Who's on the Trail

The 2019 Canalway Trail User Count

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Executive Summary

The 524-mile Canalway Trail system is one of New York State's premier outdoor destinations. The trail gives millions of New Yorkers in more than 200 canalside communities a dedicated place to walk, jog, and bike right from their doorsteps. Since 2005, Parks & Trails New York (PTNY) and the New York State Canal Corporation have been at the forefront of quantifying the trail's popularity through annual Canalway Trail counts. For the first time, this year's *Who's on the Trail* report includes an estimate of the total number of visits to the full 360-mile Erie Canalway Trail and 90-mile Champlain Canalway Trail.

The Canalway Trail counts analyzed in the *Who's on the Trail* report gives trail managers, municipalities, planners, and members of the public answers to important questions about trail use, including how many people are using the trail, when is use occurring, and how are people using the trail? Over the years, the answers to these questions have helped to support millions of dollars in public investment for maintenance and construction across the Canalway Trail system. Decisions regarding design, funding, operation, maintenance, and promotion of the Canalway Trail system are based, in large part, on understanding the level and type of trail usage. Estimates of annual trail traffic volume help inform current and future expenditures for construction and maintenance.

The Canalway Trail counts have also been used to help assess the impact of trail usage on New York's economy. A 2014 Economic Impact Study of the Erie Canalway Trail, completed by PTNY, found that more than 1.6 million visits to the trail supported more than 3,400 jobs and created $250 million in economic impact. Since then, subsequent *Who's on the Trail* reports have demonstrated that the popularity of the Erie Canalway Trail remains high.

In January 2017, Governor Andrew Cuomo announced the creation of the Empire State Trail which, when completed by the end of 2020, will result in a 750-mile trail network that incorporates the Erie and Champlain Canalway Trails and the Hudson River Valley Greenway. The Empire State Trail will also connect to regional trails, including the Glens Falls Feeder Canal Trail.

PTNY projects that the Canalway Trail system as a whole saw over 3.3 million visits in 2019, including three million visits to the Erie Canalway Trail and just under 300,000 visits along the in-progress Champlain Canalway Trail. The estimated use figures are based on a methodology used by the Hudson River Valley Greenway and Alta Planning and Design used to estimate the annual number of users (8.6 million) that will use the Empire State Trail when complete at the end of 2020. These numbers are significantly higher than past PTNY estimations and are likely due to major investments in closing the gaps in the Canalway Trail system in recent years. The total use projections are an estimate only, and further trail data in future years will help refine the estimate.

In 2019, PTNY measured usage at eight locations along the Erie and Champlain Canalway Trails. Electronic counters along the 360-mile Erie Canalway Trail recorded usage at Fairport (Monroe County), Camillus (Onondaga County), DeWitt (Onondaga County), German Flatts (Herkimer County), Niskayuna (Schenectady County), Colonie (Albany County), Albany (Albany County), and Schuylerville (Saratoga County). The data show impressive visitation numbers, with five locations seeing 120,000 visits per year; more than 160,000 visits to Lions Park in Niskayuna, and 170,000 visits to Perinton Park in Fairport.

Usage at all locations is strongest on weekends and holidays, suggesting the trail is very popular for recreational activities. Peak usage for all locations occurs between June and September, though the busiest month varies by location. This data provides unprecedented insight into Canalway Trail usage, and will enable PTNY to make more accurate usage estimates in the future.

Background

Parks & Trails New York (PTNY) and the New York State Canal Corporation (NYSCC) began using trail counts in 2005 to support anecdotal claims of the Erie Canalway Trail's popularity among walkers and cyclists with more objective evidence. In 2010, PTNY and the NYSCC began using the current protocol and methodology developed by the National Bicycle and Pedestrian Documentation Project (NBPD). The NBPD is a nationwide effort designed to provide consistent data collection and adjustment factors to estimate annual trail usage.

Since 2005, Canalway Trail counts have been conducted by volunteers across the Canal corridor. Observational counts were conducted on the Champlain Canalway and Feeder Canalway Trails in 2012, which was the first year counts were conducted on a segment of the Canalway Trail system other than the Erie.

2014 marked the first year that an electronic trail counter was installed for a full year at a location to obtain trail use data for the annual count. Since 2014, PTNY and the NYSCC have continued to use electronic counters as a major component of counting trail usage.

Methodology

PTNY's electronic count process relies on the PYRO-Box counter manufactured by Eco-Counter, a French company that sells a range of pedestrian and bicycle counting products. PTNY currently owns 10 PYRO-Box counters, Eco-Counter's most popular counter, after purchasing three counters in 2019 and having one of our oldest counters refurbished.

The PYRO-Box counter is a simple, grey plastic box that can be installed on a post or other vertical surface. The counter uses infrared pyroelectric technology to count the people passing within range of the sensor by detecting body temperature. Counters are installed for a minimum of one month, although PTNY prefers to install counters for one year or longer so to use actual counts rather than samples of data to estimate full-year counts. To collect data from the counter, PTNY staff visits the counter or removes the counter to return it to the office. Using Bluetooth technology, the counter can be connected to a mobile phone application or a laptop program to sync the data.

Three counters (Colonie, Fairport, and Albany) were in place at the beginning of 2019. These counters were in place through May, July, and October, respectively. Additional counters were installed in Camillus, DeWitt, and Niskayuna in June, the counter in Schuylerville was installed in August, and the German Flatts counter was installed in October. Due to concerns about the security of the counter in Niskayuna, it was removed when data was collected from the counter in December. The counters in Camillus, DeWitt, German Flatts, and Schuylerville still remain in their fixed location since the beginning of 2020.

Since 2010, PTNY and the NYSCC have used the National Bicycle and Pedestrian Project (NBPD) protocol and methodology to estimate full year trail usage based on a subset of observed data. The adjustment factors account for season, type of facility (multi-use path or high-density pedestrian and entertainment area), day of the week and month when the count was conducted, and type of climate. Since NBPD methodology is becoming the national standard for trail count studies, it allows the Canalway Trail data to be compared with annual usage estimates from trails across the country.

The 2019 *Who's on the Trail* report includes a new analysis. Using the methodology of an analysis completed by Alta Planning and Design in July 2018 to project total trail use upon the completion of the Empire State Trail in 2020, this analysis includes a projection of total trail use across the Erie and Champlain Canalway Trail corridors.

