAR	7%
APR	11%
MAY	11%
JUN	12%
JUL	13%
AUG	14%
SEP	11%
OCT	6%
NOV	6%
DEC	3%

Works Cited

Lindsey, 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.

National Bicycle & Pedestrian Documentation Project Count Adjustment Factors. (2009, March). Retrieved November 2, 2012, from National Bicycle & Pedestrian Documentation Project Count: <http://bikepeddocumentation.org/>

Acknowledgements

Parks & Trails New York and the New York State Canal Corporation wish to thank the volunteers who visited the trail on multiple occasions to conduct the user counts: Judy Bulova, Chris Reed, and James Robinson

Special thanks to Canalway Trails Association New York board member Jeanne Williams who helped organize the volunteer efforts.