Counter Locations

Electronic counters measured trail usage along the Erie Canalway Trail at seven locations during 2019, covering different portions of the year in Fairport (Monroe County), Camillus (Onondaga County), DeWitt (Onondaga County), German Flatts (Herkimer County), Niskayuna (Schenectady County), Colonie (Albany County), and Albany (Albany County), as is shown in Table 1. An additional count in Schuylerville (Saratoga County) measured usage in Hudson Crossing Park on the Champlain Canalway Trail.

The 2019 Who's on the Trail report analyzes a full year's worth of trail usage data for Fairport, Colonie and Albany. Fairport and Albany were analyzed in the 2018 Who's on the Trail report; however, a full year's worth of data was not yet available. A full year's data was analyzed for Colonie in the 2018 report with additional data recorded in 2019 providing a more thorough study of usage trends. Partial data measured over several months is included for Camillus, DeWitt, German Flatts, Niskayuna and Schuylerville.

TABLE 1 - 2019 CANALWAY TRAIL COUNT LOCATIONS

Month	Fairport			Camillus			DeWitt			German Flatts			Niskayuna			Colonie			Albany			Schuylerville		
	Total	Days	Daily Avg	Total	Days	Daily Avg	Total	Days	Daily Avg	Total	Days	Daily Avg	Total	Days	Daily Avg	Total	Days	Daily Avg	Total	Days	Daily Avg	Total	Days	Daily Avg
January 2019	3,721	31	120	-	-	-	-	-	-	-	-	-	-	-	-	1,491	31	48	2,632	31	85	-	-	-
February 2019	3,895	28	139	-	-	-	-	-	-	-	-	-	-	-	-	572	28	20	2,901	28	104	-	-	-
March 2019	6,877	31	222	-	-	-	-	-	-	-	-	-	-	-	-	2,269	31	73	6,808	31	220	-	-	-
April 2019	12,442	30	415	-	-	-	-	-	-	-	-	-	-	-	-	6,099	30	203	12,497	30	417	-	-	-
May 2019	19,497	31	629	-	-	-	-	-	-	-	-	-	-	-	-	1,399	7	200	14,584	31	470	-	-	-
June 2019	25,968	30	866	10,473	17	616	9,833	17	578	-	-	-	2,142	3	714	-	-	-	17,183	30	573	-	-	-
July 2019	8,388	8	1,049	16,966	31	547	16,987	31	548	-	-	-	19,680	31	635	-	-	-	16,088	31	519	-	-	-
August 2019	-	-	-	19,530	31	630	15,824	31	510	-	-	-	21,698	31	700	-	-	-	13,841	31	446	369	4	92
September 2019	-	-	-	14,278	30	476	14,637	30	488	-	-	-	19,544	30	651	-	-	-	15,265	30	509	2,097	30	70
October 2019	-	-	-	11,263	31	363	10,227	31	330	1,848	22	84	13,632	31	440	-	-	-	8,257	21	393	1,303	31	42
November 2019	-	-	-	5,956	30	199	4,874	30	162	684	30	23	6,388	30	213	-	-	-	-	-	-	566	30	19
December 2019	-	-	-	1,922	20	96	1,144	20	57	25	20	1	-	-	-	-	-	-	-	-	-	105	23	5
2019 Recorded	80,788	189	427	80,388	190	423	73,526	190	387	2,557	72	36	83,084	156	533	11,830	127	93	110,056	294	374	4,440	118	38
ANNUAL USAGE	170,206	365	466	136,864	365	375	125,182	365	343	20,970	365	57	162,273	365	445	64,530	365	177	120,365	365	330	16,425	365	45

MAP 1 - 2019 CANALWAY TRAIL COUNT LOCATIONS

The 2019 Canalway Trail count locations represent geographic and environmental diversity. Fairport is located in Western New York, Camillus and DeWitt are located in Central New York, German Flatts is in the Mohawk Valley, and Niskayuna, Colonie, Albany, and Schuylerville are located in the Capital District. German Flatts and Schuylerville are located in more rural locations, in communities with smaller

population density, while Camillus, DeWitt, Niskayuna and Colonie are in suburban locations on the outskirts of major Canalway Trail cities in Syracuse, Schenectady and Albany. The Fairport and Albany trail count locations are integrated into communities where many users can access the trail by foot or bicycle.

TABLE 2 – TOTAL ESTIMATED ANNUAL VOLUME, ALL SITES (2019)

Location	Estimated Annual Usage
Fairport	170,206
Camillus	136,864
DeWitt	125,182
German Flatts	20,970
Niskayuna	162,273
Colonie	64,530
Albany	120,365
Schuylerville	16,425

Fairport

In July 2018, PTNY installed a counter in Perinton Park, a community park at the western edge of the Village of Fairport. The trail follows the northern bank of the canal and is paved in this location. To the west of the park are suburban residential homes and to the east of the park are village businesses. This location is also within the roughly 100-mile stretch of uninterrupted trail between Lockport and Newark. The counter remained in Fairport for just under a full year and the data reflects usage between July 10, 2018 and July 8, 2019. PTNY estimated annual usage using 143 days of usage in last year's Who's on the Trail report.

Over the course of 364 days, the counter measured 168,316 visits to the trail in Fairport. This recorded usage corresponds to an estimated annual usage of 170,206. This level of usage is roughly equal to the highest measured along the Erie Canalway Trail included in the 2019 Who's on the Trail report (just under Niskayuna's 170,387 visits).

TABLE 3 – TRAIL USAGE BY MONTH, FAIRPORT (MONROE COUNTY), JULY 2018 – JULY 2019

Month	Total	Days	Daily Average
July, 2018	19,019	22	865
August, 2018	23,607	31	762
September, 2018	22,603	30	753
October, 2018	11,233	31	362
November, 2018	5,335	30	178
December, 2018	5,731	31	185
January, 2019	3,721	31	120
February, 2019	3,895	28	139
March, 2019	6,877	31	222
April, 2019	12,442	30	415
May, 2019	19,497	31	629
June, 2019	25,968	30	866
July, 2019	8,388	8	1,049
Total Recorded	**168,316**	**189**	**427**
Annual Usage	**170,206**	**365**	**466**

Camillus

The counter in Camillus was installed in June 2019 in Erie Canal Park, and remained in place for six months. The Erie Canal Park runs along the Erie Canal and includes the restored Nine Mile Creek Aqueduct. At the trailhead where the counter was installed, off of Devoe Road, sits the Sims' Store Museum, a renovated canal store that hosts school groups for tours and offers boat rides. The trail runs along the north bank of the 1850s-era "Enlarged Canal", and features a stone-dust surface through this location. The Devoe Road trailhead is in a more rural setting that does not feature significant population

or employment centers within walking distance. However, large suburban populations are within a short drive from this trailhead and can easily access it.

The data analyzed in this report reflects usage between usage between June 14 and December 20. Full-year data will be analyzed in next year's report. Over the course of 190 days, the counter measured 80,388 visits to the trail in Camillus. This recorded usage corresponds to an estimated annual usage of 136,864.

One of the signature projects of the Empire State Trail effort will close a major gap in the Erie Canalway Trail from Camillus through the city of Syracuse. Currently, the Erie Canalway Trail west of Syracuse transitions from an off-road stretch in Camillus to an on-road stretch that runs through the center of the city. However, work is underway to construct off-road trails that will link together to make the majority of the trail through Syracuse off-road. PTNY installed counters in Camillus and DeWitt, at either end of the gap to be closed, to gain a baseline of information that can be compared with counts that will be done once the projects through Syracuse are complete.

TABLE 4 – TRAIL USAGE BY MONTH, CAMILLUS (ONONDAGA COUNTY), JUNE 2019 – DECEMBER 2019

Month	Total	Days	Daily Average
June, 2019	10,473	17	616
July, 2019	16,966	31	547
August, 2019	19,530	31	630
September, 2019	14,278	30	476
October, 2019	11,263	31	363
November, 2019	5,956	30	199
December, 2019	1,922	20	96
Total Recorded	**80,388**	**190**	**423**
Annual Usage	**136,864**	**365**	**375**

DeWitt

At the eastern end of efforts to close the Syracuse gap in the Empire State Trail is the Town of DeWitt. As mentioned above, work is underway to close the gaps through the city of Syracuse and add off-road accommodations where the trail currently follows heavily-trafficked urban roads. PTNY has installed counters in Camillus and DeWitt to gain a baseline of information that can be compared with counts that will be done once the projects through Syracuse are complete.

The counter in DeWitt is located off of the Butternut Drive trailhead of the Old Erie Canal State Historic Park. Old Erie Canal State Historic Park includes a 36-mile segment of the 1850s-era "Enlarged Canal", that was originally known as the "Long Level", as the flat topography requires no lockage from this point east to Frankfort, a distance of 70 miles. While there are some access challenges in the immediate vicinity, most notably the need to cross Interstate 481, there are large urban and suburban populations that live a short distance away from this trailhead and can easily access it.

The DeWitt counter was installed in June 2019, and remained in place for six months. The data analyzed in this report reflects usage between June 14 and December 20. Over the course of 190 days, the counter measured 73,526 visits to the trail in Dewitt. This recorded usage corresponds to an estimated annual usage of 125,182.

TABLE 5 – TRAIL USAGE BY MONTH, DEWITT (ONONDAGA COUNTY), JUNE 2019 – DECEMBER 2019

Month	Total	Days	Daily Average
June, 2019	9,833	17	578
July, 2019	16,987	31	548
August, 2019	15,824	31	510
September, 2019	14,673	30	488
October, 2019	10,227	31	330
November, 2019	4,874	30	162
December, 2019	1,144	20	57
Total Recorded	**73,526**	**190**	**387**
Annual Usage	**125,182**	**365**	**343**

German Flatts

This counter location is easily the most rural setting included in the 2019 Who's on the Trail report. The counter was installed just west of Lock E-18. A small parking area at the Lock allows trail users to drive to access the trail; a smaller number of trail users may walk or bike from the Village of Herkimer or one of the other Herkimer County communities; Lock E-18 would likely be a turn-around point for these users.

As of the end of 2019, the trail between Fort Herkimer Church to Lock E-18 in the town of German Flatts in Herkimer County newest was the newest stretch of the Erie Canalway Trail to be opened to the public. This stretch was built as part of closing a significant on-road gap that currently runs most of the way between Utica and Little Falls. The only previous stretch of trail that was open in this stretch runs for about 2 miles along the Canal from the Village of Mohawk to Fort Herkimer Church; the new stretch extends this off-road stretch for an additional two miles. Further trail construction is underway to extend this trail to Route 167 in Little Falls, where it will connect to the off-road trail running east to Schenectady.

The German Flatts counter was installed in October 2019 and remained in place for under three months. The data analyzed in this report reflects usage between usage between October 10, 2019 and December 21, 2019. Over the course of 72 days, the counter measured 2,557 visits to the trail in German Flatts. This recorded usage corresponds to an estimated annual usage of 20,970*

TABLE 6 – TRAIL USAGE BY MONTH, GERMAN FLATTS (HERKIMER COUNTY), OCTOBER 2019–DECEMBER 2019

Month	Total	Days	Daily Average
October, 2019	1,848	22	84
November, 2019	684	30	23
December, 2019	25	20	1
Total Recorded	**2,557**	**72**	**36**
Annual Usage	**20,970**	**365**	**57**

Niskayuna

The Niskayuna electronic counter was placed near the western end of Lions Park in Schenectady County. Lions Park is one of the most prominent trailheads for the Erie Canalway Trail in the Capital District, where the trail is locally referred to as the Mohawk-Hudson Bike-Hike Trail. This section of Erie Canalway Trail is a rail trail and the former train station located at Lions Park is now an art gallery and visitor center. The park also contains a large parking lot and restroom facilities, making it a popular starting/ending point for trail running, biking, and dog walking for residents of this suburban community. Several major employment centers are located along the trail between Lions Park and Schenectady, and two large town parks for Niskayuna and Colonie are located within a few miles along the trail in both

directions. This counter was removed in December 2019 and will be relocated in the future due to security concerns.

The Niskayuna counter was installed in June 2019 and remained in place for six months. The counter will remain in Niskayuna for a full year; however, the data analyzed in this report reflects six months' worth of usage between June 28, 2019 and November 30, 2019. Full-year data will be analyzed in next year's report.

Over the course of 156 days, the counter measured 83,084 visits to the trail in Niskayuna. This recorded usage corresponds to an estimated annual usage of 162,273.

TABLE 7 – TRAIL USAGE BY MONTH, NISKAYUNA (SCHENECTADY COUNTY), JUNE 2019–NOVEMBER 2019

Month	Total	Days	Daily Average
June, 2019	2,142	3	714
July, 2019	19,680	31	635
August, 2019	21,698	31	700
September, 2019	19,544	30	651
October, 2019	13,632	31	440
November, 2019	6,388	30	213
Total Recorded	**83,084**	**156**	**533**
Annual Usage	**162,273**	**365**	**445**

Colonie

The Colonie electronic counter was installed in Colonie Town Park at the Schermerhorn Road trailhead and parking area. The park's trailhead is just east of where the trail has a short on-road stretch to pass underneath the Adirondack Northway (Interstate 87). To the east of the town park, the trail runs for roughly four miles to the Alexander Street trailhead in Cohoes. Counts were previously performed at this location in 2009 and 2018.

The Colonie counter was installed in January 2018 and remained in place for a year and five months. The data analyzed in this report reflects usage between January 1, 2019 and May 7, 2019. Over the course of 492 days, the counter measured 75,413 visits to the trail in Colonie. This recorded usage corresponds to an estimated annual usage of 64,530. PTNY calculated this number by taking a rolling average for each day that the counter was active. The average was then calculated from that data and reflects the estimated annual usage.

TABLE 8 – TRAIL USAGE BY MONTH, COLONIE (ALBANY COUNTY), DECEMBER 2017 – MAY 2019

Month	Total	Days	Daily Average
December, 2017	276	11	25
January, 2018	668	31	22
February, 2018	1,209	28	43
March, 2018	1,376	31	44
April, 2018	4,370	30	146
May, 2018	8,202	31	265
June, 2018	8,833	30	294
July, 2018	9,518	31	307
August, 2018	9,032	31	291
September, 2018	9,471	30	316
October, 2018	6,677	31	215
November, 2018	1,979	30	66
December, 2018	2,248	31	73
January, 2019	1,491	31	48
February, 2019	572	28	20
March, 2019	2,269	31	73
April, 2019	6,099	30	203
May, 2019	1,399	7	200
Total Recorded	**75,413**	**127**	**93**
Annual Usage	**11,830**	**365**	**177**

Albany

The electronic counter installed in Albany is located just north of the Corning Riverfront Park. There is a trail that connects Albany's downtown waterfront park up to Watervliet between the Hudson River and Interstate 787. At the northern end of Corning Riverfront Park, there is a large parking lot underneath the Interstate viaduct and a boat launch that allows for access to the river. The counter was installed along the trail located north of the parking area and boat launch. This stretch of trail is the eastern-most stretch of the Erie Canalway Trail; the parking area under I-787 is located in roughly the same location as the Erie Basin that marked the eastern end of the 1850's-era "Enlarged" Erie Canal.

The Albany counter was installed in July 2018 and remained in place for over a year. The data analyzed in this report reflects usage between July 31, 2018 and October 21, 2019. Over the course of 448 days, the counter measured 159,966 visits to the trail in Albany. This recorded usage corresponds to an estimated annual usage of 120,365.

TABLE 9 – TRAIL USAGE BY MONTH, ALBANY (ALBANY COUNTY), JULY 2018 – OCTOBER 2019

Month	Total	Days	Daily Average
July, 2018	838	1	838
August, 2018	15,394	31	497
September, 2018	14,883	30	496
October, 2018	11,225	31	362
November, 2018	4,067	30	136
December, 2018	3,503	31	113
January, 2019	2,632	31	85
February, 2019	2,901	28	104
March, 2019	6,808	31	220
April, 2019	12,497	30	417
May, 2019	14,584	31	470
June, 2019	17,183	30	573
July, 2019	16,088	31	519
August, 2019	13,841	31	446
September, 2019	15,265	30	509
October, 2019	8,257	21	393
Total Recorded	**159,966**	**294**	**374**
Annual Usage	**120,365**	**365**	**330**

Schuylerville

The trail counter installed in Schuylerville was within the confines of Hudson Crossing Park, near to where the Dix Bridge carries the trail over the Hudson River. The counter is located adjacent to a parking area within the park, although it does not necessarily capture all visitors to the park or who use the trail, due to the non-linear nature of the facility. A gate was installed to prevent motorized traffic from continuing past this parking lot, the counter will record all visitors who walk past the gate. Hudson Crossing Park is located in a rural area; while the Village of Schuylerville is less than a mile away, most visitors to this location will arrive by car.

The Schuylerville counter was installed in August 2019 and remained in place for four months. The counter will remain in Schuylerville for a full year; however, the data analyzed in this report reflects usage between August 28, 2019 and December 23, 2019. Full-year data will be analyzed in next year's report. Over the course of 128 days, the counter measured 4,440 visits to the trail in Fairport. This recorded usage corresponds to an estimated annual usage of 16,425.

The historic $200 million investment in the Empire State Trail solved a different problem for each of its major legs. While the Erie Canalway Trail was largely complete and only needed some of the gaps closed, the Champlain Canalway Trail was mostly a planned trail as of 2017 and needed a significant investment to get some of the core stretches of trail constructed. The centerpiece and symbolic halfway point of the Champlain Canalway Trail is located in Schuylerville at Hudson Crossing Park. At this location, the trail crosses the Hudson River and passes from Saratoga County, which hosts the southern half, to Washington County, host of the northern half.

TABLE 10 – TRAIL USAGE BY MONTH, SCHUYLERVILLE (SARATOGA COUNTY), AUGUST 2019 – DECEMBER 2019

Month	Total	Days	Daily Average
August, 2019	369	4	92
September, 2019	2,097	30	70
October, 2019	1,303	31	42
November, 2019	566	30	19
December, 2019	105	23	5
Total Recorded	**4,440**	**118**	**38**
Annual Usage	**16,425**	**365**	**45**

Trail Use Characteristics

Trail use at all eight recorded sites was analyzed in aggregate to determine overall usage trends and to identify instances where the observed use at one site varies greatly from the other locations along the trail. This observation was split into two general categories - summer (***June to September***) and fall/winter/spring (***October to May***). The summer analysis only includes seven sites; German Flatts was not installed until October 2019, and as such does not have any data for the summer months.

SUMMER

On average, each location saw the most visitors during the weekend, with Sunday typically being the busiest day on the trail. At Camillus and Schuylerville, the busiest days of the week were found to be on Wednesday and Tuesday, respectively. This likely reflects the heavy use at these locations from school groups, both of which visit the parks in which the trail heads are located. In Albany, the busiest day of the week was Saturday.

The busiest use during the week was generally after 4:00 PM, with half of the groups having peak weekday periods during 6:00-7:00 PM. This likely is a result of trail users visiting the trail after work hours. The only exception was at Camillus, where the peak weekday period was between 12:00-1:00 PM. Again, this most likely reflects the higher number of visits to this site from school groups, who come during midday. On the weekends, the peak usage at all sites was before noon. The earliest weekend peak usage period was at Colonie, between 8:00-9:00 AM.

FALL/WINTER/SPRING

Overall, each location was found to have significantly fewer visitors in the fall/winter/spring than in the summer. As was seen in summer, there was higher recorded use on the weekends than on weekdays. Niskayuna had the highest daily usage average on weekend days with 460 visits - more than double the average weekday visitation. For five of the eight locations, Saturday was the busiest day of the week. The only location where a weekday was found to be the busiest day was Schuylerville on Wednesdays; again, likely a result of use from school groups or other event-based visitation.

During the off-season, the earliest peak weekday period was 10:00-11:00 AM at Schuylerville. At Camillus, Dewitt, and Colonie, the busiest weekday periods were between 4:00-5:00 PM while German Flatts and Fairport both had their peak weekday periods between 3:00-4:00 PM. During the weekend, five out of eight locations had their peak weekend periods in the early afternoon. Albany, Colonie, and Niskayuna were the only locations that had peak weekend periods before noon.

TABLE 11- TRAIL USE CHARACTERISTICS, ALL SITES (2019)

	Summer (June-September)					Fall/Winter/Spring (October-May)				
	Weekday Average	Weekend Average	Busiest Day of the Week	Peak Weekday Period	Peak Weekend Period	Weekday Average	Weekend Average	Busiest Day of the Week	Peak Weekday Period	Peak Weekend Period
Fairport (Jul 2018-Jul 2019)	705	1,101	Sunday	6-7 PM	10-11 AM	258	346	Sunday	3-4 PM	2-3 PM
Camillus (Jun 2019-Dec 2019)	482	755	Wednesday	12-1 PM	11 AM-12 PM	191	357	Saturday	4-5 PM	12-1 PM
DeWitt (Jun 2019-Dec 2019)	482	629	Sunday	6-7 PM	10-11 AM	174	272	Saturday	4-5 PM	3-4 PM
German Flatts (Sep 2019-Dec 2019)	-	-	-	-	-	24	47	Saturday	3-4 PM	2-3 PM
Niskayuna (Jun 2019-Nov 2019)	562	907	Sunday	6-7 PM	10-11 AM	277	460	Saturday	2-3 PM	9-10 AM
Colonie (Jan 2018-May 2019)	258	408	Sunday	5-6 PM	8-9 AM	85	146	Saturday	4-5 PM	9-10 AM
Albany (Jul 2018-Oct 2019)	449	650	Saturday	6-7 PM	10-11 AM	220	334	Sunday	12-1 PM	10-11 AM
Schuylerville (Aug 2019-Dec 2019)	70	78	Tuesday	4-5 PM	11 AM-12 PM	22	27	Wednesday	10-11 AM	2-3 PM

Full-Year Trail Use Extrapolation Methodology

For all eight sites, the observed usage was extrapolated to find the full-year estimate for that site. The raw data was downloaded for the entirety of the time the counters were installed at each location. The oldest data downloaded for this report was data from the Town of Colonie, in which the counter was originally installed in December 2017. Data was downloaded at an hour-level granularity to ensure that it was available for hour-by-hour analysis as used above. The data was checked for any anomalies, and any data that may have been downloaded from outside the period of time when the counter was installed was excluded. The data was then aggregated by day.

The NBPD extrapolation figures allow for the conversion of hourly, daily, or monthly count data into daily, weekly, or yearly figures, respectively. The instructions to the NBPD extrapolation spreadsheet, which is publicly available at http://bikepeddocumentation.org/, are based on the use of manual counts. The directions recommend that estimates are based on the average of at least two and preferably three two-hour counts during the same period and week or during consecutive weeks. Weekday counts are directed to occur on Tuesdays through Thursday and not on holidays, and weekend counts can be completed on either Saturday or Sunday.

The extrapolation spreadsheet calls for five input variables - count dates, count times, type (multi-use path or street/sidewalk), climate zone, and two-hour count volume. Count dates provide the spreadsheet with information on the day of week and month of the count, and count time provides the inputs on what times were observed. The type factor allows the extrapolation methodology to be used for multi-use pathways or for users cycling on the street or walking on sidewalks in medium to high density areas. All counts included in this analysis were done on paths and use the path extrapolation factors. Climate zone gives users one of three choices - "Long Winter-Short Summer", "Moderate Climate", or "Very Hot Summer-Mild Winter". All of the counts in New York were categorized in the "Long Winter-Short Summer" climate region. Finally, the input calls for the two-hour count total. Based on these five variables, the NBPD spreadsheet is set up to return the daily, weekly, monthly and annual count figures based on a two-hour count total.

The NBPD structure is based on three tables. Table One calculates daily use based on what each hour period is as a percentage of total daily use. These figures differ based on path or street/sidewalk, on weekday or weekend, and on whether the counts are done between April and September or between October and March. For each of these circumstances, each hour of time between 6:00 AM and 10:00 PM is estimated to be a set percentage of total daily use - i.e. from 5:00 PM to 7:00 PM is considered 14% of daily use. The observed two-hour count is first multiplied by 1.05 to account for the fact that 6:00 AM to 10:00 PM is assumed to be 95% of all trail usage, and then the resulting figure is divided by the two-hour count proportion to come up with a daily estimate.

The second table converts the daily total to a weekly total using a similar estimation factor, where each day of the week is given a percentage of total weekly use. This figure is used to generate the monthly estimate (without using a separate table) by multiplying the weekly estimate by the number of weeks in the month (accounting for partial weeks). While the notes in the table include a correction that holidays should be accounted for weekend usage rates, it does not appear that the formulas account for that correction.

The final table adjusts the monthly estimate to an annual estimate, and is based on the climate regions. For each of the three climate regions, each month of the year is considered to be a set portion of total annual use. The three tables as they appear in NBPD are listed below (with the categories that don't apply to the upstate region removed).

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

Table 2: Day to Week	
DAILY ADJUSTMENT FACTORS	
SUN	18%
MON	14%
TUES	13%
WED	12%
THURS	12%
FRI	14%
SAT	18%
Note: Holidays use weekend rates	

Table 3: Region and Month	
MONTHLY ADJUSTMENT FACTORS	
CLIMATE REGION	Long Winter Short Summer
JAN	3%
FEB	3%
MAR	7%
APR	11%
MAY	11%
JUN	12%
JUL	13%
AUG	14%
SEP	11%
OCT	6%
NOV	6%
DEC	3%

The month-long extrapolation factors were the only piece of this calculation that PTNY used in determining annual use. These factors were applied to the data in three different ways to calculate total annual figures based on the available data. For five sites - Camillus, DeWitt, German Flatts, Niskayuna, and Schuylerville - the data available was less than a full year and entirely in 2019. For these sites, a percentage of total annual use figure was calculated by summing the NBPD figure for months where full month data was available, and adding a portion of the NBPD monthly factor for months where only a part of the month had data available. The total observed use was divided by the percentage of annual use to obtain the total annual use figure.

In Fairport, the counter was installed for 364 days spanning from mid-July 2018 to mid-July 2019. To obtain a total annual use figure at this site, the full month figures for August 2018 through June 2019 were added together (140,909). The two July part-month figures were extrapolated to full-month figures by dividing the observed figures into the proportion of the month (by day) for which the counter was installed. These two figures were then averaged together, weighted by the number of days observed for each month (22 for July 2018, 8 for July 2019). The resulting figure, 29,297, was added to the 140,909 figure for August through June to reach the total annual use figure of 170,206.

In Colonie and Albany, the counters were installed for more than one year. For each of these sites, a 365-day observed figure was calculated for each successive 365-day period for which the counter was installed. These successive 365-day usage figures were then averaged to have an average annual use figure. In Colonie, the 365-day periods spanned from (December 21, 2017 to December 20, 2018) to (May 8, 2018 to May 7, 2019). In Albany, the periods included (July 31, 2018 to July 30, 2019) to (October 22, 2018 to October 21, 2019).

Total Trail Use Estimates

As part of the completion of the statewide Empire State Trail (EST), new stretches of both the Erie Canalway Trail (ECT) and Champlain Canalway Trail (CCT) have been constructed, helping to link together increasingly long continuous stretches of trail across the state. In anticipation of the completion of the Empire State Trail by the end of 2020, the Hudson River Valley Greenway and Alta Planning & Design published the *Empire State Trail: Trail User Projections* report which estimated the potential number of annual users on the EST. The report states that 8.6 million users will visit the EST annually once it is completed, based on existing trail counts and the population density surrounding the stretches of trail. This methodology provided the basis for PTNY to count the total estimate use on the ECT and CCT in 2019.

In 2019, PTNY estimates that 3,311,737cyclists, pedestrians, and other users enjoyed the ECT and CCT. This number is a significant increase from past PTNY projections which estimated annual ECT visits at approximately 1.6 million. Now that more sections of the ECT have been completed and renovated, trail usage is expected to continue to increase, especially following the completion of the EST at the end of 2020.

For the ECT, the number of visits to the trail was estimated to have been 3,017,024 in 2019. Each year the ECT boasts visitors from all parts of the nation and abroad. During the Cycle the Erie Canal Bike Tour alone, more than 650 cyclists ride the entirety of the trail from Buffalo to Albany, with many other riders visiting the trail during that week to ride portions of the trail as the Bike Tour passes through their community.

When adding in the CCT, an additional 294,713 users are estimated to have visited the Canalway Trail system in 2019. It is expected that by the end of 2020, all 62 miles of the CCT will be open for the use and enjoyment of the public. Again, funding for the EST will help push the completion and renovation of the CCT to make it more accessible and enjoyable for all.

Detailed Methodology

The below methodology was developed by Alta Planning & Design and replicated with their permission for use in calculating total trail use along the Erie and Champlain Canalway Trails.

The core assumption in the methodology is that trail use correlates with population density in surrounding areas. This is supported by research cited in the Empire State Trail report. Population densities around a three-mile radius of each electronic counter location were calculated using the following steps:

1. **Map the 19 locations along the ECT and CCT where PTNY has conducted electronic trail counts**
2. **Determine the population density of block groups within 3-mile buffer area around each count location.** All block groups that fall within a 3-mile radius of each existing counter location were selected, and the American Community Survey (ACS) 2014-18 5-Year Estimate Total Population data was joined to the block groups (POP). Each block group agglomeration had its area calculated (SQMI).
3. **Determine population density for each individual counter location**. The sum of the population and (POP_SUM) and sum of the area (SQMI_SUM) for each block group agglomeration was calculated. These values were then used to determine the unique population densities (POP_DEN) associated with each counter location by dividing the sum of the population by the sum of the area (POP_DEN=[POP_SUM/SQMI_SUM]).

Each of the 19 electronic trail counts and the corresponding population densities were plotted. The electronic counter data was weighted based on the number of months that each station was active for, so the model took into account those locations which had more useable data. The resulting trendline was used to estimate trail users at each sample location on the Erie Canalway Trail system.

Determining the trendline to be used was the one way in which this methodology diverged from that used by Alta. While that projection used a linear trendline, the R^2 value for the trendline was only 0.1299, showing a fairly weak correlation. Instead, PTNY used a power regression, with the equation (**y = 3313.1x$^{0.4949}$**; where x is population density and y is annual trail visits). This equation more accurately reflected the observed trend in trail use, where the rate of increase in expected trail count increased rapidly at low population densities, and then the rate of increase slows at higher population densities. The resultant R^2 value was 0.426, a much stronger correlation than that used by Alta.

FIGURE 2. CORRELATION BETWEEN POPULATION DENSITY AND OBSERVED TRAIL VISITATION DATA
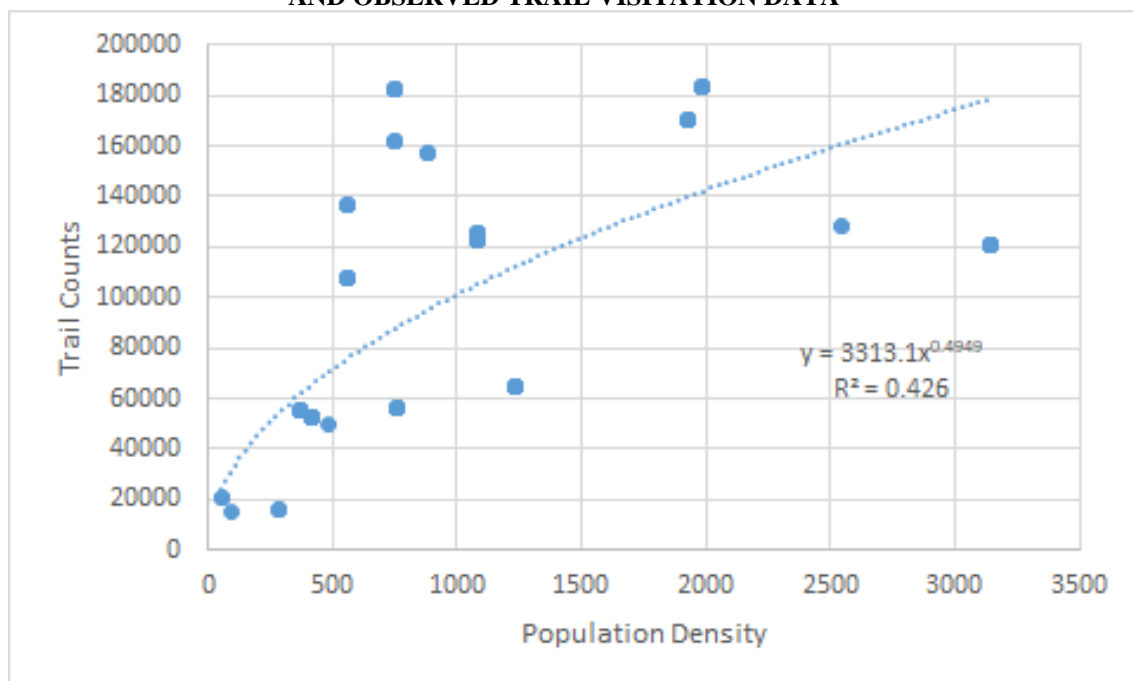
The estimated trail use for the entirety of the ECT and CCT were calculated based on this trendline equation using the following steps:

1. **Map sample count points along the ECT and CCT.** These sample locations were the same that were used by Alta in their methodology. Any sample count location that could have data instead provided by one of the 2019 count locations was then removed.
2. **Determine population, area, and population density for each sample point.** Following a similar methodology to that which was used for the electronic count points, each block group within a 3-mile radius of the sample points were combined, and a total population figure (based on ACS 2014-18 5-Year Estimate Total Population), square mileage, and population density) was calculated.
3. **Calculate estimate trail use at each sample location.** Population densities at each of the 43 sample locations along the Erie Canalway Trail system were entered into the equation (y = 3313.1x$^{0.4949}$; where x is population density and y is annual trail users).

TABLE 11- TRAIL USER PROJECTIONS

Sample Number	Sample Location	2019 Estimate	Sample Number	Sample Location	2019 Estimate
1	Buffalo	240,636	24	Oriskany	42,328
2	Tonawanda	139,144	25	Whitesboro	95,575
3	Amherst	66,714	26	Frankfort	34,111
4	Lockport	90,281	-	German Flatts*	20,970
5	Middleport	30,974	27	Little Falls	28,645
6	Medina	33,683	28	St. Johnsville	22,754
7	Ridgeway	30,994	29	Canajoharie	29,916
8	Albion	43,796	30	Root	22,871
9	Holley	37,964	31	Fultonville	30,248
10	Brockport	51,478	32	Amsterdam	67,373
11	Rochester	167,089	33	Pattersonville	29,991
12	Henrietta	125,003	34	Rotterdam	98,020
-	Fairport*	170,206	35	Schenectady	122,849
13	Macedon	49,084	-	Niskayuna*	162,273
14	Palmyra	37,403	-	Colonie*	64,530
15	Galen	31,383	36	Green Island	149,583
16	Clyde	26,066	-	Albany*	120,365
17	Montezuma	21,195	37	Mechanicville	58,104
18	Port Byron	39,212	38	Stillwater	25,171
19	Jordan	39,858	39	Schuylerville	37,604
-	Camillus*	136,864	40	Fort Edward	39,579
-	DeWitt*	125,182	41	Hudson Falls	28,463
20	Fayetteville	43,265	42	Fort Ann	22,367
21	Chittenango	40,056	43	Whitehall	27,020
22	Sylvan Beach	27,433	-	Glens Falls*	56,405
23	Rome	29,657	**TOTAL ALL LOCATIONS**		**3,311,737**

*Estimates from these locations were calculated using electronic counter data

Erie Canalway Trail Sample Locations 2019

Conclusion

The 2019 Who's on the Trail report is the thirteenth edition of this report. The findings of this report support previous reports and strengthen the conclusions reached in those reports. The most evident finding in this report is that the statewide popularity of the Canalway Trail system has grown significantly and that growth continues to be strong. The newly included total trail projections of over 3.3 million visits to the Canalway Trail system reflect the results of more than a decade of investment in closing the gaps in the trail network and the investment and excitement around the completion of the Empire State Trail. This trail system is clearly a major recreational asset for communities across the Canal corridor, and it is essential to care for and highlight the ongoing value of these trails.

The 2020 Who's on the Trail report will include additional data gathered from locations that currently have counters installed, and there will be additional locations at which data is also gathered. As we gain additional insight on the nature of trail use, we will be better able to estimate total trail-wide use, and will be better positioned to respond to the needs of our growing trail network.

Appendix One – Historic Trail Use by Location, 2009-2019

Annual usage based on Electronic Counters				
Location	County	Year	Full Year /Part Year*	Annual Usage
Niawanda Park, Tonawanda	Erie	2014-15	Full	183,419
Lyons Park, Niskayuna	Schenectady	2016-17	Full	182,325
Lyons Park, Niskayuna	Schenectady	2019	Part	162,273
Perinton Park, Fairport	Monroe	2018	Part	176,255
Bushnell's Basin, Perinton	Monroe	2015-16	Part	157,236
Erie Canal Historical Park, Camillus	Onondaga	2019	Part	136,864
Old Erie Canal State Historic Park, DeWitt	Onondaga	2019	Part	125,182
West Henrietta Road, Rochester	Monroe	2018	Part	128,129
Corning Riverfront Park, Albany	Albany	2018-19	Full	120,365
Cedar Bay Park, DeWitt	Onondaga	2016-17	Full	122,689
Erie Canal Historical Park, Camillus	Onondaga	2016-17	Full	108,025
Colonie Town Park, Colonie	Albany	2017-19	Full	64,530
Haviland Cove Park, Glens Falls	Warren	2017-18	Full	55,405
Towpath Park, Spencerport	Monroe	2017-18	Full	55,361
Robinson Road, Pendleton	Niagara	2016-17	Full	52,454
Lock 20 Canal Park, Marcy	Oneida	2015	Part	49,424
Lock 18, German Flatts	Herkimer	2019	Part	20,970
Hudson Crossing Park, Schuylerville	Saratoga	2019	Part	16,425
Rause Road, Fort Plain	Montgomery	2015	Part	15,607

*Full-year figures are pulled from 12 months of continuous counter operation. Part-year figures are extrapolations based on data collected from less than a full year.

Annual usage based on Observational Counts			
Location	County	Year	Annual Usage
Niawanda Park, Tonawanda	Erie	2011	605,033
Cedar Bay Park, DeWitt	Onondaga	2016	454,643
Erie Canal Historical Park, Camillus	Onondaga	2018	250,665
Nine Mile Creek Aqueduct, Camillus	Onondaga	2010	237,834
Warners Road, Camillus	Onondaga	2017	233,090
Old Erie Canal State Park, DeWitt	Onondaga	2010	223,732
Erie Canal Historical Park, Camillus	Onondaga	2011	207,381
Nine Mile Creek Aqueduct, Camillus	Onondaga	2011	198,270
Erie Canal Historical Park, Camillus	Onondaga	2010	174,663
Lyons Park, Niskayuna	Schenectady	2009	173,927
Warners Road, Camillus	Onondaga	2010	165,333
Corning Riverfront Park, Albany	Albany	2015	156,714
Cedar Bay Park, DeWitt	Onondaga	2015	155,602
Henpeck Park, Greece	Monroe	2011	107,143
Schenectady Co. Community College, Schenectady	Schenectady	2009	105,869
Robinson Road, Pendleton	Niagara	2018	98,228
Colonie Town Park, Colonie	Albany	2009	95,471
Main Street Bridge, Brockport	Monroe	2013	72,390
Newport Road, Camillus	Onondaga	2010	68,264
Park Avenue Bridge, Brockport	Monroe	2013	63,874
Lyman Street, Brockport	Monroe	2013	62,700
Kiwanis Park, Rotterdam	Schenectady	2009	56,715
Lakeport Road, Chittenango	Madison	2014	52,021
Haviland Cove Park, Glens Falls	Warren	2012	51,209
South Chuctanunda Creek, Amsterdam	Montgomery	2016	51,077
The Five Combines, Kingsbury	Washington	2012	38,610
Division Street Bridge, Waterford	Saratoga	2016	33,080
Erie Canal Marina, Palmyra	Wayne	2015	31,711
Albion Canal Park, Albion	Orleans	2013	31,024
The Silos, Hudson Falls	Washington	2012	25,246
Centerport Aqueduct Park, Brutus	Cayuga	2010	19,453
Lake Road, Oneida	Madison	2014	8,063

Appendix Two – Electronic Count Data, 2019

Month	Fairport Total	Days	Daily Avg	Camillus Total	Days	Daily Avg	DeWitt Total	Days	Daily Avg	German Flatts Total	Days	Daily Avg	Niskayuna Total	Days	Daily Avg	Colonie Total	Days	Daily Avg	Albany Total	Days	Daily Avg	Schuylerville Total	Days	Daily Avg
Dec 2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	11	25	-	-	-	-	-	-
Jan 2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	668	31	22	-	-	-	-	-	-
Feb 2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,209	28	43	-	-	-	-	-	-
Mar 2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,376	31	44	-	-	-	-	-	-
Apr 2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,370	30	146	-	-	-	-	-	-
May 2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,202	31	265	-	-	-	-	-	-
Jun 2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,833	30	294	-	-	-	-	-	-
Jul 2018	19,019	22	865	-	-	-	-	-	-	-	-	-	-	-	-	9,518	31	307	838	1	838	-	-	-
Aug 2018	23,607	31	762	-	-	-	-	-	-	-	-	-	-	-	-	9,032	31	291	15,394	31	497	-	-	-
Sep 2018	22,603	30	753	-	-	-	-	-	-	-	-	-	-	-	-	9,471	30	316	14,883	30	496	-	-	-
Oct 2018	11,233	31	362	-	-	-	-	-	-	-	-	-	-	-	-	6,677	31	215	11,225	31	362	-	-	-
Nov 2018	5,335	30	178	-	-	-	-	-	-	-	-	-	-	-	-	1,979	30	66	4,067	30	136	-	-	-
Dec 2018	5,731	31	185	-	-	-	-	-	-	-	-	-	-	-	-	2,248	31	73	3,503	31	113	-	-	-
Jan 2019	3,721	31	120	-	-	-	-	-	-	-	-	-	-	-	-	1,491	31	48	2,632	31	85	-	-	-
Feb 2019	3,895	28	139	-	-	-	-	-	-	-	-	-	-	-	-	572	28	20	2,901	28	104	-	-	-
Mar 2019	6,877	31	222	-	-	-	-	-	-	-	-	-	-	-	-	2,269	31	73	6,808	31	220	-	-	-
Apr 2019	12,442	30	415	-	-	-	-	-	-	-	-	-	-	-	-	6,099	30	203	12,497	30	417	-	-	-
May 2019	19,497	31	629	-	-	-	-	-	-	-	-	-	-	-	-	1,399	7	200	14,584	31	470	-	-	-
Jun 2019	25,968	30	866	10,473	17	616	9,833	17	578	-	-	-	2,142	3	714	-	-	-	17,183	30	573	-	-	-
Jul 2019	8,388	8	1,049	16,966	31	547	16,987	31	548	-	-	-	19,680	31	635	-	-	-	16,088	31	519	-	-	-
Aug 2019	-	-	-	19,530	31	630	15,824	31	510	-	-	-	21,698	31	700	-	-	-	13,841	31	446	369	4	92
Sep 2019	-	-	-	14,278	30	476	14,637	30	488	-	-	-	19,544	30	651	-	-	-	15,265	30	509	2,097	30	70
Oct 2019	-	-	-	11,263	31	363	10,227	31	330	1,848	22	84	13,632	31	440	-	-	-	8,257	21	393	1,303	31	42
Nov 2019	-	-	-	5,956	30	199	4,874	30	162	684	30	23	6,388	30	213	-	-	-	-	-	-	566	30	19
Dec 2019	-	-	-	1,922	20	96	1,144	20	57	25	20	1	-	-	-	-	-	-	-	-	-	105	23	5
2019 Recorded	**80,788**	**189**	**427**	**80,388**	**190**	**423**	**73,526**	**190**	**387**	**2,557**	**72**	**36**	**83,084**	**156**	**533**	**11,830**	**127**	**93**	**110,056**	**294**	**374**	**4,440**	**118**	**38**
Total Recorded	**168,316**	**364**	**462**	**80,388**	**190**	**423**	**73,526**	**190**	**387**	**2,557**	**72**	**36**	**83,084**	**156**	**533**	**75,689**	**503**	**150**	**159,966**	**448**	**357**	**4,440**	**118**	**38**
Annual USAGE	**170,206**	**365**	**466**	**136,864**	**365**	**375**	**125,182**	**365**	**343**	**20,970**	**365**	**57**	**162,273**	**365**	**445**	**64,530**	**365**	**177**	**120,365**	**365**	**330**	**16,425**	**365**	**45**

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